



Service Manual – ThermoPro Single Head 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

- ◆ TP2S



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
- **Water Bypass** = On for LARGE (35%) MEDIUM (10%) SMALL (0%)
- **Brew Volume** = Set to Vessel Requirement.
- **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

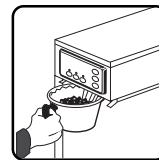
1. Brewer should be ON (Confirm at rear toggle switch, then press the ON/OFF button). Ready-to-Brew should be ON. If connected to an InterLock grinder, grinder should be on. If Interlocked, grind coffee at this time.
2. Place an empty ThermoPro server under the brewcone.



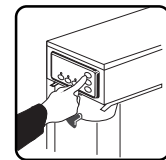
3. Place a clean filter into the brewcone.



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

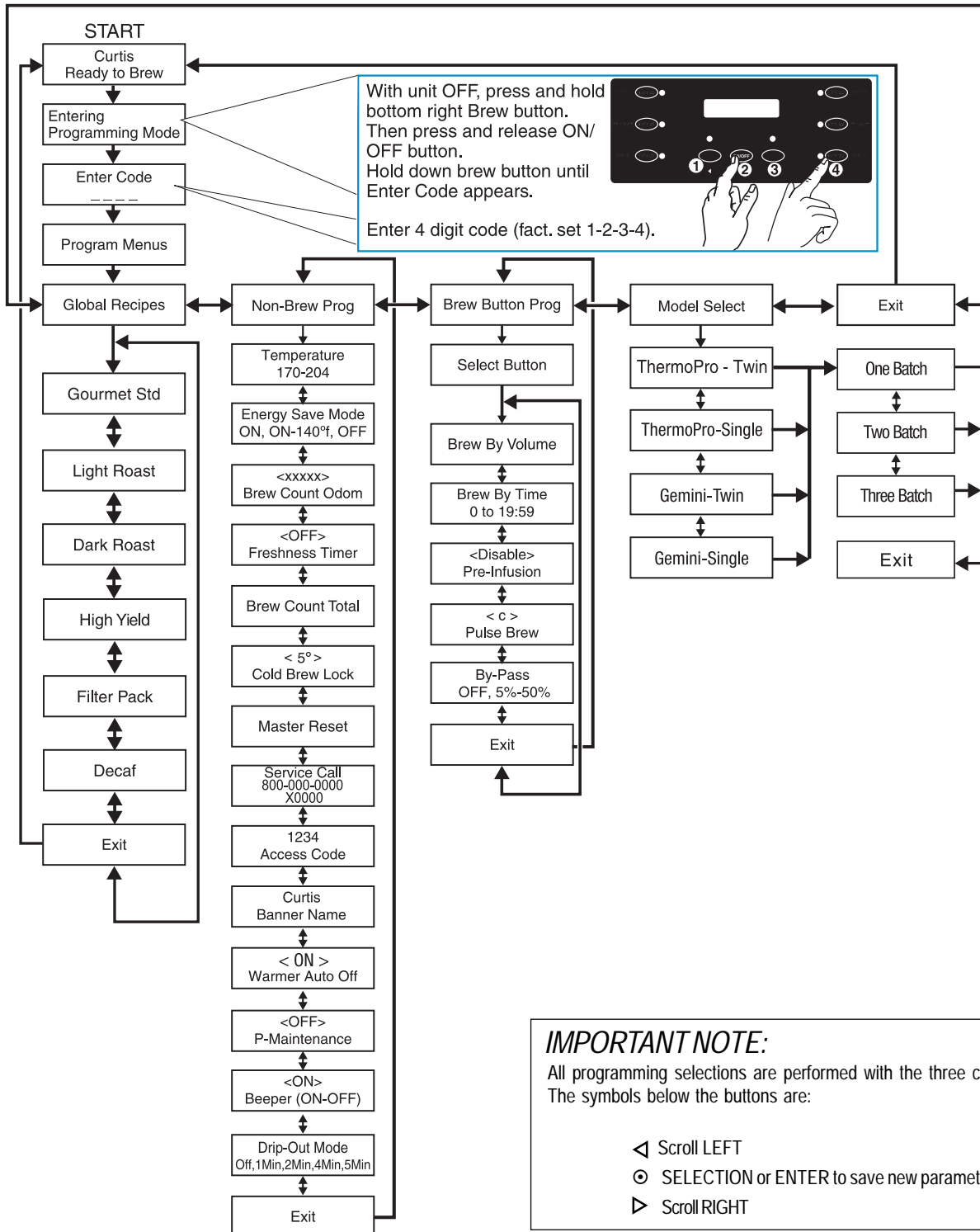
Your Curtis ADS System is Factory Pre-Set for Optimum Performance.

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 **CURTIS** Press ON/OFF button and the screen will display **THRO1 CURTIS** After three seconds, **CURTIS FILLING...** is displayed.

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

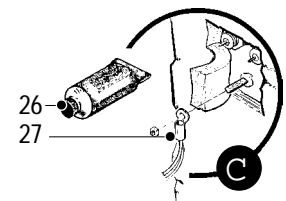
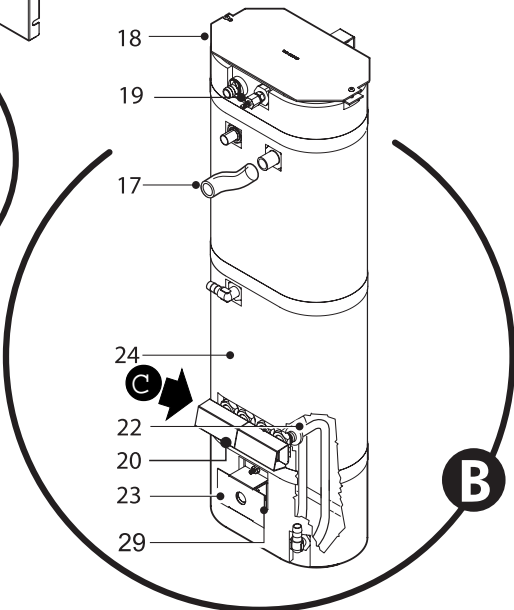
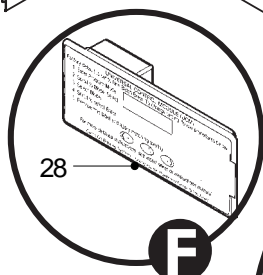
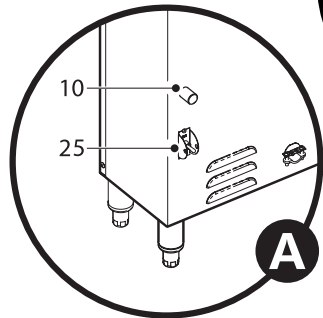
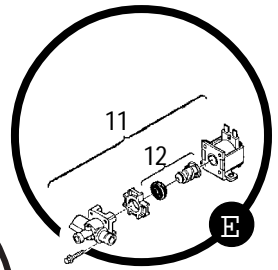
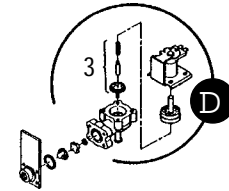
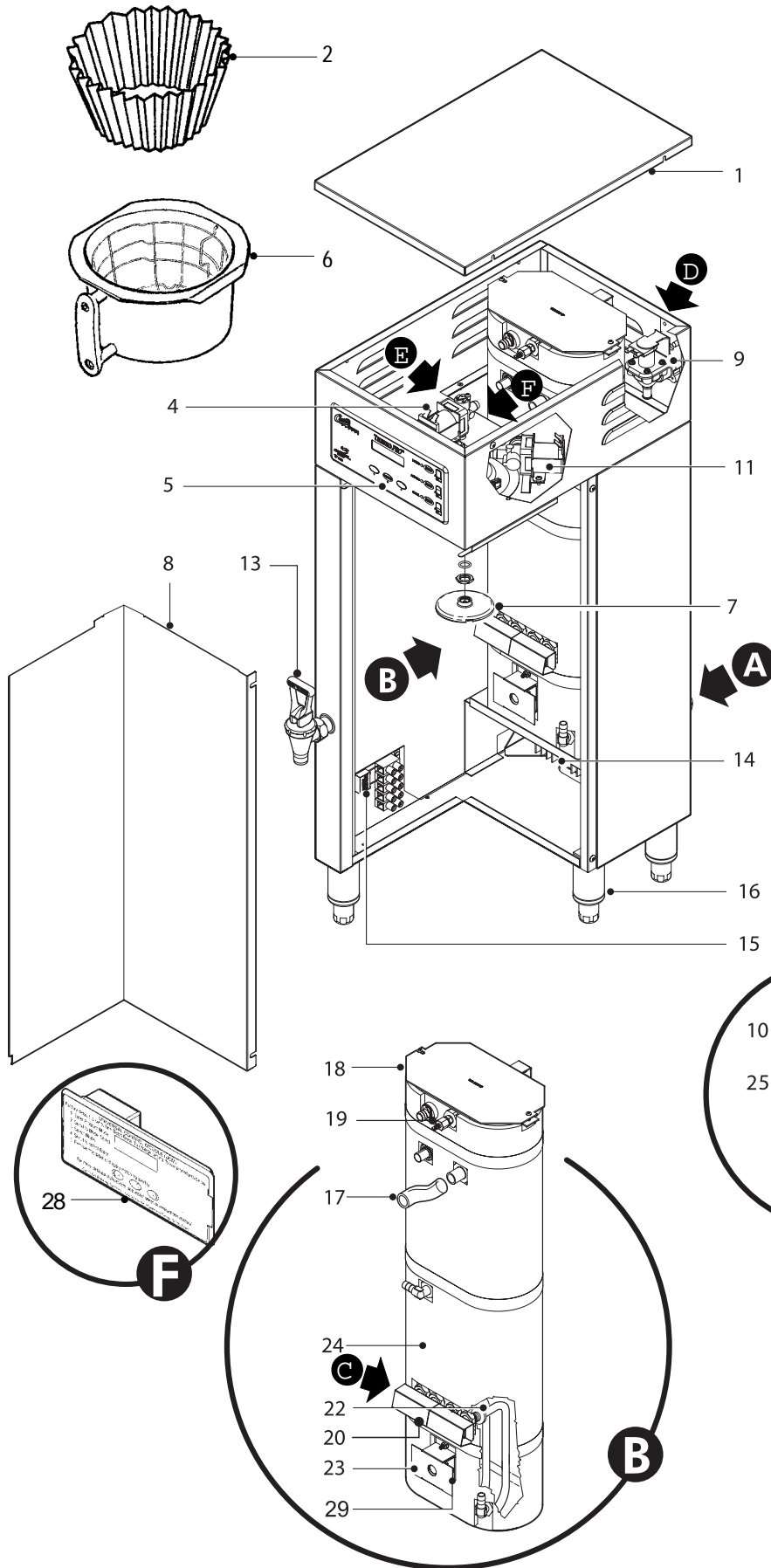
Control will display **CURTIS READY TO BREW** when temperature reaches the setpoint (200°F). Unit is now ready to brew.



Illustrated Parts List

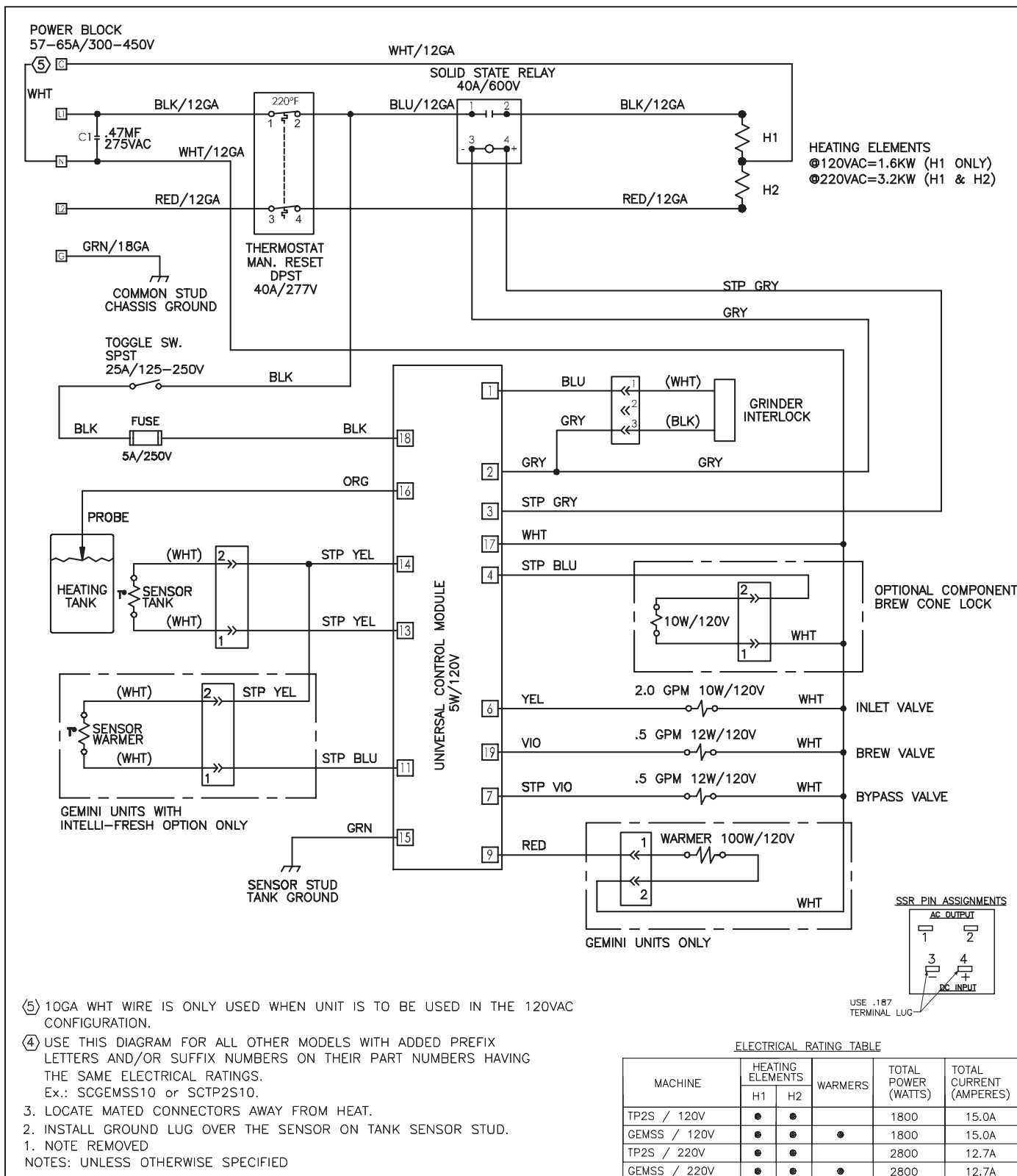
Nº	Part Nº	Description
1	WC-61509	COVER, TOP WRAP
2	GEM-6-01	FILTERS, 12½" X 4" 500/PKG (FOR WC-3354)
2A	GEM-6	FILTERS, 500/PKG (USE WITH WC-3357)
3	WC-3765L*	KIT, VALVE REPAIR USE ON WC-825 & WC-826
4	WC- 844-101*	VALVE, ADJ BY-PASS
5	WC-39444	LABEL, UCM OVERLAY TP2S 3-BATCH CURTIS
5A	WC-39417	LABEL, UCM OVERLAY TP2S 1-BATCH CURTIS
5B	WC-39416	LABEL, UCM OVERLAY TP2S 2-BATCH CURTIS
6	WC-3354	BREWCONE ASSY, GOURMET LARGE CAP
6A	WC-3357	BREWCONE ASSY/WBASKET (NOT SHOWN)
7	WC-29050*	SPRAYHEAD ASSY, ADVANCED FLOW
8	WC-58037-101	COVER, CENTER WRAP
9	WC- 847*	VALVE, WATER INLET 2GPM 120V 10W
10	WC-1501	FUSE HOLDER W/5A FUSE
11	WC-37122*	KIT, DUMP VALVE BREW RIGHT
12	WC-37132*	KIT, DUMP VALVE WC-820WC-821,WC-844
13	WC-1825	FAUCET ASSY, HOT WATER TP2S/2T
14	WC-8559*	RELAY, SOLID STATE 40A W/HEAT SINK
14A	WC-8556-101	HEATSINK, ASSY W/OPTICAL BD (OLDER UNITS)
15	WC-8591*	CAPACITOR, X2
16	WC-3526	LEG, ADJUSTABLE 4 IN ASSY
17	WC-5350*	TUBE, ½ ID x 1/8W SILICONE
18	WC-5851	COVER, TANK W/KNOTCHES
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 (NOT SHOWN)
22	WC- 904-04	ELEMENT, HEATING 1.6KW 120V W/JAM NUTS
22A	WC- 906-04*	ELEMENT, HEATING 2KW 220V W/JAM NUTS
23	WC- 522*	THERMOSTAT, RESET
24	WC-61500	TANK ASSY, COMPLETE 120V 3.2KW
24A	WC-61505	TANK ASSY, COMPLETE 220V 4.0KW
25	WC- 102*	SWITCH, TOGGLE
26	WC-5231*	COMPOUND, SILICONE
27	WC-1438-101*	SENSOR, HEATING TANK
28	WC-37176	KIT, UCM & LABEL INSTRUCTIONS
29	WC-43055	GUARD, SHOCK RESET THERMOSTAT

* Recommended Parts to Stock



Electrical Diagram

ThermoPro Single – 220 Volt



⑤ 10GA WHT WIRE IS ONLY USED WHEN UNIT IS TO BE USED IN THE 120VAC CONFIGURATION.

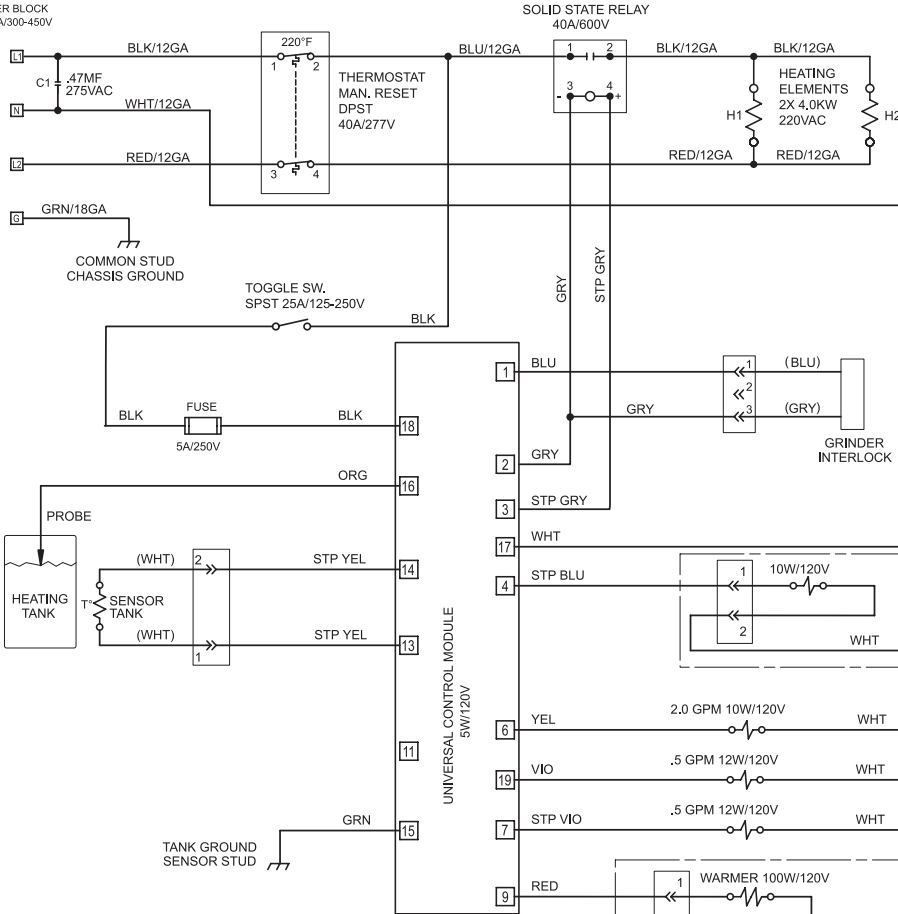
④ USE THIS DIAGRAM FOR ALL OTHER MODELS WITH ADDED PREFIX LETTERS AND/OR SUFFIX NUMBERS ON THEIR PART NUMBERS HAVING THE SAME ELECTRICAL RATINGS.
Ex.: SCGEMSS10 or SCTP2S10.

3. LOCATE MATED CONNECTORS AWAY FROM HEAT.
 2. INSTALL GROUND LUG OVER THE SENSOR ON TANK SENSOR STUD.
 1. NOTE REMOVED
- NOTES: UNLESS OTHERWISE SPECIFIED

ThermoPro Single - 220 Volt

7023 A SEE ECN-7023 FOR REVISIONS 10-28-04 SJ

POWER BLOCK
57-65A/300-450V



LEGEND

- UNIVERSAL CONTROL MODULE
PIN ASSIGNMENT (20 PIN)
- 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
- SSR PIN ASSIGNMENTS
- AC OUTPUT
1 2
DC INPUT
3 4
USE .187 TERMINAL LUG

ELECTRICAL RATING TABLE

MACHINE	HEATING ELEMENTS		WARMER	TOTAL POWER (WATTS)	TOTAL CURRENT (AMPERES)
	H2	H1			
TP2S	●	●		4300	19.5A
GEMSS	●	●	●	4300	19.5A

VOLTAGE: 220VAC	TITLE: LADDER DIAGRAM
HERTZ: 50/60 HZ	PART NUMBER: LD-GTPS-SSR-10
WIRES: 3W + G	REVISION: A
PHASE: 1 PHASE	

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: SCGEMSS10 or SC1P2S10.
3. LOCATE MATED CONNECTORS AWAY FROM HEAT.
2. INSTALL GROUND LUG OVER THE SENSOR ON TANK SENSOR STUD.
1. NOTE REMOVED
NOTES: UNLESS OTHERWISE SPECIFIED

GEMINI UNITS ONLY

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