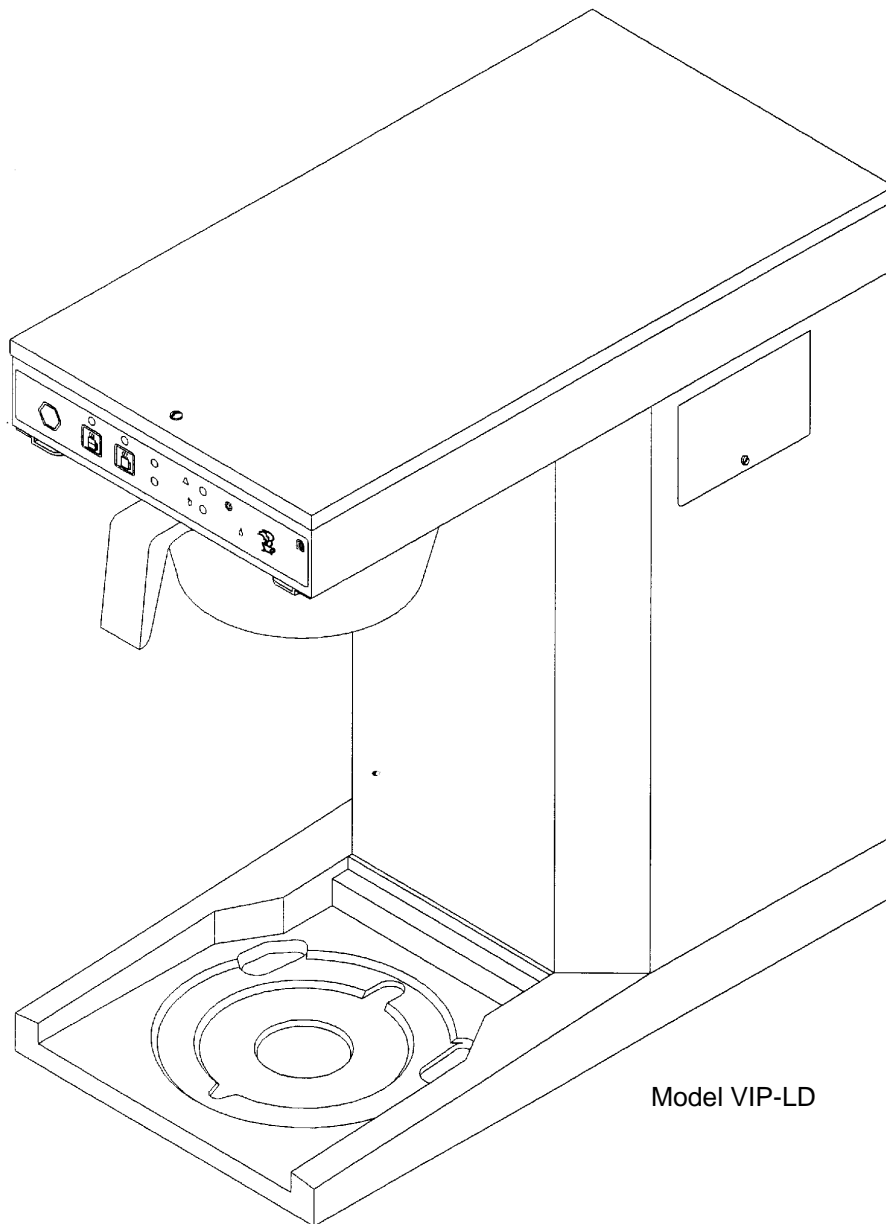


NEWCO ENTERPRISES

INSTALLATION and OPERATION MANUAL for VIP II BREWERS



Model VIP-LD

BREWER SPECIFICATIONS

<u>Model</u>	<u>Width</u>	<u>Length</u>	<u>Height</u>	<u>US</u> <u>120V Amps</u>	<u>CANADA</u> <u>120V Amps</u>
VIP-LD	8-5/8"	16-5/8"	17-1/2"	13	11.7
VIP-TD	8-5/8"	16-5/8"	23-3/4"	13	11.7

NOTE: Automatic models without faucet is also available.

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 1/2" 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" porthole for up to 25 ft run, and 5/16" porthole for over 25-ft runs.
- 4) Ensure that the PDS flow control is installed on the rear of the brewer. Connect incoming water line to the flow control device on the back of the brewer. Manufacturer recommends connecting to copper tubing. Turn on water supply and check for leaks.

INITIAL SETUP INSTRUCTIONS

WARNING: - Read and follow 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 nameplate.

Tank Fill

- 1) Brewer should be connected to water supply as outlined in PLUMBERS INSTALLATION INSTRUCTIONS above. Place an empty decanter in place below the brewbasket to catch any water which may be dispensed during the tank fill process. Plug or wire brewer to the appropriate voltage circuit as indicated on the serial tag. Turn power switch located on the rear of machine to the on position and tank will begin to fill. The expansion chamber in the brewer has a water level probe in it. When the water reaches this probe, 5-6 minutes, the fill solenoid will shut off and the tank will begin heating. Allow 10-15 minutes for the water to heat to the preset temperature. Some water may be dispensed through the sprayhead during the initial fill process.

Volume Check and Adjustment

- 2) Place a suitable decanter in place below the brew basket to catch water during the volume check and calibration procedure. Depress the full brew switch (full cup). If the tank is up to the preset temperature, temperature adjustment dial is in the off position or if the autoarm feature has been disabled the brew cycle will begin. Otherwise the brewer will go into the autoarm mode. In the autoarm mode the heating light will be lit and the corresponding switch light will begin to flash indicating that the unit is in the brew mode but is not up to temperature. When the tank reaches the preset temperature the brew cycle will begin. Note: To accelerate the set up time the "Tank Temp" adjustment dial may be rotated to the off position momentarily until the brew cycle begins and then turned back. The autoarm mode can also be bypassed by simply holding in the brew button for 3 seconds. The brew cycle may be canceled by depressing the cancel switch.
- 3) After the brew cycle has finished check volume of water in the container. Adjust the "Brew Time" with the control board located behind the right side access plate. Turn the dial Clockwise to increase the volume of water and counterclockwise to decrease it. The range of adjustment is 30 seconds to 5 minutes. The dial labeled "Visa" on the timer may be set for an additional amount of time to flash the brewing light. This will allow time for the coffee to finish draining from the brew basket after the fill cycle has completed. See Fig on page 3 for control board setting information.

Temperature Check and Adjustment

- 4) Allow approximately 10 minutes for the water in the tank to heat to brewing temperature. The ready light will be lit when the unit is up to temperature. Run one brew 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. (Note: Brew cycle may be canceled by depressing the cancel button). The brewer features an electronic temperature control circuit and the temperature may be adjusted with the control board located behind the right side access plate. See Fig on page 3 for control board setting information.
- 5) In higher altitude locations (5000 feet above sea level) the tank temperature may have to be adjusted lower to prevent boiling. Turning adjustment knob in a clockwise direction will increase water temperature. This unit features an electronic temperature control. Adjustment is located on the control board behind the front access plate.
- 6) CAUTION: The water faucet will dispense hot water when the handle is pulled.

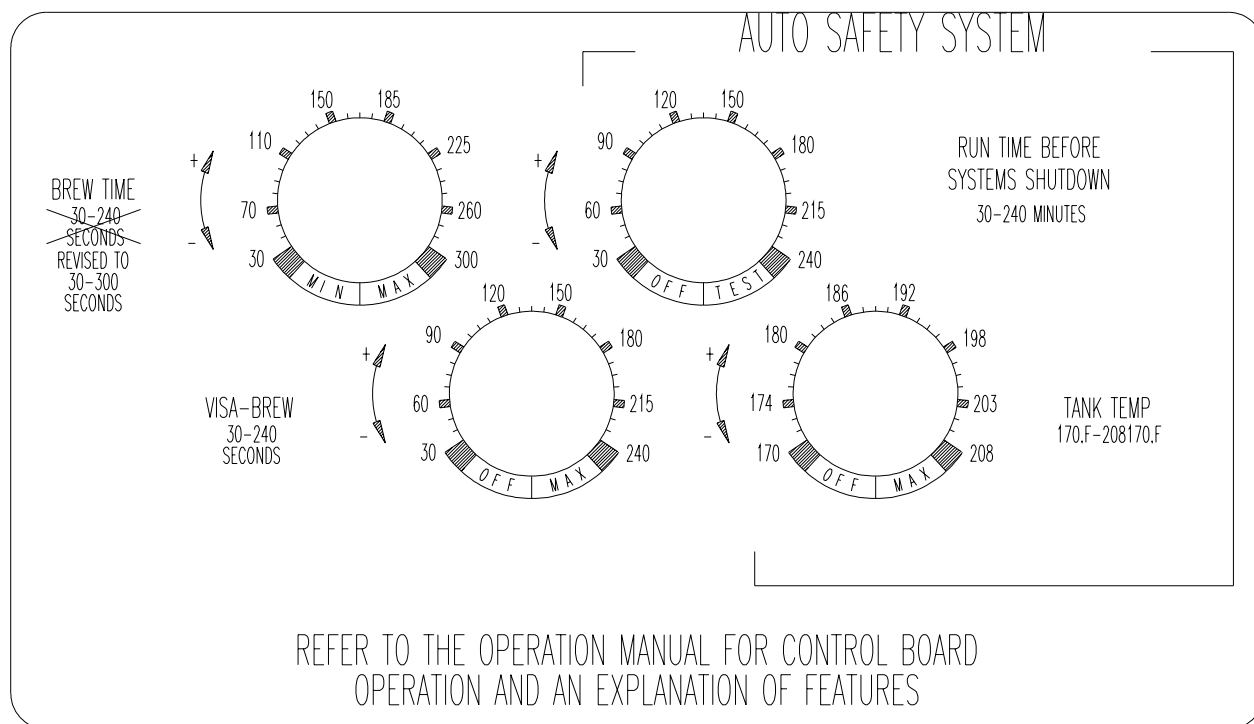


Fig 1 - Control Board Setting Information

COFFEE PREPERATION PROCEDURES

- 1) Place filter into brew basket.
- 2) Put the appropriate amount of ground coffee into the filter for the volume of coffee being brewed.
- 3) Slide the brew basket into holder.
- 4) Remove the dispenser lid unless it is a brew through design. Place the dispenser directly under the brew basket.
- 5) Press the desired "regular" or "half" brew start switch.
- 6) If the autoarm feature is enabled and the brewer is not up to temperature, the heating light and corresponding brew switch light will begin to flash indicating that the brewer is heating and will begin to brew immediately after the heating cycle is complete. To override autoarm and begin brew cycle immediately, depress and hold the appropriate brew switch for 3 seconds until brewing begins. Do not remove dispenser. Brew cycle may be canceled by depressing the cancel switch. The heating and brew switch light should no longer be flashing.
- 7) 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 dispenser below.
- 8) The brew switch light should continue to flash until all the liquid has finished flowing from the brew basket. Do not remove dispenser until the brewing process has stopped and all liquid has stopped flowing from the brewbasket.
- 9) The resultant coffee brew should be crystal clear and have the desired properties attainable through excellent extraction.
- 10) To empty brew basket simply remove from brew rails and dump filter into wastebasket. The brewing process, as described above, can now be started again.

BREW SYSTEM DESIGN FEATURES

FEATURE SUMMARY TABLE

Feature	Settings Available	Controls/Indicates
Brew Time	30-300 seconds (.5-5 minutes).	Volume of water delivered for coffee.
Visi-Brew	30-240 seconds (.5-4 minutes).	Duration of flashing brewing light after brew time elapses to indicate coffee still draining from basket.
Temperature	170-208° F.	Water temperature in tank.
Autoarm	On or Off; (Wiring determines value).	Flashes heating light when heating and brew switch is depressed.
Power Modes Use "RUN TIME..." DIAL	Power Save; Adjustable 30-240 mins. Normal. Default when dial is in off position.	Tank temperature reduced to 170° F after set time. Maintains tank at set temperature.

- Digital Brew Timing - Brew time is accurate to within .1 seconds over the entire adjustment range of 30 to 360 seconds.
- AutoCal Function - Allows the brew volume to be set with one brew cycle. To use feature it is best to remove the brew basket due to the delay in cessation of the sprayhead delivery and the final drainage from the brewbasket. If doing so place a wide mouth pitcher of suitable volume and with desired volume level indicated on pitcher below sprayhead to capture brewed water. Brew time adjustment knob may be turned all the way up and then a brew cycle started. During the brew cycle, as the volume approaches the correct level in the decanter, slowly rotate the dial down until brewing stops. The timer is now set for the delivered amount of water. (As an alternate to this temporarily replace the standard brewbasket with a basket which has had the outlet enlarged to allow the water to flow out as fast as it comes in. Do not use this basket for brewing coffee.)
- Auto Arm - Ensures that the brewer is up to temperature prior to brewing to ensure proper extraction is obtained. If the water temperature in the tank is below the value set by the "Solid State Thermostat" on the control board when the brew cycle is initiated the fill portion of the brew cycle is delayed. The heating light will begin to flash indicating that the unit is in the brew mode but is not up to temperature (brewing light will also be on). The tank heater will begin heating and when the tank reaches the preset temperature the fill portion of the brew cycle will begin. This feature may be disabled if desired by connecting the 1 pole connector with blue wire to the mating connector with red wire. Connectors are positioned above the fill valve. Refer to wiring diagram on page 6. The autoarm feature may be bypassed for individual brew cycles by holding in the brew start switch for about 3 seconds. Release switch when brew cycle starts.
- Visa-Brew - Continues to flash the brewing light after the fill portion of the brew cycle has stopped alerting the user that the brewed hot coffee has not finished draining from the brew basket. This popular feature has been enhanced with an autocal feature similar to the brewing autocal described above. Simply turn the adjustment dial all the way up, start a normal brew cycle as described under the "OPERATION INSTRUCTIONS", and after the brewed coffee has quit dripping from the basket turn the dial down just until the brewing light turns off. Visa Brew is now custom set for your machine, filters, and coffee.
- Power Save Mode - Allows you to automatically save energy when the brewer is not in use for a specified length of time. In this mode the tank heater will be set back to 170°F after being idle for the selected time. To select the timeframe before power save mode is engaged, rotate the dial on the board labeled "Run Time Before System Shutdown" to the desired setting. If the dial is put in the off position the brewer will be in a normal mode where the tank temperature will be maintained at the temperature set on the control board at all times. Starting a brew cycle will reinitialize the timer and the set time frame starts over. If the autoarm has not been disabled the tank will be brought up to temperature before brewing when the brew start switch is depressed.
- Solid State Thermostat - Maintains temperature within 3 degrees throughout the adjustment range of 170-208 degrees. Full off position is at the extreme left of the adjustment dial. The only wear item, a remotely mounted relay, may be replaced without disturbing the tank or recalibrating the temperature. This also allows the incorporation of several other convenience and safety features as explained below.
- Initial Tank Fill Circuit - Prevents the tank element from coming on before water level in tank has covered the element in the tank when setting the brewer up. This acts as a backup to the unique mechanical heater control incorporated into the brewer's tank system to ensure that the tank element or its components are not damaged by premature heatup. The fill solenoid will run until water contacts the probe in the upper expansion chamber or for up to 6 minutes, whichever comes first. See "Tank Fill" under the "INITIAL SETUP INSTRUCTIONS" for operation.

- **Temperature Override** - Turns the tank heater on at the start of a brew cycle to the maximum setting for 1 minute. This assures a more uniform brew temperature and reduces the recovery time required for rebrewing. As an additional safety check on the heater circuit the control board continuously monitors how long the element is on. If the run time exceeds 30 minutes the tank element is shut down and an error message is produced. See the following section for an explanation of all error messages.
- **Service Alert System** - Monitors key elements of brewer operation and shuts brewer down if an error condition occurs. If the tank heater element runs for more than 30 minutes continuously, the fill valve runs for more than 6 minutes (1-1/2 minutes during brew cycle) continuously without probe contact or if the temperature sensor opens or shorts this will trigger the system to shut down. The service alert system illuminates the various indicator lights on the front of the brewer to indicate the type of error encountered. The table below list the different error codes produced by the service alert system, the possible cause and what to check when the brewer will not operate.

Error Code:	Problem Area:	Cause:	Check:
Autobrew/Heating & brewing lights on steady	Water Fill	System detects that fill valve has run for 6 min. (1-1/2 min. during brew cycle) w/o making contact with probe.	Water supply to brewer, water filters & water probe to see if limed up.
Autobrew/Heating & ready lights on steady	Tank Heater	Tank heating system has run for 20 minutes.	Tank heater relay, tank heater, limit thermostat.
Auto Brew/heating& ready lights on steady	See cause	Blue wire is not connected to either black or Red wire	Blue wire connection. Black to enable Auto Arm or red to Disable Auto Arm
Autobrew/Heating & half brew lights on steady	Temperature Probe	Thermistor is open.	Replace Thermistor.
Autobrew/Heating & full brew lights on steady	Temperature Probe	Thermistor shorted.	Replace Thermistor.

IN CASES WHERE THERE IS A HEATER OR FILL PROBE ERROR, THE BREWER CAN BE RESET BY HOLDING DOWN THE CANCEL BUTTON FOR APPROXIMATELY 5 SECONDS. ERROR WILL CLEAR.

REPLACEMENT PARTS LIST

Part No Description

Tank Components

110777 Element, tank, 1250 W 120 V
 110792 Element, tank, 1400 W 120 V
 110791 Element, tank, 1550 W 120 V
 110762 Protector, element
 110764 Washer, element
 110765 Screws, element
 110766 Washer, element, locking
 110767 Ring tab
 110752 Seal, element
 110758 O-ring, Tank, 5.975 ID x .275 W
 111080 Lid, plastic
 111153 Sensor, temperature

Valves and faucet

111050 Valve, Inlet
 110305 Flow control, PDS, low flow
 111396 Faucet
 110506 Clamp, drain tube
 111517 Insert, 3/8 tube insert

Tubing and gaskets

152218 Tubing, Silicone, 1/4 ID x 3/8 OD
 152213 Tubing, Silicone, 3/8 ID x 5/8 OD
 102544 Tubing, Silicone, 3/8 ID x 1/2 OD
 101931 Tubing, Silicone, 5/8 ID x 3/4 OD
 111105 Nipple, fitting, Silicone
 100025 Gasket, sprayhead
 102836 Grommet, probe & thermistor

Part No Description

Expansion Pan Parts

111164 O-ring, exp pan, 6.484 ID x .139 W
 111176 Spring, check valve, expansion pan
 111226 Cover, expansion pan
 111227 Pan, expansion
 111228 Retainer, Ball
 111401 Ball, 1/2 diameter
 111402 Screw, #6 x 3/8", for plastic
 111403 Screw, #4 x 3/8", for plastic
 111519 Level probe
 704222 Gasket, pan outlet, 4 holes
 110978 Sprayhead fitting ass'y

Electrical Components

110626 Switch, On/Off, DPST, rocker
 110378 Board, display
 111515 Board, control
 105057 Relay, heater, 12 V coil

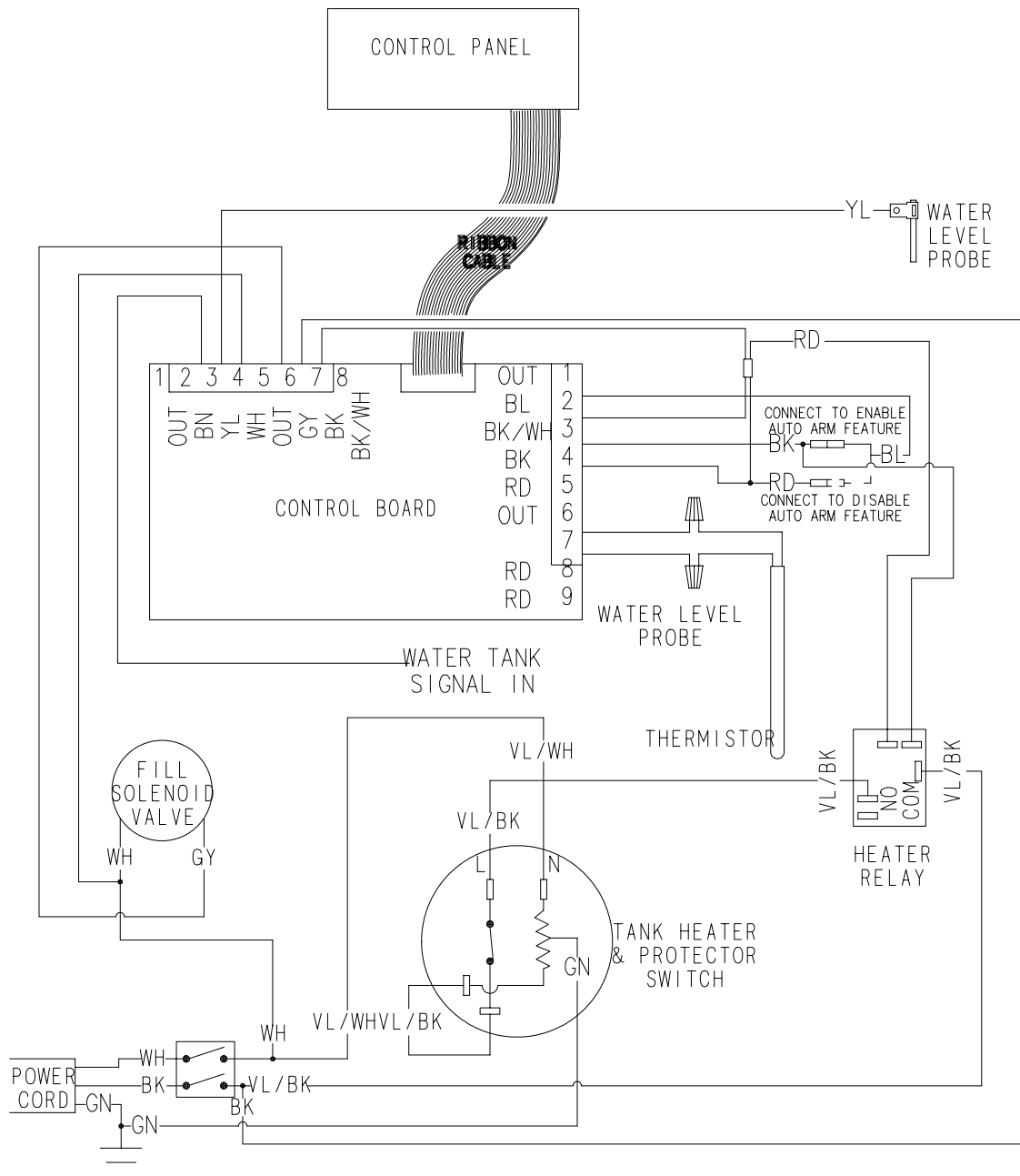
Miscellaneous components

110985 Brewbasket
 104010 Brewrail, RH
 104011 Brewrail, LH
 100024 Sprayhead, S/S, 5 hole
 201173 Nut, sprayhead, 7/16-20
 701985 Sprayhead tube assembly
 110381 Spacer, 5/16" hex, display board
 110991 Screw, 6-32 x 3/16, PPHMS, Nylon
 108014 Access Plate
 111198 Standoff, .144 ID x 3/8 L, Brass

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



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