

Curtis® WILBUR CURTIS COMPANY, INC.

Service Manual – ThermoPro Twin Brewer

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.

- Do NOT immerse the unit in water or any other liquid
- To reduce the risk of fire or electric shock, do NOT open top or side panels. No user serviceable parts inside. Repair should be done 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

Models Included

- ◆ ThermoPro Twin Head Brewer



WARNING HOT LIQUID,
Scalding may occur.
Avoid splashing.



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.



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



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

This Curtis Generation 3 Unit is Factory Pre-Set and Ready to Go... Right from the Carton.

Following are the Factory Settings for your G3 Coffee Brewing Systems:

- **Brew Temperature** = 200°F
- **Brew Volume** = Set to Vessel Requirement.
- **Water Bypass** = On for LARGE & MEDIUM Brew Only
- **Sleep Mode** = Off

System Requirements:

- **Water Source** 20 – 90 PSI (Minimum Flow Rate of 1 GPM)
- **Electrical:** See attached schematic for standard model or visit www.wilburcurtis.com for your model.

SETUP STEPS

The unit should be level (left to right and front to back), located on a solid counter top. Connect a water line from the water filter to the brewer. NOTE: Some type of water filtration device must be used to maintain a trouble-free operation. (In areas with extremely hard water, we suggest that a sedimentary and taste & odor filter be installed.) This will prolong the life of your brewing system and enhance coffee quality.

The National Sanitation Foundation 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. In some areas an approved backflow prevention device may be required between the brewer and the water supply.

1. A 3/8" NPT x 3/8" Flare elbow has been supplied for water line connection. Use tubing sized sufficiently to provide a minimum of 1.0 GPM.
2. To hookup the InterLock grinder, Locate the jack labeled "Class 2 Wiring Only" on brewer and grinder. Connect the two with the cable plug.
3. Connect the unit to an appropriate electrical power circuit.
4. Turn on the toggle (STANDBY/ON) switch behind the unit. The heating tank will start to fill. When the water level in the tank rises to the correct volume, the heating elements will energize automatically. With ADS Systems there is no danger of element burnout caused by an empty tank.
5. The heating tank will require 20 to 30 minutes to reach operating temperature (200°F) as indicated by the READY-TO-BREW indicator.
6. Prior to brewing, dispense 12 ounces of hot water through the hot water faucet.
7. Brew a cycle of at least 12 ounces, to purge the water lines of any air that may be trapped after filling.

BREWING INSTRUCTIONS

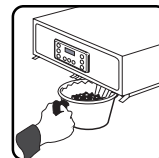
1. Brewer should be ON (Confirm at rear toggle switch, then press the ON/OFF button). Ready-to-Brew should be ON. If connected to an InterLock grinder, grinder should be on. If Interlocked, grind coffee at this time.
2. Place an empty ThermoPro server under the brewcone.



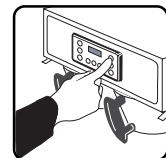
3. Place a clean filter into the brewcone.



4. Fill brewcone with ground coffee.



5. Transfer filled brewcone to brewer.



6. Press Brew button. Brewing will begin immediately.



WARNING TO AVOID SCALDING, Do not remove brewcone while brew light is flashing.



ISO 9001 REGISTERED

WILBUR CURTIS COMPANY
Montebello, CA 90640

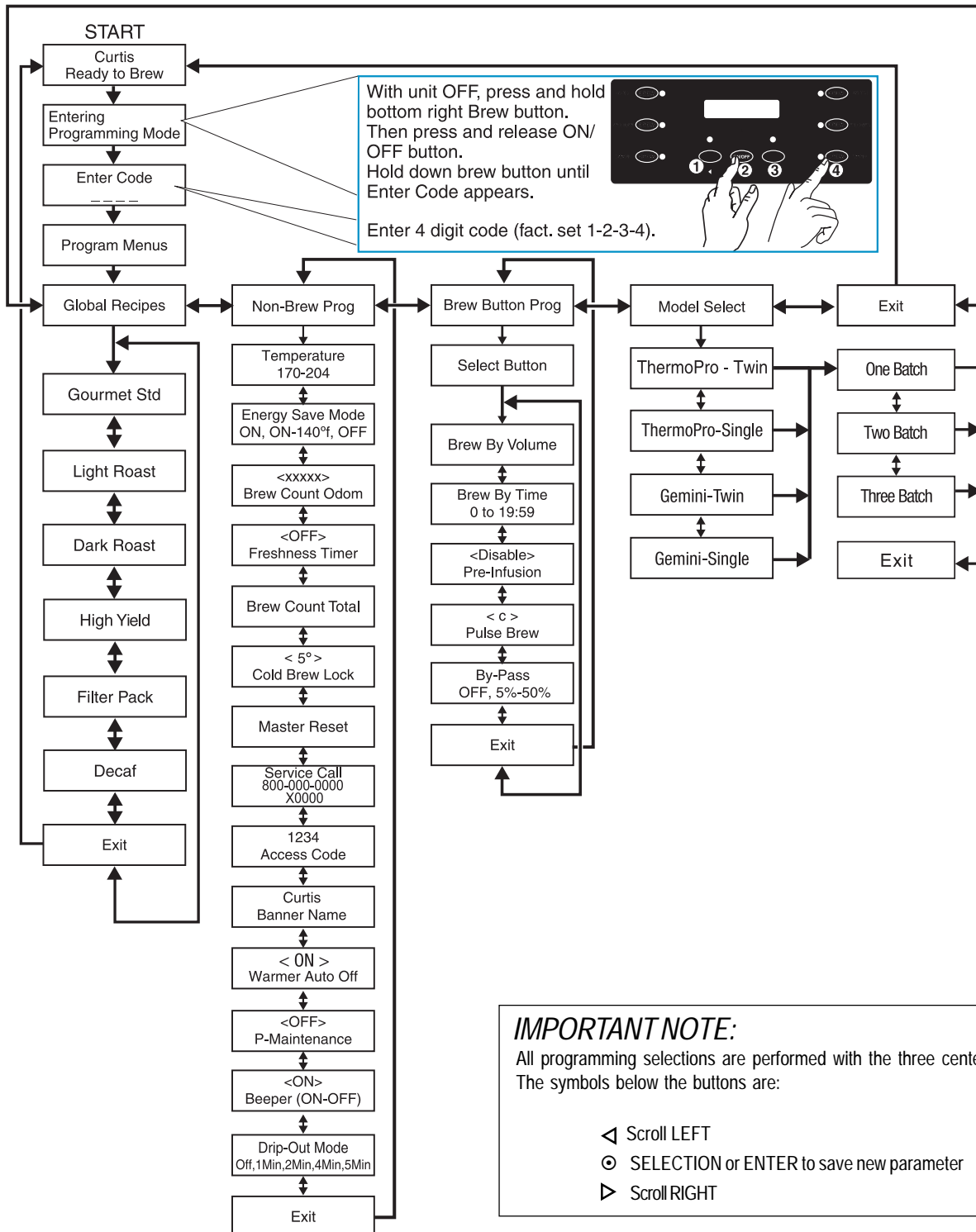
Your Curtis ADS System is Factory Pre-Set for Optimum Performance.

After connection to water and power; the rear toggle switch must be on. You will hear a beep sound, indicating power is available to the controller.

The control displays **WILBR CURTIS**. Press ON/OFF button and the screen will display **THERMO WILBR CURTIS**. After three seconds, **WILBR CURTIS HEATING...** is displayed.

Water will fill the tank (approximately 2-3 minutes depending on water flow rate). When the proper level is reached **WILBR CURTIS HEATING...** will appear on the screen. It takes approximately 20 minutes to reach setpoint temperature of 200° F.

Control will display **WILBR CURTIS READY TO BREW** when temperature reaches the setpoint (200° F). Unit is now ready to brew.

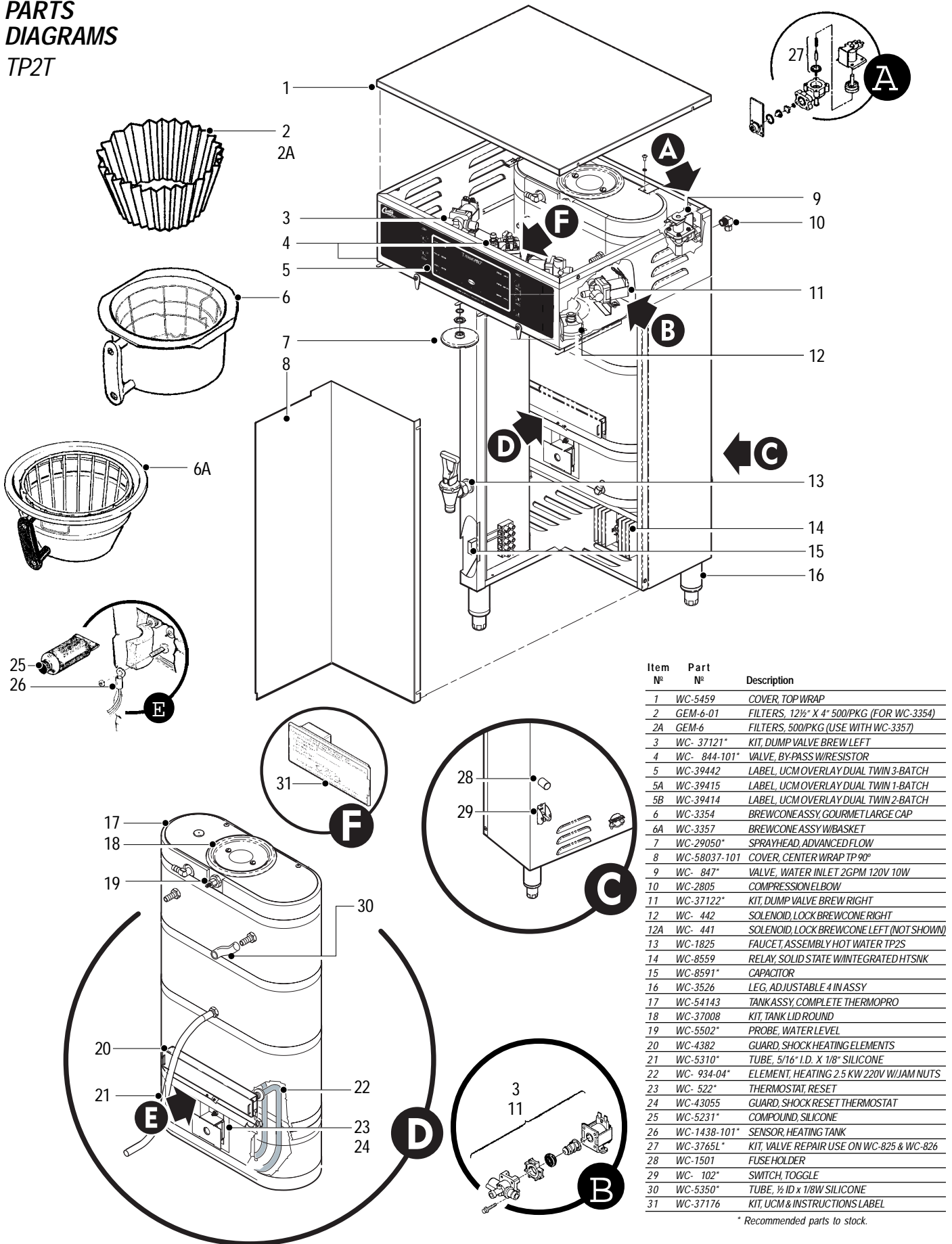


IMPORTANT NOTE:

All programming selections are performed with the three center buttons. The symbols below the buttons are:

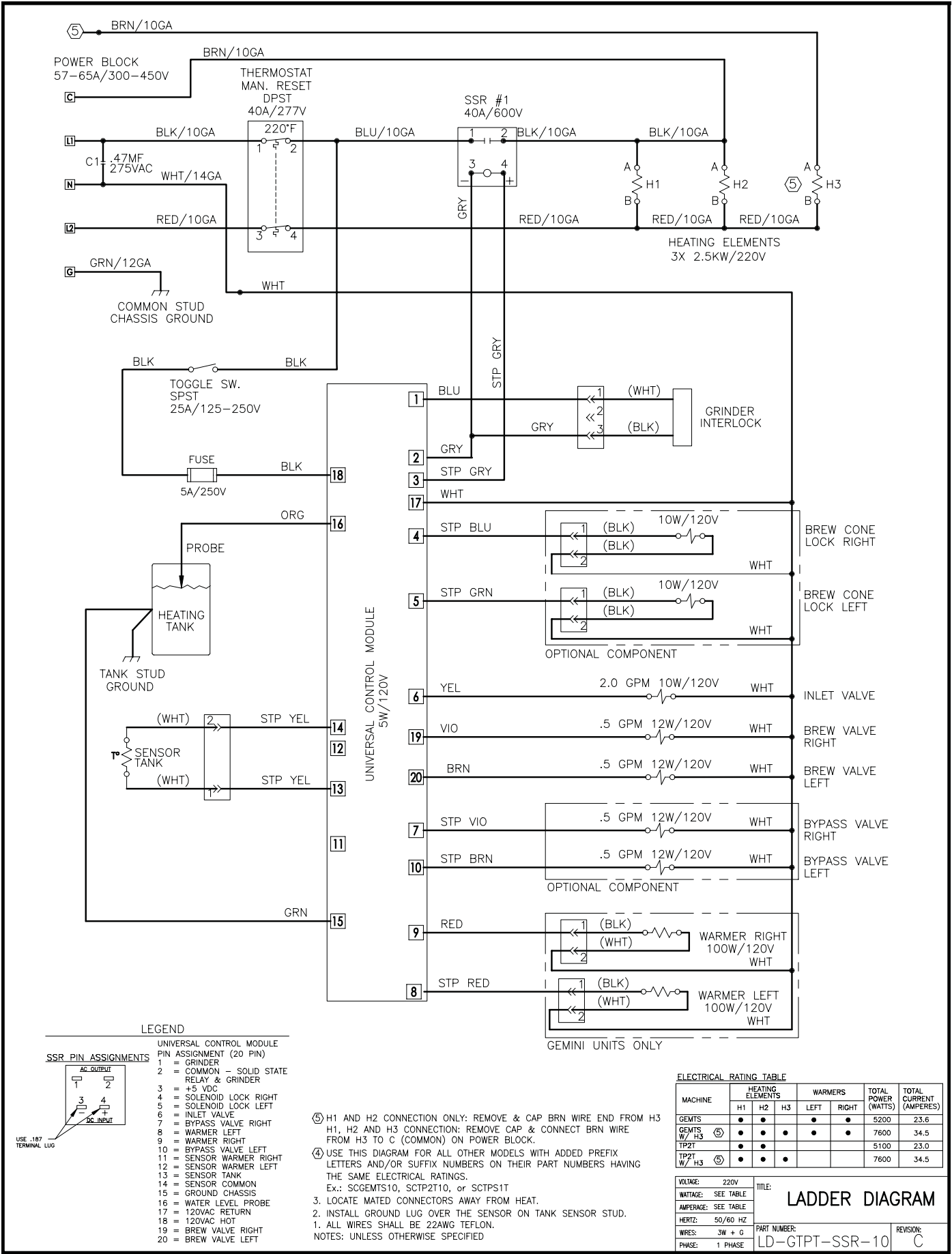
- ◀ Scroll LEFT
- ⊙ SELECTION or ENTER to save new parameter
- ▶ Scroll RIGHT

**PARTS
DIAGRAMS**
TP2T



Item N°	Part N°	Description
1	WC-5459	COVER, TOP WRAP
2	GEM-6-01	FILTERS, 12½" X 4" 500/PKG (FOR WC-3354)
2A	GEM-6	FILTERS, 500/PKG (USE WITH WC-3357)
3	WC- 37121*	KIT, DUMP VALVE BREW LEFT
4	WC- 844-101*	VALVE, BY-PASS W/RESISTOR
5	WC-39442	LABEL, UCM OVERLAY DUAL TWIN 3-BATCH
5A	WC-39415	LABEL, UCM OVERLAY DUAL TWIN 1-BATCH
5B	WC-39414	LABEL, UCM OVERLAY DUAL TWIN 2-BATCH
6	WC-3354	BREWCONE ASSY, GOURMET LARGE CAP
6A	WC-3357	BREWCONE ASSY W/BASKET
7	WC-29050*	SPRAYHEAD, ADVANCED FLOW
8	WC-58037-101	COVER, CENTER WRAP TP 90°
9	WC- 847*	VALVE, WATER INLET 2GPM 120V 10W
10	WC-2805	COMPRESSION ELBOW
11	WC-37122*	KIT, DUMP VALVE BREW RIGHT
12	WC- 442	SOLENOID, LOCK BREWCONE RIGHT
12A	WC- 441	SOLENOID, LOCK BREWCONE LEFT (NOT SHOWN)
13	WC-1825	FAUCET, ASSEMBLY HOT WATER TP2S
14	WC-8559	RELAY, SOLID STATE W/INTEGRATED HTSNK
15	WC-8591*	CAPACITOR
16	WC-3526	LEG, ADJUSTABLE 4 IN ASSY
17	WC-54143	TANK ASSY, COMPLETE THERMOPRO
18	WC-37008	KIT, TANK LID ROUND
19	WC-5502*	PROBE, WATER LEVEL
20	WC-4382	GUARD, SHOCK HEATING ELEMENTS
21	WC-5310*	TUBE, 5/16" I.D. X 1/8" SILICONE
22	WC- 934-04*	ELEMENT, HEATING 2.5 KW/ 220V W/JAM NUTS
23	WC- 522*	THERMOSTAT, RESET
24	WC-43055	GUARD, SHOCK RESET THERMOSTAT
25	WC-5231*	COMPOUND, SILICONE
26	WC-1438-101*	SENSOR, HEATING TANK
27	WC-3765L*	KIT, VALVE REPAIR USE ON WC-825 & WC-826
28	WC-1501	FUSE HOLDER
29	WC- 102*	SWITCH, TOGGLE
30	WC-5350*	TUBE, ½ ID x 1/8W SILICONE
31	WC-37176	KIT, UCM & INSTRUCTIONS LABEL

* Recommended parts to stock.



LEGEND

UNIVERSAL CONTROL MODULE
PIN ASSIGNMENT (20 PIN)

SSR PIN ASSIGNMENTS

1	AC OUTPUT
2	AC OUTPUT
3	DC INPUT
4	DC INPUT

USE .187" TERMINAL LUG

1 = GRINDER
2 = COMMON - SOLID STATE RELAY & GRINDER
3 = +5 VDC
4 = SOLENOID LOCK RIGHT
5 = SOLENOID LOCK LEFT
6 = INLET VALVE
7 = BYPASS VALVE RIGHT
8 = WARMER LEFT
9 = WARMER RIGHT
10 = BYPASS VALVE LEFT
11 = SENSOR WARMER RIGHT
12 = SENSOR WARMER LEFT
13 = SENSOR TANK
14 = SENSOR COMMON
15 = GROUND CHASSIS
16 = WATER LEVEL PROBE
17 = 120VAC RETURN
18 = 120VAC HOT
19 = BREW VALVE RIGHT
20 = BREW VALVE LEFT

⑤ H1 AND H2 CONNECTION ONLY: REMOVE & CAP BRN WIRE END FROM H3
H1, H2 AND H3 CONNECTION: REMOVE CAP & CONNECT BRN WIRE FROM H3 TO C (COMMON) ON POWER BLOCK.

④ USE THIS DIAGRAM FOR ALL OTHER MODELS WITH ADDED PREFIX LETTERS AND/OR SUFFIX NUMBERS ON THEIR PART NUMBERS HAVING THE SAME ELECTRICAL RATINGS.
Ex.: SCGEMTS10, SCTP2T10, or SCTPS1T

3. LOCATE CONNECTORS AWAY FROM HEAT.

2. INSTALL GROUND LUG OVER THE SENSOR ON TANK SENSOR STUD.

1. ALL WIRES SHALL BE 22AWG TEFLON.

NOTES: UNLESS OTHERWISE SPECIFIED

ELECTRICAL RATING TABLE

MACHINE	HEATING ELEMENTS			WARMERS		TOTAL POWER (WATTS)	TOTAL CURRENT (AMPERES)
	H1	H2	H3	LEFT	RIGHT		
GEMTS	●	●	●	●	●	5200	23.6
GEMTS W/ H3	●	●	●	●	●	7600	34.5
TP2T	●	●	●			5100	23.0
TP2T W/ H3	●	●	●			7600	34.5

LADDER DIAGRAM

VOLTAGE: 220V	TITLE:
WATTAGE: SEE TABLE	PART NUMBER: LD-GTPT-SSR-10
AMPERAGE: SEE TABLE	
HERTZ: 50/60 HZ	
WIRES: 3W + G	
PHASE: 1 PHASE	

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.

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♦ Technical Support Phone: 800/995-0417 (M-F 5:30A - 4:00P PST)

♦ Web Site: www.wilburcurtis.com

♦ E-Mail: techsupport@wilburcurtis.com