

Service Manual – Water Boiler 14 Gallon Gas

MODEL

- WB-14-11

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



Sanitation Requirements

The Curtis Water Boiler is Factory Pre-Set and Ready to Go... Right from the Carton.

Factory Settings:

- Brew Temperature = 200°F
- Volume = 14 Gallons

System Requirements

- Water Source: 20 – 100PSI (Min Flow Rate of 1 GPM)
- Electrical: 120VAC, 3 Amps

Equipment to be installed to comply with applicable federal, state, or local plumbing/electrical codes having jurisdiction.

SETUP STEPS

1. Place unit at counter height, on a firm, level base, in such a way that it can be connected to water and power supply. The urn must be away from wall no less than 6" and must have plenty of cross ventilation.
2. Install the water faucet.
3. Connect water line to inlet fitting on valve. It is recommended that some type of water mineral reducing filter be used in the water line before entering the unit. Water pressure entering brewer is required to be stable and must provide minimum of 1 gallon per minute. Use water regulator for constant pressure. Required water pressures, 20 to 100 psi. The water supply connection: 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.
4. Once the water connection is complete, open the water line, then plug in the power cord into an 115V outlet. Water must be above the base of the gauge glass before turning on the heat.

NSF International requires the following water connection:

1. A quick disconnect or additional coiled tubing (at least 2x the depth of the unit) so that the machine can be moved for cleaning underneath.
2. This equipment is to be installed with adequate backflow protection to comply with applicable federal, state and local codes..
3. Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained in accordance with federal, state, and local codes.



GAS CONNECTION

Waterboiler units 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.

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

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

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

 **WARNING HOT LIQUID,** Scalding may occur. Avoid splashing.



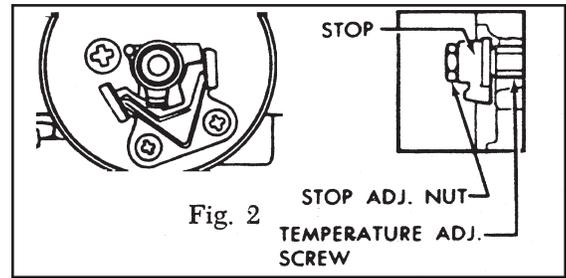
ISO 9001 REGISTERED

WILBUR CURTIS COMPANY
Montebello, CA 90640

SET-UP

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 10° 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 counterclockwise 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).
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.

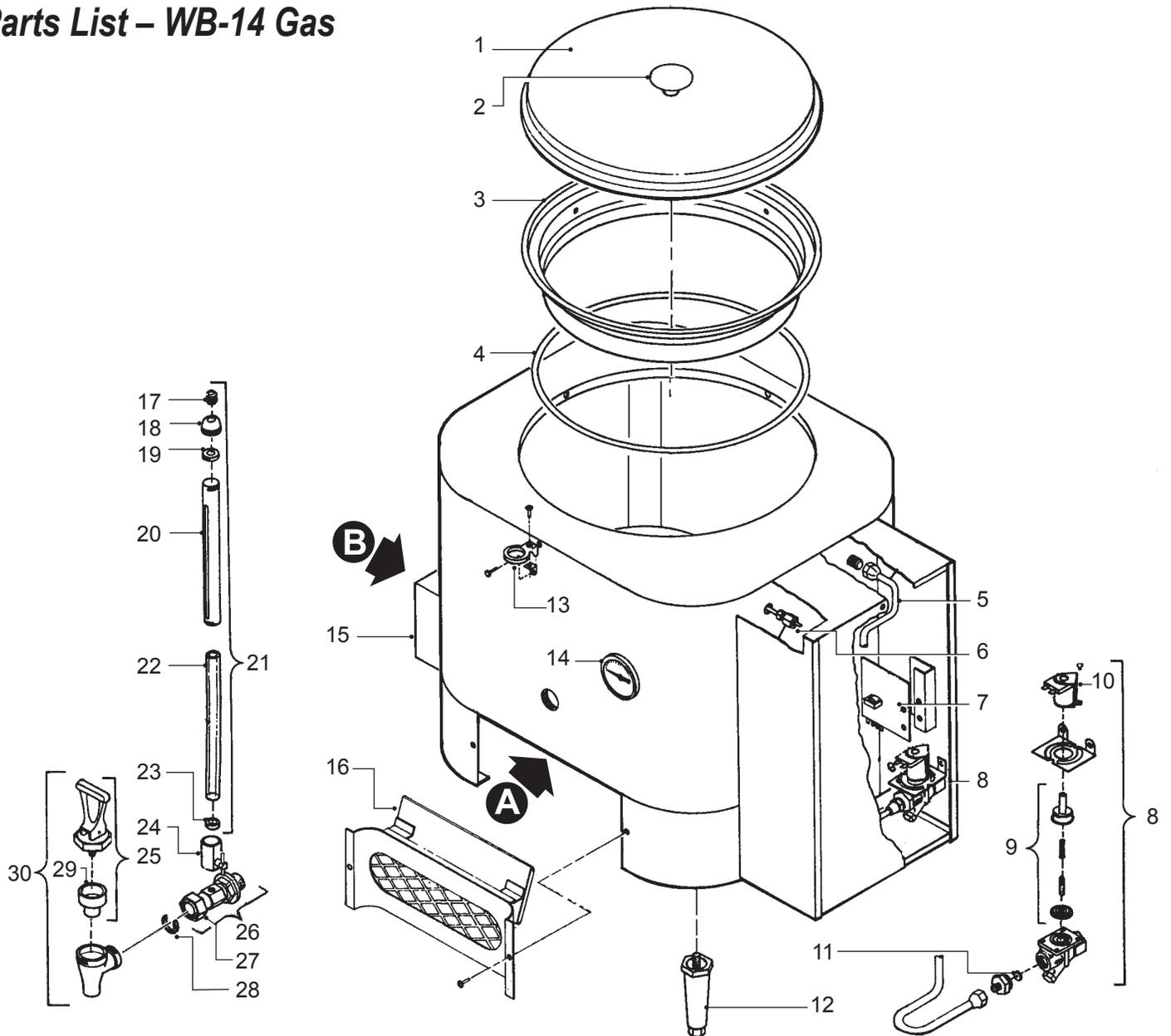
PROCEDURE FOR LIGHTING OR RELIGHTING PILOT

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, refer to "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 should now ignite.

PROCEDURE FOR ADJUSTING PILOT

1. Remove pilot adjustment cap. Adjust pilot key, allowing flame to completely envelop the end ($\frac{1}{8}$ ") of the Thermocouple.
2. Adjust pilot burner air shutter (if provided) to obtain a soft blue flame.

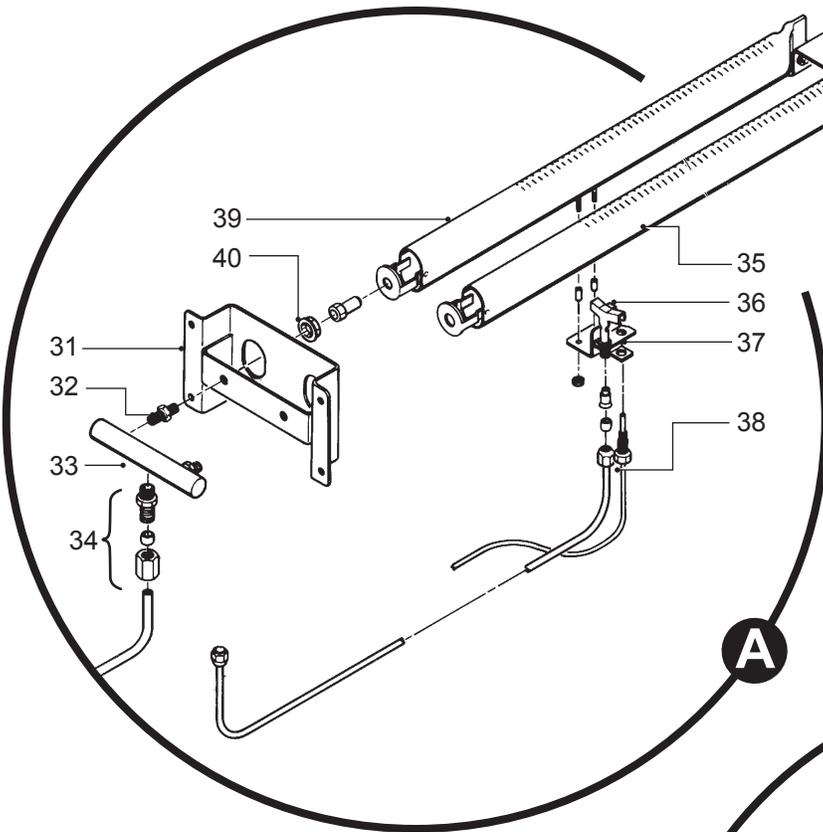
Parts List – WB-14 Gas



ITEM	PART N°	DESCRIPTION
1	WC-5602	LID, 6 GAL WITH KNOB
2	WC-3205	KNOB, LID 1/4-20 FEMALE THRD
3	WC-6118-01	COLLAR, WATER BOILER
4	WC-4303	O' RING, LINER
5	WC-5334	TUBING, WATER INLET 15½"L
6	WC-5502	PROBE, WATER LEVEL
7	WC- 608	LEVEL CONTROL, WATER
8	WC- 801	VALVE, INLET BRASS .50 GPM 120V 10W
9	WC-3700	KIT, INLET VALV REPAIR USE ON WC-801
10	WC- 409	COIL, DOLE VALVE 120V S-45
11	WC- 813	FLOW WASHER, .5GPM .5" S45
12	WC-3500	LEG, 4" ADJUSTABLE 3/8-16 THRD
13	WC-2007	BRACKET, GAUGE GLASS
14	WC- 511	THERMOMETER, DIAL
15	WC-1141	KIT, CONTROL GAS URN

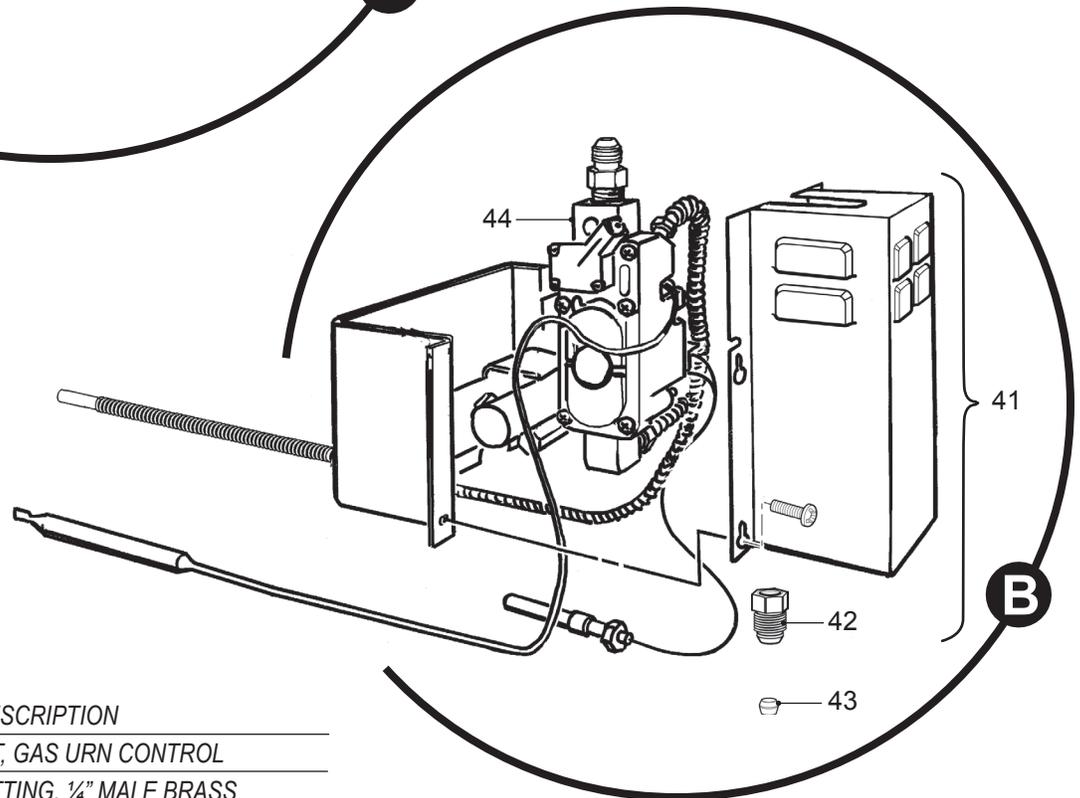
ITEM	PART N°	DESCRIPTION
16	WC-11011	PANEL, EXHAUST GAS
17	WC-2003	CAP, VENTED PLUG
18	WC-2002	CAP, SHIELD
19	WC-2005	WASHER, SHIELD CAP
20	WC-2009	SHIELD, GAUGE GLASS 7"
21	WC-2100	GAUGE GLASS ASSEMBLY 7"
22	WC-2024	GAUGE GLASS, 7"
23	WC-2006	WASHER, SHIELD BASE
24	WC-1900	VALVE, GUAGE GLASS SHUT OFF
25	WC-3706	KIT, FAUCET REPAIR
26	WC-1901A	SHANK, FAUCET W/SHIELD BASE
27	WC-1903	NUT, SHANK UNION
28	WC-1906	C' RING
29	WC-1805	SEAT CUP, SILICONE
30	WC-1801	FAUCET,

Parts List WB-14 Gas Thermostat & Burner



Burner Assembly

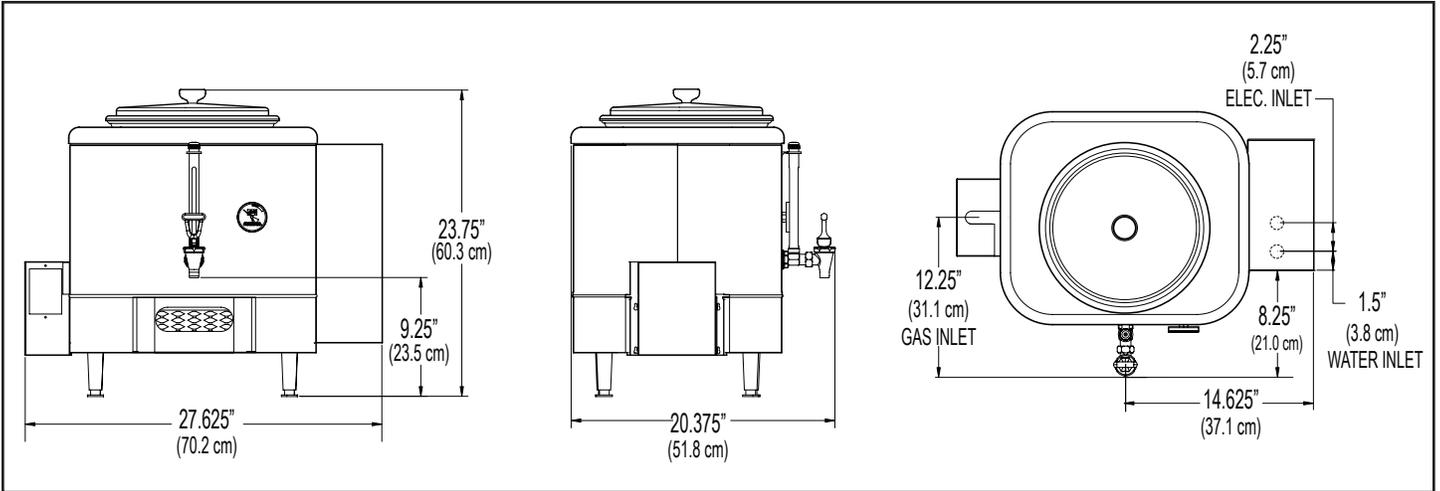
ITEM	PART N°	DESCRIPTION
31	WC-1114	SUPPORT, BURNER ASSEMBLY
32	WC-1104N	GAS, JET ORIFICE (NATURAL GAS)
33	WC-1105N	MANIFOLD, GAS NAT
34	WC-2804	CONNECTOR $\frac{3}{8}$ x $\frac{3}{8}$ CMPRSN
35	WC-1110N	GAS, BURNER ASSY 16" (NATURAL)
36	WC-1102N	GAS, PILOT (NATURAL GAS)
37	WC-1115	BRACKET, MOUNTING GAS PILOT
38	WC-1106	GAS, 26" THERMOCOUPLE
39	WC-1108	GAS, BURNER 16" (SINGLE URNS)
40	WC-4011	PALNUT, GAS URNS



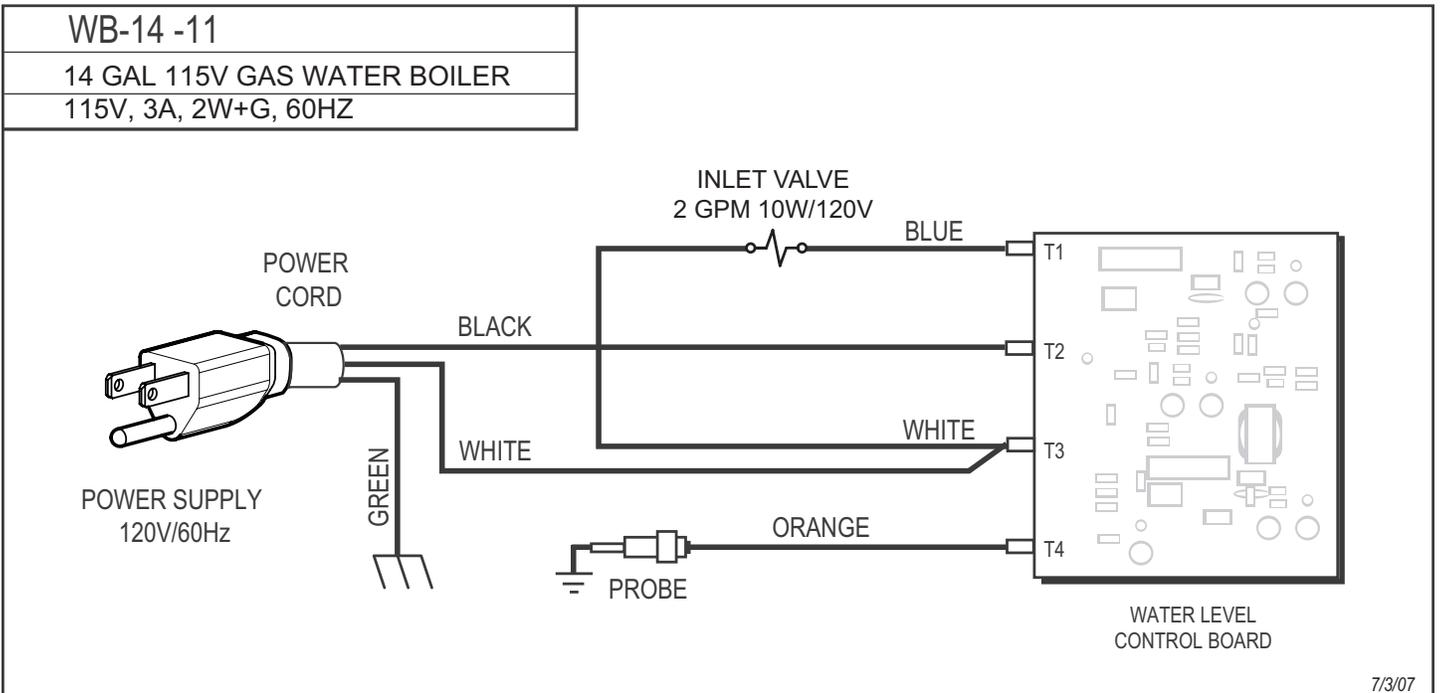
Gas Control

ITEM	PART N°	DESCRIPTION
41	WC-1141	KIT, GAS URN CONTROL
42	WC-28019	FITTING, $\frac{1}{4}$ " MALE BRASS
43	WC-28018	SLEEVE, CMPRSN FITTING BRASS
44	WC-1140	CONTROL ASSY, GAS URN

WB-14 Rough-In Drawing



WB-14 Wiring Diagram



7/3/07

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, "O" 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 ♦ Fax: 323-837-2410
♦ Technical Support Phone: 800/995-0417 (M-F 5:30A - 4:00P PST) ♦ E-Mail: techsupport@wilburcurtis.com
♦ Web Site: www.wilburcurtis.com

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