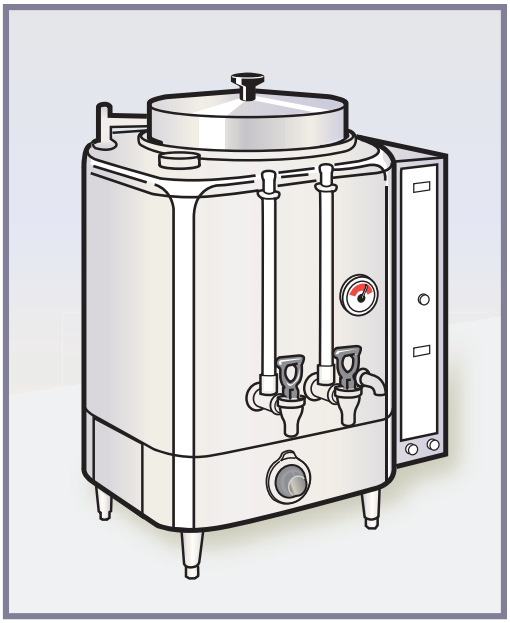
Service Manual for RU Series Automatic Urns

MODELS INCLUDED

- RU-150
- RU-225
- RU-300
- RU-600
- RU-1000

Important Safeguards/Conventions



This appliance is designed for commercial use. Any servicing other than cleaning and maintenance should be performed by an authorized Wilbur Curtis service center.

- *To reduce the risk of fire or electric shock, do NOT open side or bottom panel. No user serviceable parts inside. Repair should be performed only by authorized service personnel.*
- *Keep hands and other items away from hot parts of unit during operation.*
- *Never clean with scouring powders, bleach or harsh implements.*

Conventions

WARNINGS – To help avoid personal injury

Important Notes/Cautions – from the factory

Sanitation Requirements

The RU Automatic Urn is Factory Pre-Set and Ready to Go… Right from the Carton.

Factory Settings:

- *Brew Temperature = 200°F*
- *Brew Volume = Set to requirements of coffee liner*

System Requirements

- *Water Source: 20 – 100 psi (Min Flow Rate of 1 gpm)*
- *Electrical: See attached schematic for standard model or visit www.wilburcurtis.com for your model.*

CAUTION: Please use the setup procedures in this manual before attempting to use brewer. Failure to follow the instructions can result in injury or the voiding of the warranty.

WARNING: DO NOT place this urn closer than six [6] inches from wall. Urn must have adequate cross-ventilation.

CAUTION: DO NOT connect this urn to hot water. The inlet valve is not rated for hot water.

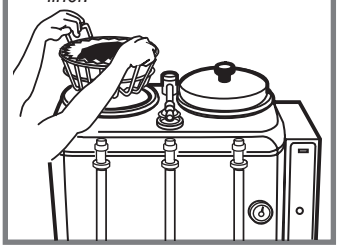
WARNING HOT LIQUID, Scalding may occur. Avoid splashing.

ISO 9001 REGISTERED

WILBUR CURTIS CO.
Montebello, CA 90640

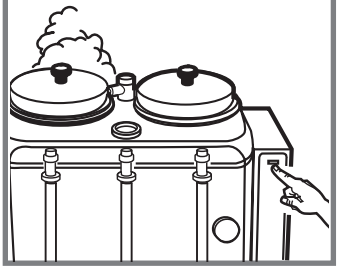
BREWING INSTRUCTIONS

1. *Place filter in basket. Pour coffee into filter. Place basket into liner.*



2. *Rotate sprayhead over bed of coffee inside filter.*

3. *Press the BREW button on control panel to begin brewing.*



INSTALLATION AND OPERATING INSTRUCTIONS

UNPACKING THE URN

All urns are carefully packed in cartons with laminated cardboard inserts. The packaging is specifically to fitted to your urn. The packaging exceeds the requirements of the I. C. C. regulations.
Inspect all containers at the time of delivery for visual or concealed damage. In case of punctured or damaged cartons the carrier must be notified immediately.

PACKING LIST

ITEM	QTY SINGLE	QTY TWIN
WIRE BASKET	1	2
LID WITH KNOB	1	2
FAUCET, HOT WATER	1	1
FAUCET, COFFEE	1	2
LEGS, ADJUSTABLE	4	4
FILTERS, PAPER	25	40
SERVICE MANUAL	1	1

URN ASSEMBLY & INSTALLATION

Attach adjustable legs, screwing them into the four corners beneath the urn. Locate the urn on a sturdy, level countertop. Install the water and coffee faucets.

WATER SUPPLY

All Curtis Automatic Urns are equipped with a ¼" male flare fitting which must be connected to the water supply with a ¼" copper tubing and a ¼" flare nut. It is recommended that some type of water strainer be used in the water line before entering the unit. We advise using a mineral reducing filter. To expedite the filling of the urn, you may use the emergency refill valve.

CAUTION Don't forget to close the valve once it fills.

HEAT SUPPLY

Read the serial plate to determine the energy source of the urn (electric, gas, steam).

WARNING When you hookup an electric urn, use the proper wire gauge, plus 25%. Never use fuses or breakers larger than needed. The body of the urn must be securely grounded with a separate grounding conductor and never with the neutral conductor of a single phase, 3 wire system. Refer to the wiring diagram included with each urn for wire gauge.

ELECTRIC THERMOSTAT ADJUST

On electric urns, thermostats are set at the factory to cut off at 200ºF. We do not recommend changing this. If necessary, adjustment is as follows:

1. Rotate the thermostat knob to the right to the BOIL position. Pull off the knob.
2. Locate the tiny adjustment screw, inside the stem (see figure 1). Using a small screwdriver, adjust the temperature up or down:
   a. By turning the screw ¼ turn to the left will increase the temperature about 20°F.
   b. Turning the screw ¼ turn to the right will decrease the temperature by 20°F.
   c. To set the thermostat precisely at 200°F, insert a thermometer probe into the water jacket through the steam hole (just under the sprayhead). Turn the screw ½ turn to the left. When the thermometer reaches 200°F, slowly turn the adjustment screw to the right until the pilot light turns off.

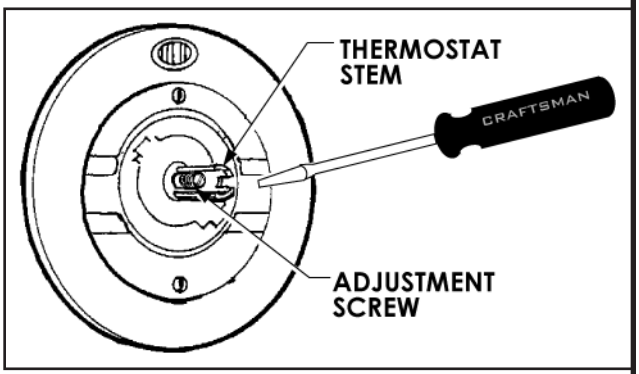


figure 1.

GAS URN INSTALLATION

The urn must be away from wall no less than 6" and must have plenty of cross ventilation.

The water supply connection is the same in all RU models. All that is needed is 1/4" copper tubing with a 1/4" flare nut and some sort of water filter in the line before water enters the unit. Once the water connection is complete, open the water line, then plug in the power cord into an 115V outlet. To facilitate the filling of the water jacket, you can open the emergency refill faucet (red knob) behind the unit, to increase the speed of filling the urn. Water must be above the base of the center gauge glass before turning on the heat.

IMPORTANT Be sure to shut off the emergency refill valve after filling to prevent overflow!

GAS CONNECTION

All RU automatic urns are supplied with a 3/8" pressure connector at the end of the gas valve. This valve is connected to the thermostat. Use 3/8" O.D. stainless steel flex tubing to make the connection from the urn to the gas valve in your facility. When the connections are complete, turn the gas on. Check the line for leaks.

MAIN BURNER ADJUSTMENT (GAS INPUT)

To adjust the main burner flame, turn the screw under the gas cock handle in either direction to regulate the flow of gas to the main burner.

TO RE-CALIBRATE THE THERMOSTAT

The Unitrol thermostat is built to the most exacting standards and is a precision instrument which should never need re-calibration. However through tampering, misuse or other reasons, if the thermostat is found to be more than 10º from normal, a re-calibration may be performed by a qualified service technician. The following are the steps for this procedure:

1. Turn the thermostat to OFF to allow the unit to cool down.
2. When the water temperature is room temperature, turn the thermostat dial until the main burner ignites.
3. Slowly, turn the thermostat dial counterclock wise until the flame on the burner goes out.
4. Place a thermometer into the water jacket to determine the temperature of the water.
5. Pull off the thermostat dial and lift off the outside cover.
6. Turn the temperature stop to correspond to the actual water temperature. Mark the location of the stop for reference.
7. Turn the stop slowly until the control snaps *off*. Holding the stop to prevent rotation, carefully loosen the stop adjustment nut (see figure 2).

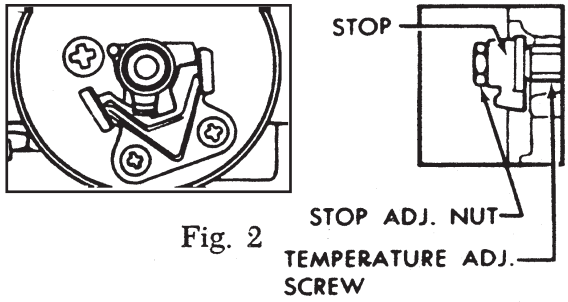


Fig. 2

8. Taking care not to move the temperature adjusting screw, turn the stop until it lines up with the tick mark previously made.
9. Hold the stop in place and tighten the stop adjustment nut.
10. Recheck the OFF temperature.
11. Replace the outside cover and thermostat dial.

THERMOCOUPLE CONNECTION

Poor contact between the thermocouple lead and the magnet assembly may cause the valve to be inoperative even when the pilot is in proper adjustment and position. If this is the problem, clean and tighten the contact points. Remove the thermocouple and carefully clean the parts that make contact with the magnet assembly.

PROCEDURE FOR LIGHTING OR RELIGHTING

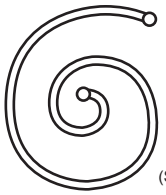
1. Turn GAS COCK handle to “off” position, and DIAL ASSEMBLY to lowest temperature position.
2. Wait sufficient length of time to allow gas which may have accumulated in burner compartment to escape.
3. Turn GAS COCK handle to “Pilot” position.
4. Fully depress SET button, and light pilot burner (adjust if necessary, as noted under “Pilot Burner Adjustment”).
5. Allow pilot to burn approximately ½ minute before releasing SET button. If pilot flame does not remain lit, repeat operation allowing longer period before releasing SET button.
6. Turn GAS COCK handle to “on” position and turn dial assembly to desired position.. The main burner will then ignite

PROCEDURE FOR ADJUSTING PILOT

1. Remove pilot adjustment cap. Adjust pilot key, allowing flame to completely envelop the end ⅜” of the Thermocouple.
2. Adjust pilot burner air shutter (if provided) to obtain a soft blue flame.

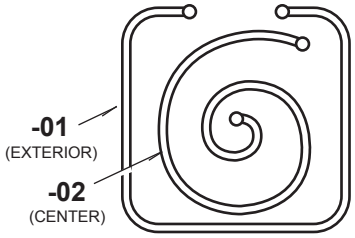
HEATING ELEMENTS, LOCATION & CONFIGURATION

RU-150 1Ø & WB-14



WC-913 -01
220V, 5 KW

RU-225 1Ø

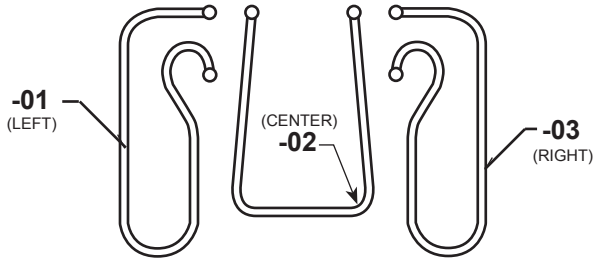


RU-225 220V, 1Ø,
3 WIRE + GND

WC-911 -01
220V, 3. 5KW

WC-911 -02
220V, 3.5 KW

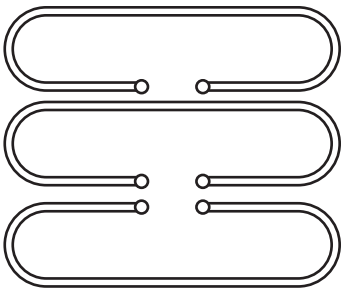
RU-150 & 225 3Ø



RU-150-20 5.25 KW, 208/220V, 3Ø, 3 OR 4 WIRE + GND.
WC-907 -01 220V @ 1.75 KW
WC-907 -02 220V @ 1.75 KW
WC-907 -03 220V @ 1.75 KW

RU-225-20 10.5 KW, 208/220V, 3Ø, 3 OR 4 WIRE + GND.
WC-908 -01 220V @ 2.5 KW
WC-908 -02 220V @ 2.5 KW
WC-908 -03 220V @ 2.5 KW

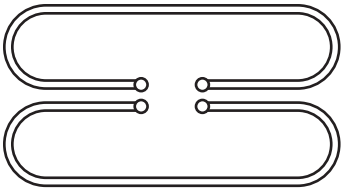
RU-300, 600 & 1000 3Ø



THESE ELEMENTS ARE INTERCHANGABLE

RU-300 7.5 KW, 208/220V, 3Ø, 3 OR 4 WIRE + GND.
3 - WC-908 220V @ 2.5 KW EA.
RU-600 10.5 KW, 208/220V, 3Ø, 3 OR 4 WIRE + GND.
3 - WC-911 220V @ 3.5 KW EA.
RU-1000 10.5 KW, 208/220V, 3Ø, 3 OR 4 WIRE + GND.
3 - WC-911 220V @ 3.5 KW EA.

RU-300, 600 & 1000 1Ø

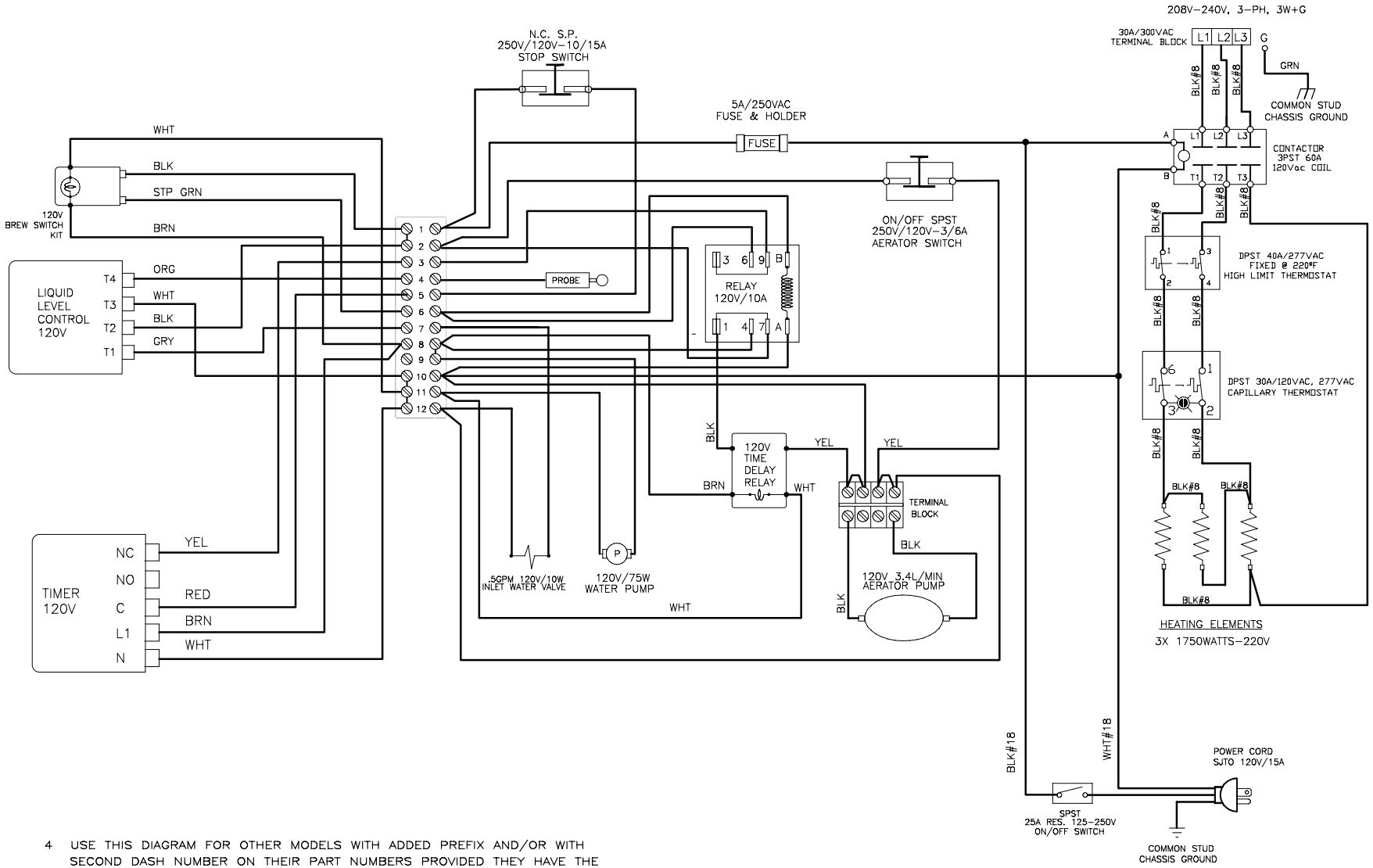


THESE ELEMENTS ARE INTERCHANGABLE

RU-300 6 KW, 208/220V, 1Ø, 3 WIRE + GROUND
2 - WC-910 220V @ 3 KW EACH
RU-300 8 KW, 208/220V, 1Ø, 3 WIRE + GROUND
2 - WC-912 220V @ 4 KW EA.
RU-600 10 KW, 220V, 1Ø, 3 WIRE + GROUND
2 - WC-913 220V @ 5 KW EACH
RU-600 8 KW, 220V, 1Ø, 3 WIRE + GROUND
2 - WC-912 220V @ 4 KW EACH
RU-1000 10 KW, 220V, 1Ø, 3 WIRE + GROUND
2 - WC-913 220V @ 5 KW EACH

ELECTRICAL DATA

MODEL	VOLTS	PHASE	WIRES	WATTS	AMPS	ELEMENTS
RU-150 -12	220	1	3W + GND	5 KW	23	1 - WC-913 -01 220V, 5 KW
RU-150 -20	208/220	3	3W OR 4W + GND	5.25 KW	15	1 - WC-907 -01 220V, 1.75 KW LEFT
						1 - WC-907 -02 220V, 1.75 KW CENTER
						1 - WC-907 -03 220V, 1.75 KW RIGHT
RU-225 -12	220	1	3W + GND	7 KW	32	1 - WC-911 -01 220V, 3.5 KW
						1 - WC-911 -02 220V, 3.5 KW
RU-225 -20	208/220	3	3W OR 4W + GND	7.5 KW	21	1 - WC-908 -01 220V, 2.5 KW LEFT
						1 - WC-908 -02 220V, 2.5 KW CENTER
						1 - WC-908 -03 220V, 2.5 KW RIGHT
RU-300 -12	220	1	3W + GND	6 KW	27	2 - WC-910 220V, 3 KW
RU-300 -28	220	1	3W + GND	8 KW	36	2 - WC-912 220V, 4 KW EA.
RU-300 -20	208/220	3	3W OR 4W + GND	7.5 KW	21	3 - WC-908 220V, 2.5 KW EA.
RU-600 -12	220	1	3W + GND	10 KW	46	2 - WC-913 220V, 5 KW EA.
RU-600 -28	208/220	1	3W + GND	8 KW	38	2 - WC-912 220V, 4 KW EA.
RU-600 -20	208/220	3	3W OR 4W + GND	10.5 KW	29	3 - WC-911 220V, 3.5 KW EA.
RU-1000 -12	220	1	3W + GND	10 KW	46	2 - WC-913 220V, 5 KW EA.
RU-1000 -20	208/220	3	3W OR 4W + GND	10.5 KW	29	3 - WC-911 220V, 3.5 KW EA.



4 USE THIS DIAGRAM FOR OTHER MODELS WITH ADDED PREFIX AND/OR WITH SECOND DASH NUMBER ON THEIR PART NUMBERS PROVIDED THEY HAVE THE SAME ELECTRICAL SPECS AND/OR RATINGS.

3 FOLLOW WIRE COLOR ASSIGNMENTS FROM POINT 'A' TO 'B' ON THE TERMINAL BLOCK AS SHOWN.

2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS.

1 ALL WIRES SHALL BE UL APPROVED APPLIANCE

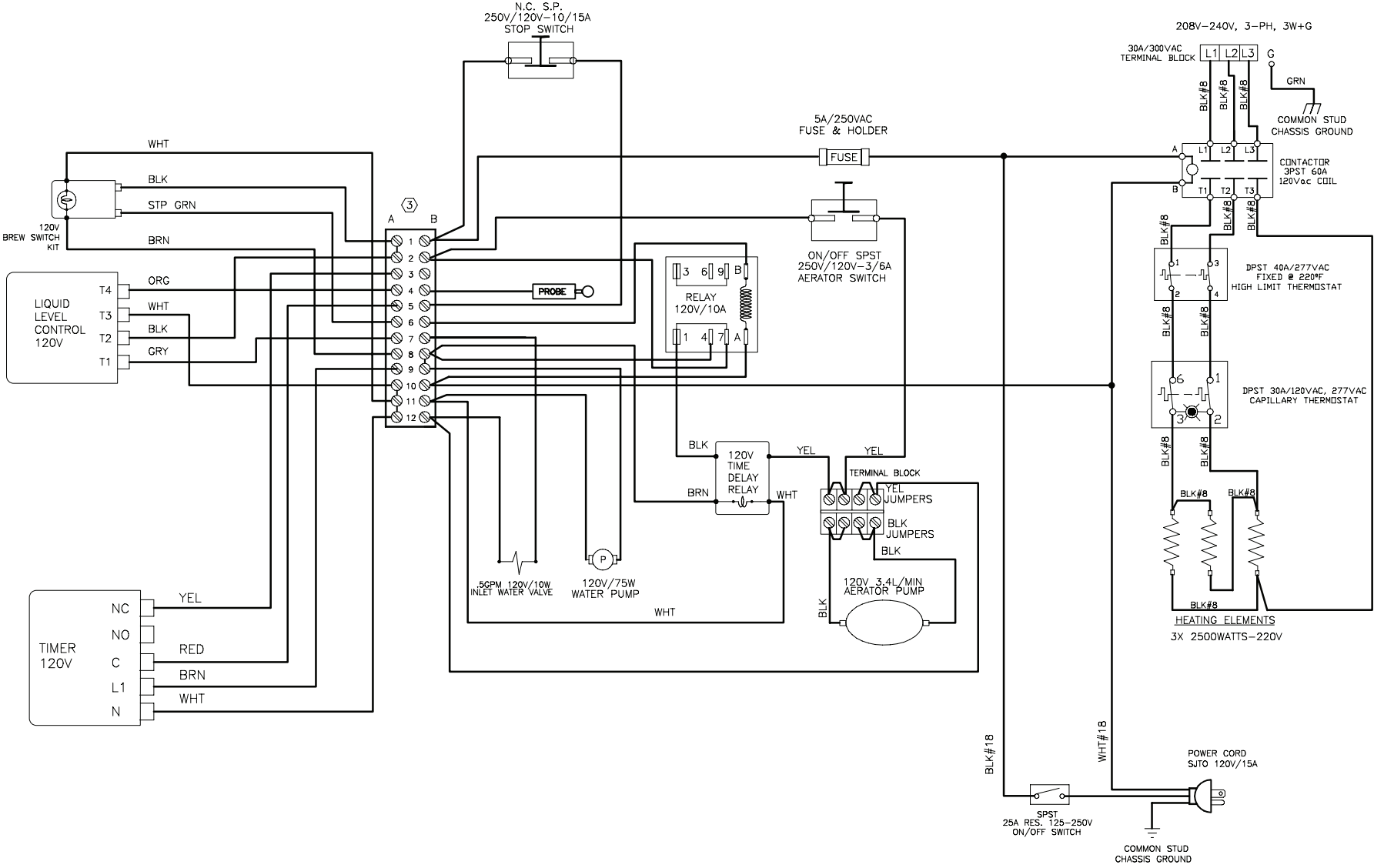
NOTES: UNLESS OTHERWISE SPECIFIED

VOLTAGE:	120/220VAC
WATTAGE:	5.25KW
AMPERAGE:	13.8
HERTZ:	60 Hz
WIRES:	3W+G
PHASE:	3PH

TITLE: WIRING DIAGRAM 5.25KW 120/220V 60HZ 3PH 3W+G with POWER CORD

PART NUMBER: WD–RU150–20

REVISION: D



VOLTAGE:	120/220V
WATTAGE:	7.5KW
AMPERAGE:	20A
HERTZ:	50/60HZ
WIRES:	3W+G
PHASE:	3-PH

TITLE:
WIRING DIAGRAM
7.5KW 120/220V 20A 3PH 3W+G
50/60HZ AG ER with POWER CORD

PART NUMBER: WD-RU225-20

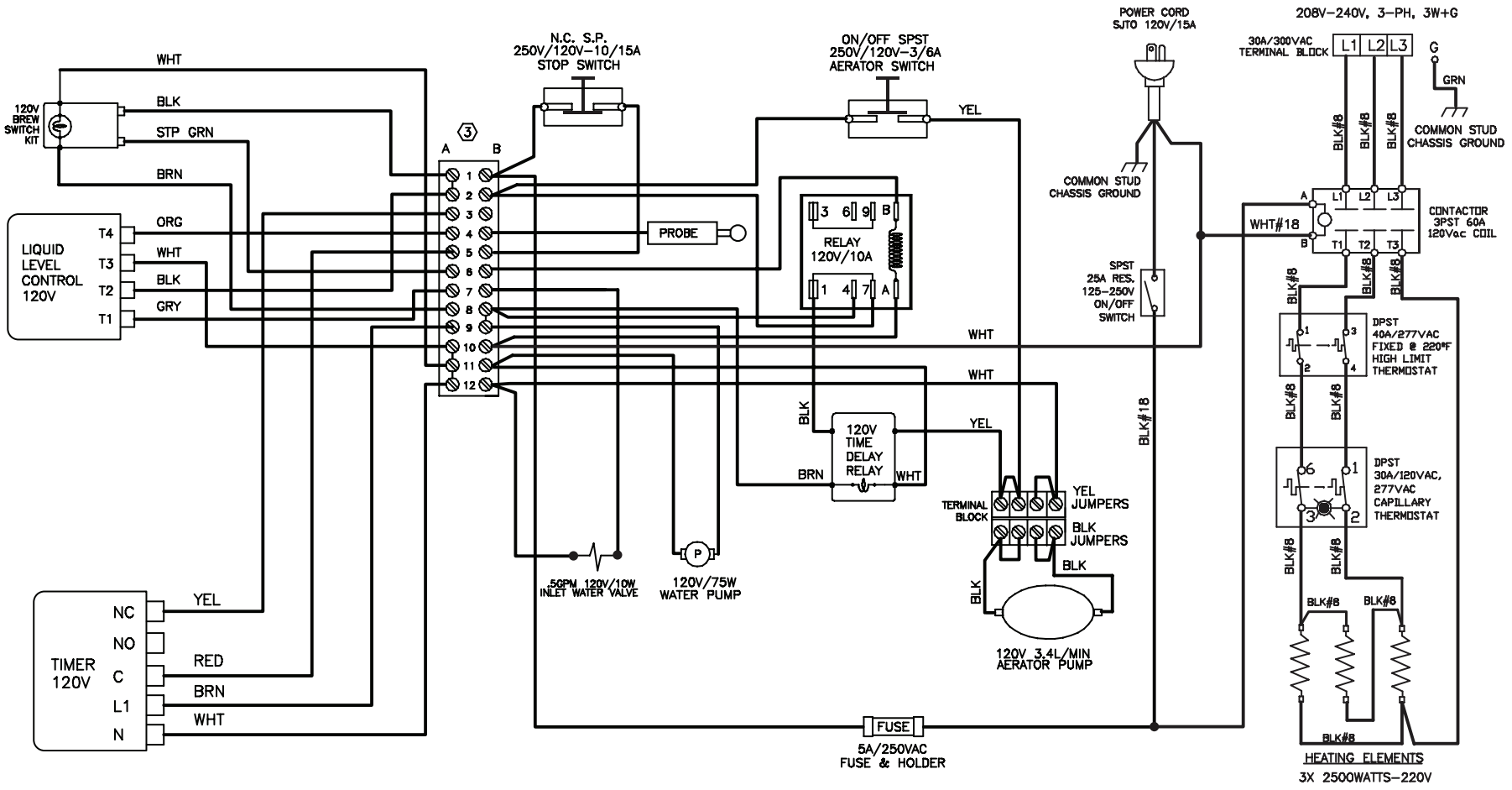
REVISION: A

③ FOLLOW WIRE COLOR ASSIGNMENTS FROM POINT 'A' TO 'B' ON THE TERMINAL BLOCK AS SHOWN.

2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS.

1 ALL WIRES SHALL BE 18 AWG UL APPROVED APPLIANCE WIRE.

NOTES: UNLESS OTHERWISE SPECIFIED



3 FOLLOW WIRE COLOR ASSIGNMENTS FROM POINT 'A' TO 'B' ON THE TERMINAL BLOCK AS SHOWN.

2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS.

1 ALL WIRES SHALL BE 18 AWG UL APPROVED APPLIANCE WIRE.

NOTES: UNLESS OTHERWISE SPECIFIED

VOLTAGE:	120/220V
WATTAGE:	7.5KW
AMPERAGE:	20A
HERTZ:	50/60HZ
WIRES:	3W+G
PHASE:	3-PH

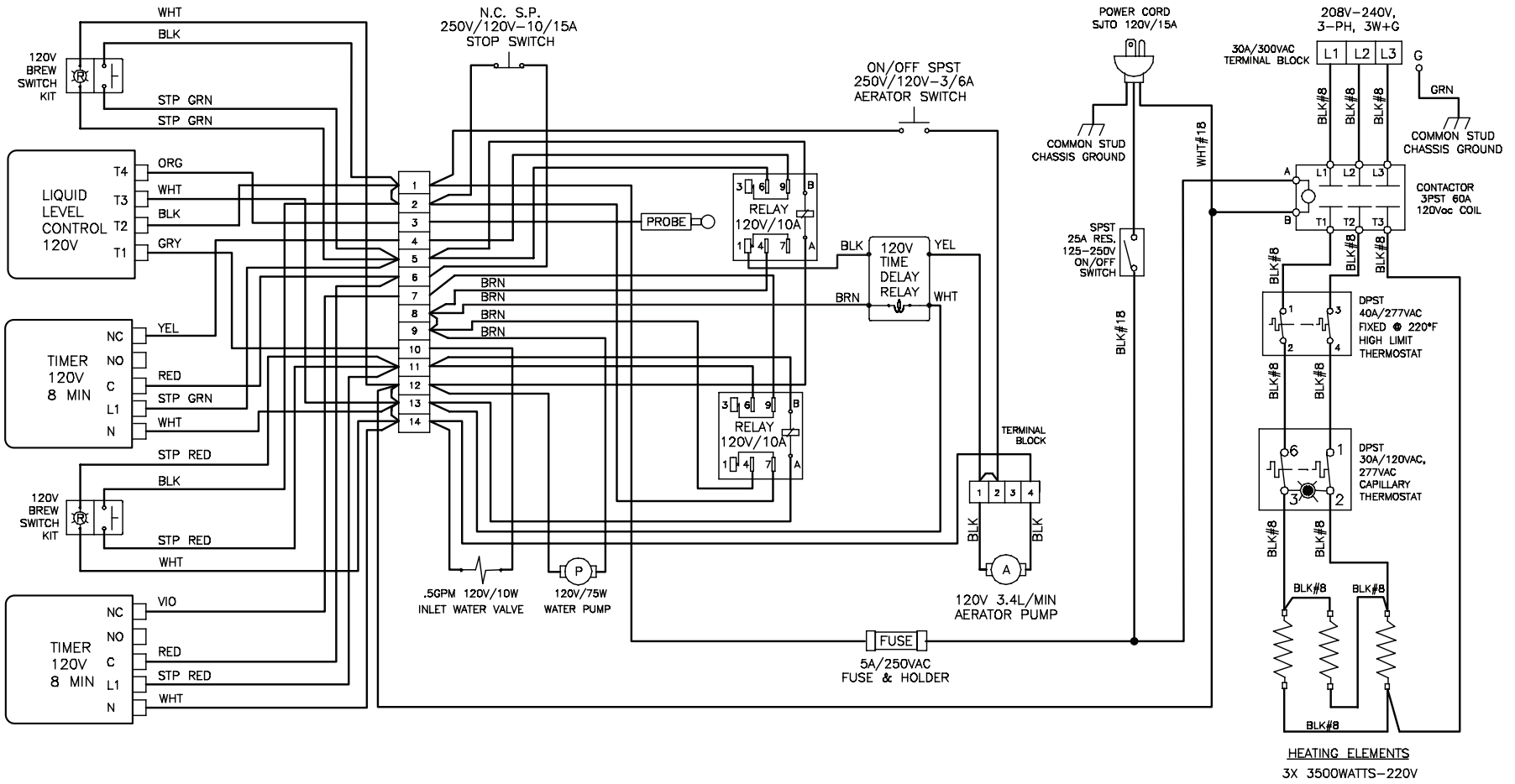
TITLE:

WIRING DIAGRAM

7.5KW 120/220V 20A 3PH 3W+G
50/60HZ AG ER with POWER CORD

PART NUMBER: WD-RU-300-20

REVISION: C



3 FOLLOW WIRE COLOR ASSIGNMENTS FROM POINT 'A' TO 'B' ON THE TERMINAL BLOCK AS SHOWN.

2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS.

1 ALL WIRES SHALL BE 18 AWG UL APPROVED APPLIANCE WIRE.

NOTES: UNLESS OTHERWISE SPECIFIED

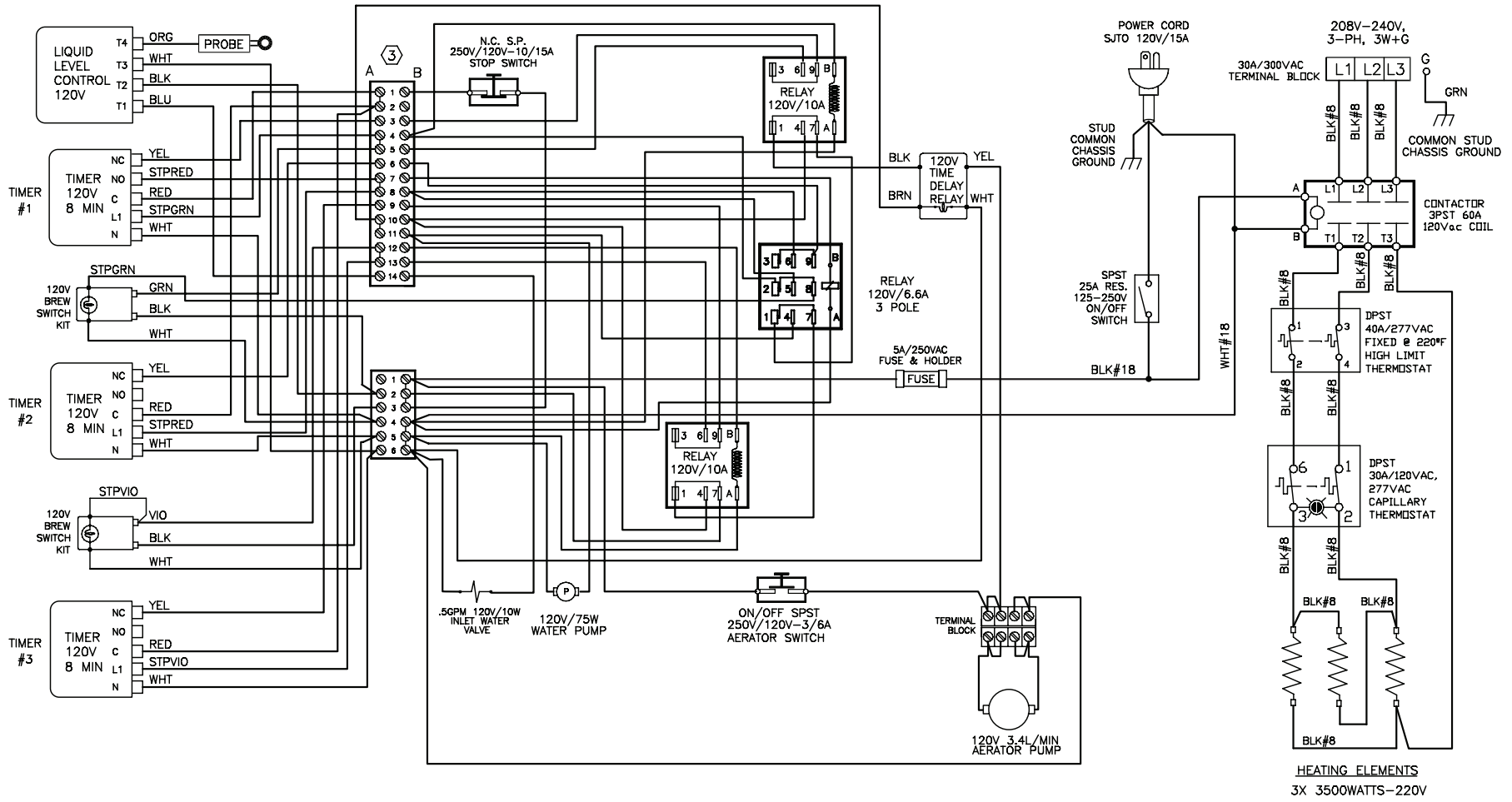
VOLTAGE:	120/220V
WATTAGE:	10.5KW
AMPERAGE:	27.6A
HERTZ:	60HZ
WIRES:	3W+G
PHASE:	3-PH

MODEL NUMBER:
RU-600-20
RU-600-20-80

TITLE: WIRING DIAGRAM
10.5KW 120/220V 3-PH 3W+G
60HZ AG ER w/POWER CORD

PART NUMBER: WD-RU600-20

REVISION: D



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(3) FOLLOW WIRE COLOR ASSIGNMENTS FROM POINT 'A' TO 'B' ON THE TERMINAL BLOCK AS SHOWN.

2 DO NOT CHANGE NOR SUBSTITUTE WIRE COLORS.

1 ALL WIRES SHALL BE 18 AWG UL APPROVED APPLIANCE WIRE.

NOTES: UNLESS OTHERWISE SPECIFIED

VOLTAGE:	120/220VAC
WATTAGE:	10.5KW
AMPERAGE:	27.6A
HERTZ:	60HZ
WIRES:	3W+G
PHASE:	3-PH

MODEL NUMBER:
RU-1000-20
RU-1000-20-072

TITLE: WIRING DIAGRAM
10.5KW, 120/220V, 3PH,
60Hz, 3W+G AG,ER w/CORD

PART NUMBER: WD-RU1000-20

REVISION: D

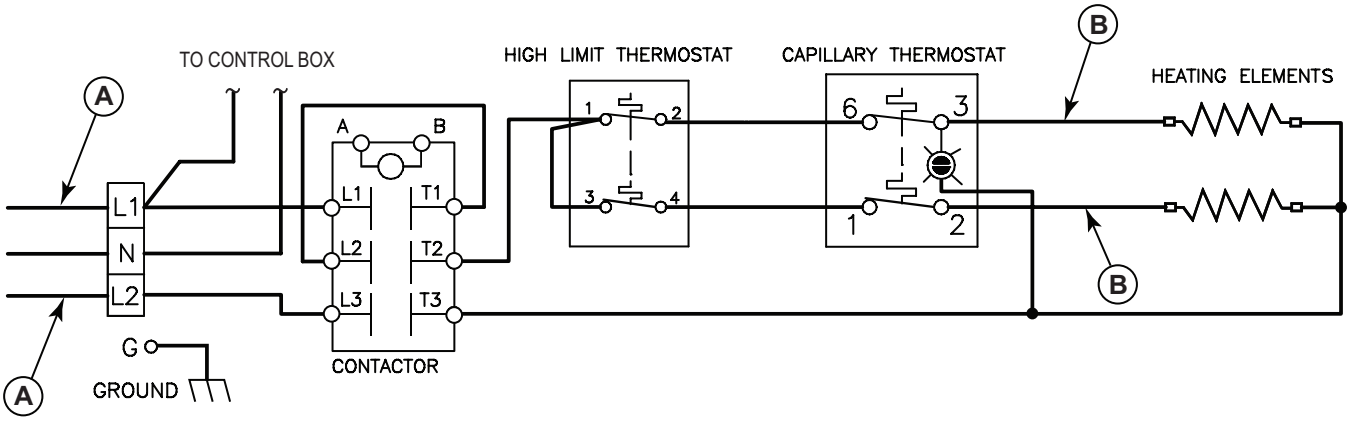

Figure 8. Single Phase Power Hookup. For Three Phase see Wiring Diagram.

TROUBLESHOOTING

To help the service technicians in the field to understand the operation of the RU models, we separate the basic functions of the unit into four different areas:

1. Heat Supply
2. Water Level Control
3. Brewing Cycle
4. Aeration

These four functions, even though they utilize the same power supply, work independently from each other.

In the following illustrations, problems are isolated to only that system where a malfunction is located, so in the field or shop, you will know exactly what components are involved.

HEAT SUPPLY OPERATION

Components involved:

1. Power Block
2. Thermostat
3. Heating Elements

HEAT SUPPLY

PROBLEM: Water will not heat up or heats up too slowly.

PROCEDURE: Take a voltage reading at terminals 1 and 3 of the power block to see if there is power from lines 1 and 2. If there is power at the power block, turn the thermostat all the way to boil and clamp your ammeter around line 1 or 2 at point A shown in figure 8. The reading should be approximately the same as indicated in the serial plate of the machine.

If you do not get a reading on your ammeter, remove the bottom cover of the urn and check for voltage at terminals 1 & 6 and 2 & 4 of the thermostat. If there is voltage at 1 and 6 (with the thermostat turned to boil) and there is no voltage at terminals 2 and 4, replace the thermostat.

If the meter reads only half of the amps that your urn is rated at (check serial plate), one of the heating elements has burnt out. Clamp your ammeter at points B (see figure 8, above) to determine which of the heating elements is bad. Replace the heating element.

If the water temperature in the urn is too hot (boiling) or too cold when the pilot light goes out, the thermostat must be recalibrated. Reset the thermostat calibration, refer to the steps on page 2. If the thermostat will not hold a calibration, replace the thermostat.

WATER LEVEL CONTROL OPERATION

Components Involved:

1. Probe Assembly
2. Liquid Level Control Board
3. Water Inlet Valve Assembly

PROBLEM: Water does not go into the urn jacket.

PROCEDURE:

I. Turn off the unit and test the probe assembly and check for grounded wiring. Pull orange wire from terminal 4 of the liquid level control board at point **A**

the quick disconnect terminal attached to the orange wire and with the other lead of the meter, touch the metal surface of the urn shell. Any reading in the meter dial will indicate the presence of a ground in either the terminals, wire, or probe assembly. Find the ground and repair it. If there is no reading at all on your ohmmeter, the probe is okay. Return the orange wire to the terminal 4 of the liquid level control board where it was removed.

II. Turn the unit on and clamp the leads of your voltmeter at the terminals of the valve coil as shown at **B** of figure 9. Under normal conditions, the voltmeter should read 110 to 120 volts while the urn is filling up and power to the coil should stop once the water level reaches the probe tip. If the voltmeter does not show voltage, the liquid level control board is not working properly. It is not sendin power to the valve solenoid and the valve does not open. Replace the board.

III. If both the probe and the liquid level control board are functioning normally, check the water inlet valve.Turn on the unit and disconnect the white and the blue wires from the coil on the valve (points **B** of figure 9). Use a lamp cord with alligator clips; hookup the terminals to the cord. Plug the cord into a 120 volt outlet. The valve should open when plugged in and close when unplugged. Repeat this three or four times. If you don't hear the sound of the solenoid, then the coil is bad. If you hear water flowing through the valve when unplugged, the diaphragm is either torn or needs cleaning. Replace the coil, diaphragm or clean out the valve.

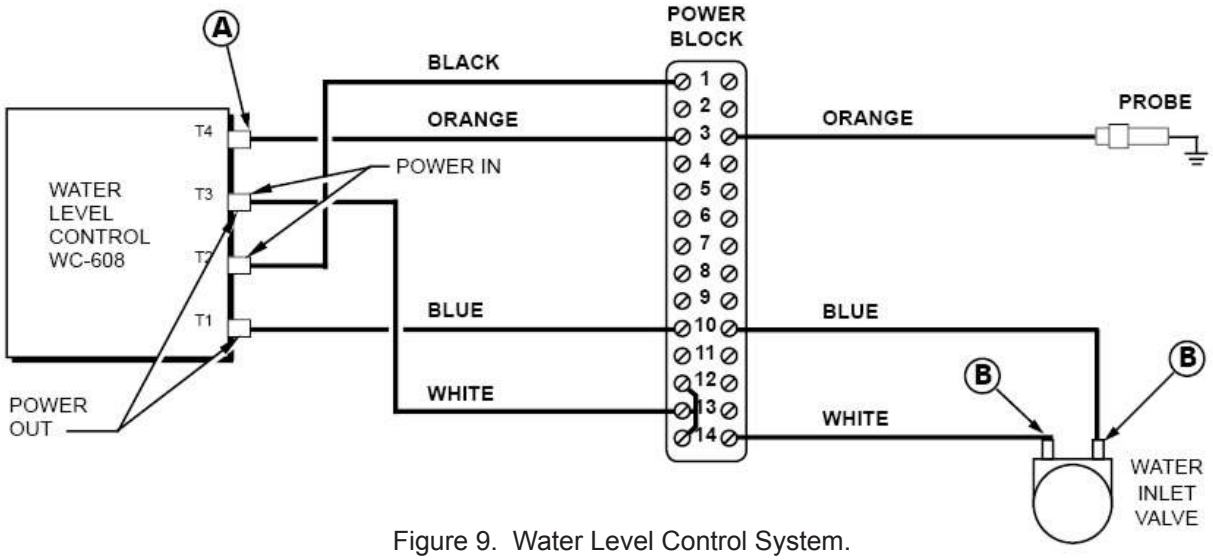

Figure 9. Water Level Control System.

BREWING OPERATION

Components Involved: Fuse, Brew Switch, Holding Relay, Timer, Stop Switch and Water Pump.

PROBLEM: Brew switch light does not turn on when pressed.
Test: Check your power supply and fuse in control box. It may be burned out.
Problem: Brew switch does not stay on, or light stays on only while switch is pressed but turns off when released and water comes out of spray head only while the switch is kept pressed.
Test Brew Switch: Take a voltage reading at points A of Fig. 10 while the brew switch is pushed in. If you read 110 volts, that means the switch is good.
Also, read voltage at points B of Fig. 10 to see if the coil of holding relay is being energized.
Test Holding Relay: The relay is used to energize the water pump, and the timer, therefore a simple voltage reading across C in the terminal strip will show if the relay is opening and closing its contacts. A zero reading will indicate a faulty relay. By the process of elimination, so far we established that the brew switch, and relay are working properly but the problem still remains.
Test Timer: The timer resets itself to the N. C.

position after every brewing cycle but if it fails to stop itself, it will remain open and cause the problem in question. To check the timer, disconnect yellow and red wires at E and take a continuity test between the two wires. If there is no continuity, the switch is open and must be replaced.

Test Stop Switch: The last of the components involved in this operation is the stop button. Its only function is to interrupt the current that energizes the coil of the holding relay after the brew switch has been depressed. A voltage reading at points F will indicate an open or closed condition.

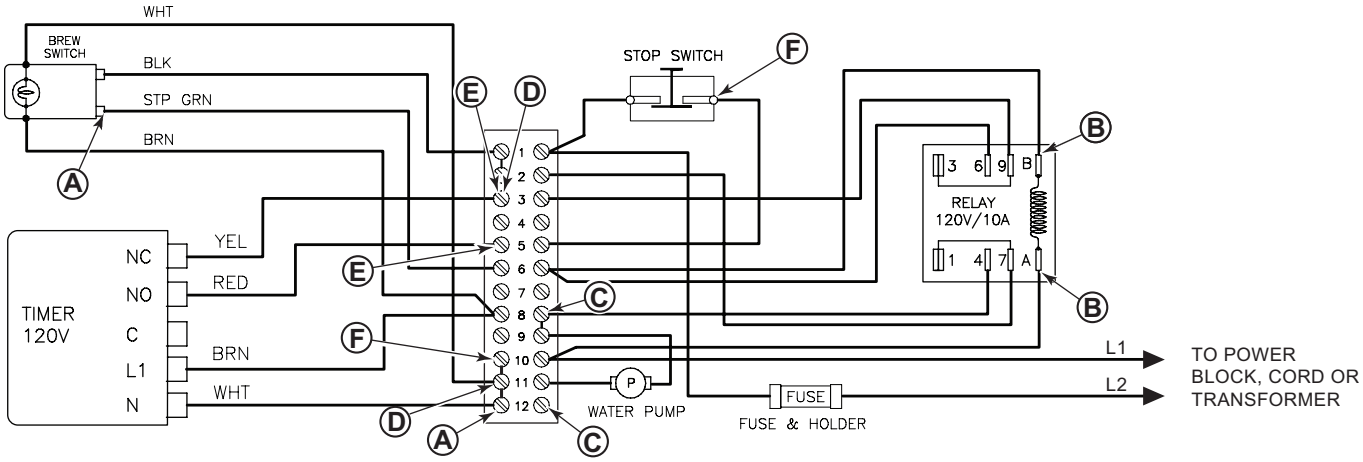

Figure 10. Brewing Operation

AERATION SYSTEM

Components Involved:

1. Aeration Switch
2. Holding Relay
3. Air Pump

AUTOMATIC AERATION

PROBLEM: Only one of the liners is aerated.

TEST: Inside the control box, there are two silicone tubes connecting the aeration pump to the ¼" copper tubes coming from inside the urn. Carefully, pull the silicone tubes from the copper tubes, press the manual aeration button and using your hand, feel for air pumping out from the silicone tubes. Determine if the pump is working. Replace the pump if air does not blow through the tubes.

MANUAL AERATION

PROBLEM: Manual aeration is not present on either of the liners, yet automatic aeration operates normally.

TEST: Check the continuity of the manual aeration switch. Check to see that the BLACK wire runs from terminal **1** of terminal strip #1 to the switch and YELLOW wire runs from the switch to terminal strip #2. Check for clean, tight connections at all terminals.

NOTE: When replacing the silicone tubing on the copper tubes, make sure you do not cover the small holes on the copper tubes.

These are air release holes so that after air is pumped into the liner, coffee can refill the gauge glass.

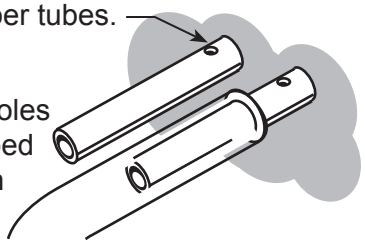

Figure 11. Air Pump Tubes.

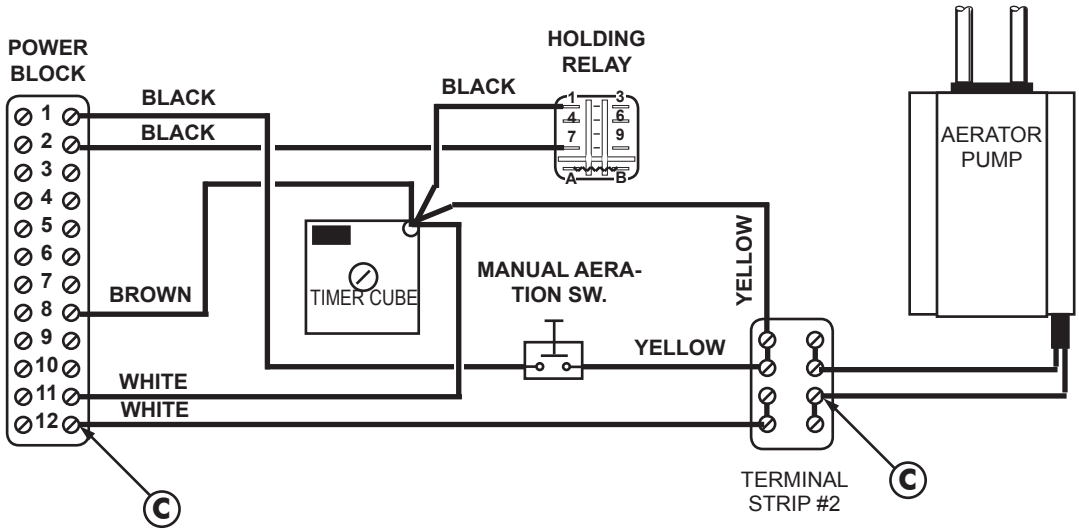

Figure 12. Aeration System.

PROBLEM: Aeration system fails to operate automatically.

TEST: Determine that the aeration pump is operating by pressing the manual aeration button on the front panel to see that air comes from the tubes.

Check the cube timer by taking a voltage reading at points **C** after running a brew cycle. There should be 110 volts across these points just after the brew cycle ends. If this test fails, replace the cube timer WC-405R.

CARE AND MAINTENANCE OF URN

PREVENTIVE MAINTENANCE

I. Remove the sprayhead from the urn and clean it once a week. More often in heavy lime areas.

WARNING Switch off the power to the unit at the circuit breaker. Turn off the water line running to the urn.

2. Clean the faucet seat cups twice a week and replace when cracked or leaking.

3. Periodic temperature checks and thermostat adjustments should be made by authorized personnel.

CLEANING

To ensure the highest quality coffee, the urn must be cleaned daily after the last batch of coffee is used.

Regular cleaning and preventive maintenance is essential in keeping your coffee urn looking and working like new.

CAUTION Do not use cleaning products containing chemicals that will damage stainless steel, ammonia and bleaches containing chlorine. Never use abrasives that will scratch the outside surface of the urn.

DAILY CLEANING INSTRUCTIONS

WARNING These steps involve working with very hot water.

I. After all the brewed coffee has been drawn from the urn, run a brew cycle of fresh water. Spray the hot water into the liner, then thoroughly brush it out with a long handled brush.

2. Drain the water off then repeat step one. Run another brew cycle. Brush out the liner and drain. Wipe down the liner with a clean towel.

3. If urn is not going to be used immediately, pour a gallon or two of fresh water into the liner. Remember to drain off this water before making another brew.

4. Wash the wire brew baskets with urn cleaner and rinse thoroughly.

TWICE A WEEK

Coffee urns must have a special scouring twice a week. To scour the urn:

1. Be sure water jacket is full of water and temperature is at brewing temperature.

2. Fill the liner with several gallons of water and add at least 1½ ounces of coffee urn cleaning compound. Allow this solution to remain in the liner approximately 30 minutes. During this time, the thermostat should be set to BOIL.

WARNING Very hot water.

3. Scrub the inside of the liner and cover with a long handled brush.
4. Drain the all the urn cleaning solution and rinse by running several brew cycles with the sprayhead centered over the liner, draining the rinse water between sprays.
5. Thoroughly clean the faucets.

WARNING Never remove the faucet when the liner has water or coffee in it.

Switch off the power to the unit at the circuit breaker. Turn off the water line running to the urn.

Use a long thin gauge glass brush to clean the coffee gauge glass. Use the same brush to clean the fitting at the bottom of the liner and the pipe connecting to the coffee faucet.

6. Leave a gallon or two of fresh water in the liner. Drain just before brewing coffee.

Product Warranty Information

The Wilbur Curtis Company certifies that its products are free from defects in material and workmanship under normal use. The following limited warranties and conditions apply:

3 Years, Parts and Labor, from Original Date of Purchase on digital control boards.

2 Years, Parts, from Original Date of Purchase on all other electrical components, fittings and tubing.

1 Year, Labor, from Original Date of Purchase on all electrical components, fittings and tubing.

Additionally, the Wilbur Curtis Company warrants its Grinding Burrs for Forty (40) months from date of purchase or 40,000 pounds of coffee, whichever comes first. Stainless Steel components are warranted for two (2) years from date of purchase against leaking or pitting and replacement parts are warranted for ninety (90) days from date of purchase or for the remainder of the limited warranty period of the equipment in which the component is installed.
All in-warranty service calls must have prior authorization. For Authorization, call the Technical Support Department at 1-800-995-0417.
Effective date of this policy is April 1, 2003.
Additional conditions may apply. Go to www.wilburcurtis.com to view the full product warranty information.

CONDITIONS & EXCEPTIONS

The warranty covers original equipment at time of purchase only. The Wilbur Curtis Company, Inc., assumes no responsibility for substitute replacement parts installed on Curtis equipment that have not been purchased from the

Wilbur Curtis Company, Inc. The Wilbur Curtis Company will not accept any responsibility if the following conditions are not met. The warranty does not cover and is void under the following circumstances:

1) Improper operation of equipment: The equipment must be used for its designed and intended purpose and function.
2) Improper installation of equipment: This equipment must be installed by a professional technician and must comply with all local electrical, mechanical and plumbing codes.
3) Improper voltage: Equipment must be installed at the voltage stated on the serial plate supplied with this equipment.
4) Improper water supply: This includes, but is not limited to, excessive or low water pressure, and inadequate or fluctuating water flow rate.
5) Adjustments and cleaning: The resetting of safety thermostats and circuit breakers, programming and temperature adjustments are the responsibility of the equipment owner. The owner is responsible for proper cleaning and regular maintenance of this equipment.
6) Damaged in transit: Equipment damaged in transit is the responsibility of the freight company and a claim should be made with the carrier.
7) Abuse or neglect (including failure to periodically clean or remove lime accumulations): Manufacturer is not responsible for variation in equipment operation due to excessive lime or local water conditions. The equipment must be maintained according to the manufacturer's recommendations.
8) Replacement of items subject to normal use and wear: This shall include, but is not limited to, light bulbs, shear disks, "0" rings, gaskets, silicone tube, canister assemblies, whipper chambers and plates, mixing bowls, agitation assemblies and whipper propellers.
9) Repairs and/or Replacements are subject to our decision that the workmanship or parts were faulty and the defects showed up under normal use. All labor shall be performed during regular working hours. Overtime charges are the responsibility of the owner. Charges incurred by delays, waiting time, or operating restrictions that hinder the service technician's ability to perform service is the responsibility of the owner of the equipment. This includes institutional and correctional facilities.

The Wilbur Curtis Company will allow up to 100 miles, round trip, per in-warranty service call.
RETURN MERCHANDISE AUTHORIZATION: All claims under this warranty must be submitted to the Wilbur Curtis Company Technical Support Department prior to performing any repair work or return of this equipment to the factory. All returned equipment must be repackaged properly in the original carton. No units will be accepted if they are damaged in transit due to improper packaging. NO UNITS OR PARTS WILL BE ACCEPTED WITHOUT A RETURN MERCHANDISE AUTHORIZATION (RMA). RMA NUMBER MUST BE MARKED ON THE CARTON OR SHIPPING LABEL. All in-warranty service calls must be performed by an authorized service agent. Call the Wilbur Curtis Technical Support Department to find an agent near you.

WILBUR CURTIS CO., INC.
6913 Acco St., Montebello, CA 90640-5403 USA
Phone: 800/421-6150 (M-F 5:30A - 4:00P PST) Fax: 323-837-2410
Technical Support Phone: 800/995-0417 E-Mail: techsupport@wilburcurtis.com
Web Site: www.wilburcurtis.com

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