USER GUIDE

Gemini® 12D Series
Twin Coffee Brewing System

READ AND SAVE THESE INSTRUCTIONS

NOTICE TO INSTALLER: Please leave this booklet with the machine.

Contact Information

Wilbur Curtis Co., Inc.
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Email: csrassistance@wilburcurtis.com | Web: www.wilburcurtis.com

For the latest specifications and information go to www.wilburcurtis.com
Toll Free: 800-995-0417 | Monday - Friday 5:30 A.M. - 4:00 P.M. PT
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Key Features

- Brews automatically in 12 or 24 cup increments per cycle.
- Automatic timer allows brewing of 24 cups without brew basket reloading.
- Hot water faucet lets you draw steaming hot water for tea or soups — even during brewing.
- High-efficiency, double-wall insulation in each satellite server maintains coffee temperature for extended periods without warming. Coffee cannot deteriorate, but maintains its rich, full-bodied flavor.
- Locking satellite lids guard against accidental spills.
- Color-coded satellite faucets available for regular or decaffeinated coffee.

Specifications (Selected Models)

Electrical Supply Requirements

MODEL #	DESCRIPTION	PHASE	VOLTS	AMPS	HEATING CONFIG	WIRE	WATTS	HERTZ	GAL/HR
GEM-12D-10	Twin, 1.5 Gallon	1 PH	220 V	29.0 A	3 X 2000 W	3W + G	6300 W	50/60 Hz	17.5
GEM-12D-16	Twin, 1.5 Gallon, 3 Phase	3 PH	220 V	17.0 A	3 X 2000 W	3W + G	6300 W	50/60 Hz	17.5
EXPORT									
GEM-12D-30	Twin, 1.5 Gallon	1 PH	230 V	29.9 A	3 X 2000 W	2W + G	6890 W	50/60 Hz	17.5

Dimensions / Water Supply Requirements

MODEL #	HEIGHT	WIDTH	DEPTH	SHIP WEIGHT	SHIP CUBE	WATER CONNECTOR	WATER PRESSURE	MIN. FLOW RATE
GEM-12D-10	29.00”	18.00”	16.50”	85.0 lbs	10.85 cu ft	3/8” flare	20 - 90 psi	2.0 gpm
GEM-12D-16	29.00”	18.00”	16.50”	91.0 lbs	10.85 cu ft	3/8” flare	20 - 90 psi	2.0 gpm
EXPORT								
GEM-12D-30	29.00”	18.00”	16.50”	91.0 lbs	10.85 cu ft	3/8” flare	20 - 90 psi	2.0 gpm

Following are the factory default settings for the Gemini brewer:

- Brew Temperature = 200°F
- Brew Volume = 250 seconds
- Sleep Mode = Disabled

Symbols

This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER - Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING - Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION - Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE - Indicates a situation which, if not avoided, could result in property damage.

IMPORTANT - Provides information and tips for proper operation.

SANITATION REQUIREMENTS

WARNING - This product can expose you to chemicals including Acrylamide and Bisphenol A (BPA), which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information visit www.P65Warnings.ca.gov.

Important Safeguards/Conventions

WARNING:

- Make sure that this appliance is installed and grounded according to the INSTALLATION INSTRUCTIONS by qualified personnel before attempting to use it. Failure to follow the INSTALLATION INSTRUCTIONS could result in personal injury or void the warranty.
- This appliance is designed for commercial use. Any service other than cleaning and preventive maintenance should be performed by an authorized Wilbur Curtis service technician.
- To reduce the risk of fire or electric shock, DO NOT open the service panels. There are no user serviceable parts inside.
- Keep hands, arms and other items away from hot surfaces of the unit during operation.
- Clean the appliance and any dispensers completely before using them for the first time according to the CLEANING INSTRUCTIONS. Clean them regularly as instructed in the CLEANING INSTRUCTIONS.
- Use this appliance only for its intended use, brewing/dispensing hot and/or cold beverages/water.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Avoid spillage onto the power (mains) connector.

CE Requirements

- This appliance must be installed in locations where it can be overseen by trained personnel.
- For proper operation, this appliance must be installed where the temperature is between 5°C to 35°C.
- Appliance shall not be tilted more than 10° for safe operation.
- An electrician must provide electrical service as specified in conformance with all local and national codes. For safe use, an all-pole disconnection must be incorporated into the fixed wiring in accordance with the wiring rules outlined in clause 7.12.2 of IEC 60335 for meeting the minimum electrical safety of this standard.
- This appliance must not be cleaned by water jet.
- This appliance can be used by persons aged from 18 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved.
- Keep the appliance and its cord out of reach of children aged less than 18 years.
- Appliances can be used by persons 18 years and above with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children under the age of 18 years should be supervised to ensure they do not play with the appliance.
- If the power cord is ever damaged, it must be replaced by the manufacturer or authorized service personnel with a special cord available from the manufacturer or its authorized service personnel in order to avoid a hazard.
- Machine must not be immersed for cleaning.
- Cleaning and user maintenance shall not be made by children unless they are older than 18 years and supervised.
- This appliance is intended to be used in household and similar applications such as:
  - – staff kitchen areas in shops, offices and other working environments;
  - – by clients in hotels, motels and other residential type environments;
  - – bed and breakfast type environments.
- This appliance not intended to be used in applications such as:
  - – farm houses
- Access to the service areas permitted by Authorized Service personnel only.
- The A-Weighted sound pressure level is below 70 dBA.

WARNING: Installation is to be performed only by a qualified installer.

WARNING: Improper electrical connection may result in an electric shock hazard. This brewer must be properly grounded.

NOTICE: DO NOT connect this brewer to a hot water supply. The water inlet valve is not rated for hot water. Do not exceed the maximum water pressure stated in the *SPECIFICATIONS* section.

IMPORTANT: Observe all governing codes and ordinances.

Installation Instructions

Installation Requirements

- A secure surface capable of supporting the weight of the appliance.
- For units without an attached cord set: Appropriately sized, UL listed, grounding type power cable to meet the electrical specifications for the appliance. If you have questions about the correct cable size and length, consult a qualified installer. If the appliance will be hard wired to a junction box, the power cable must be long enough so that the unit can be moved for cleaning underneath.
- A grounded electrical connection to an electrical circuit that meets the electrical specifications of the appliance (see *SPECIFICATIONS*). The circuit must be protected by the appropriate sized circuit breaker. If you are not certain that the existing circuit meets the requirements for your unit, consult a licensed electrician.
- A water filtration system is required to maintain trouble-free operation. Wilbur Curtis Co., Inc. recommends a Wilbur Curtis approved water filter. See the Curtis Equipment Catalog for a full line of Wilbur Curtis approved water filters.
- Potable water supply line connection from the water filter capable of supplying the minimum flow rate required by the specifications. The water supply line must be able to connect to the flare fitting on the back of the unit. See the *SPECIFICATIONS* section for the correct size. The water line should also be capable of being controlled by a shut off valve. Do not connect the water line to a saddle valve or needle valve.

NSF International requires the following water connection:

1. A quick disconnect or additional coiled tubing (at least two times the depth of the appliance) is required so that it can be moved for cleaning underneath.
2. This equipment is to be installed with adequate back-flow 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.

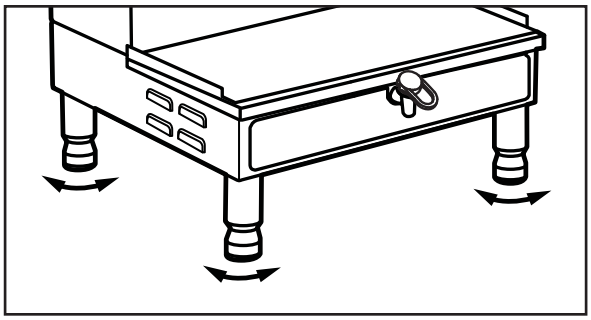
The International Plumbing Code of the International Code Council and the Food and Drug Administration (FDA) Food Code manual, direct that this equipment must be installed with adequate back-flow prevention in compliance with federal, state and local codes. For units installed outside of the U.S.A., make sure that the installation is in compliance with the applicable plumbing/sanitation code for your area.

Installation

Leveling

WARNING: Use the leveling legs to level the brewer only. Do not use them to adjust brewer height. Do not extend them higher than necessary.

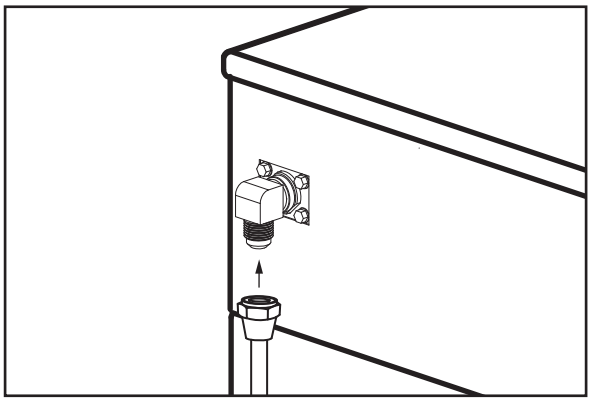
1 Position the brewer on the counter top. Level it left to right and front to back by turning the bottom of the legs.



Connect the Water Supply

2 Flush the water supply line prior to installation to purge air and debris from the water filter and tubing.

3 Connect the water supply line to the flare fitting on the back of the brewer. Leave the water supply valve closed until the power is connected.



Connect the Brewer Wiring

WARNING: Turn off power to the junction box at the circuit breaker panel before connecting the power cable to the brewer. Lock out and tag the circuit breaker.

4 Remove the screws that hold the front cover and brew deck in place and remove them.

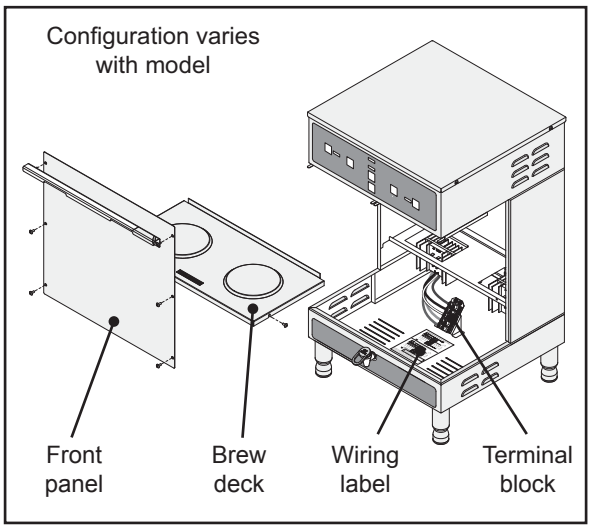
5 Loosen the strain relief on the back of the brewer.

6 Feed the power cable into the brewer.

7 Connect the wires on the power cable to the terminal block inside the brewer.

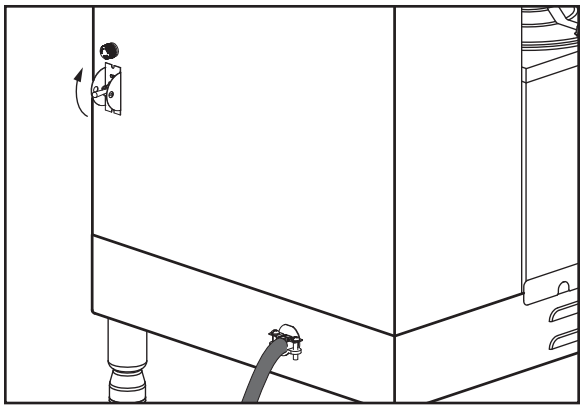
8 Tighten the strain relief and replace the front cover and brew deck.

9 Connect the power cable wires to the terminals in the junction box. See the *ELECTRICAL SCHEMATIC* for the power supply requirements.



Connect the Brewer Wiring (cont.)

Power Up the Brewer



10 Turn on the water supply valve.

11 Make sure that the circuit breaker supplying power to the unit is on.

12 Turn the toggle switch on the back of the brewer to the ON position. The water tank will start to fill. While the tank is filling, inspect the water supply line for leaks.

13 If the control panel is not already lit, push the ON/OFF button. When the water level in the tank rises to the correct volume, the heating elements will turn on automatically. Depending on the incoming water temperature and the electrical specifications, the water tank typically requires 20 to 30 minutes to reach the factory set operating temperature. When the water has heated, the READY TO BREW light will come on.

IMPORTANT: When operating the brewer at higher elevations, reduce the factory set operating temperature by 2°F for each 1000 feet of elevation above 4000 feet. See *PROGRAMMING GUIDE*.

14 Before brewing for the first time, dispense 12 ounces of hot water through the hot water faucet to help purge air from the tubing inside the brewer.

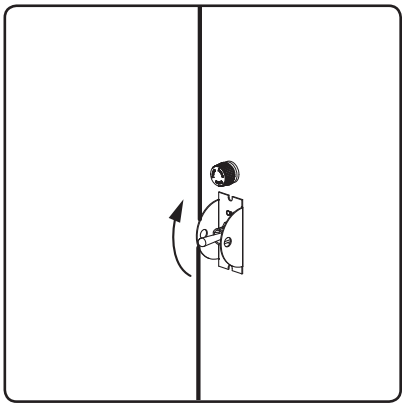
15 Brew a cycle of at least 12 ounces, to purge any remaining air from the tubing. See *OPERATING INSTRUCTIONS*. During the initial brew cycle and whenever the filter is replaced, you may hear the sounds of air being purged from the filter, tubing and water tank.

Brewing Instructions

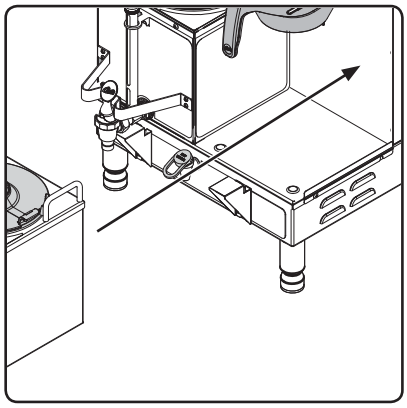
WARNING - TO AVOID SCALDING, AVOID SPLASHING. Keep body parts clear of the brewer during brewing. Do not remove the brew basket while the “BREW” light is flashing.

NOTICE - Do not use IntelliFresh® satellites on non-IntelliFresh brewers.

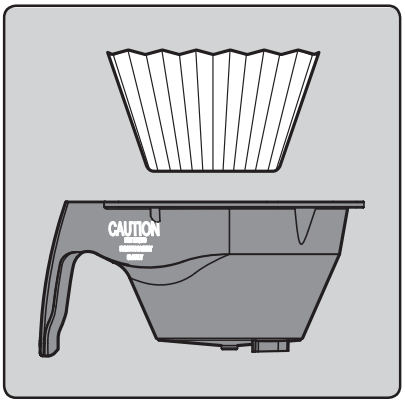
The Gemini Brewer is factory preset for optimal performance.



1 The brewer should be ON. Confirm this at the rear toggle switch. The READY TO BREW light should be on.

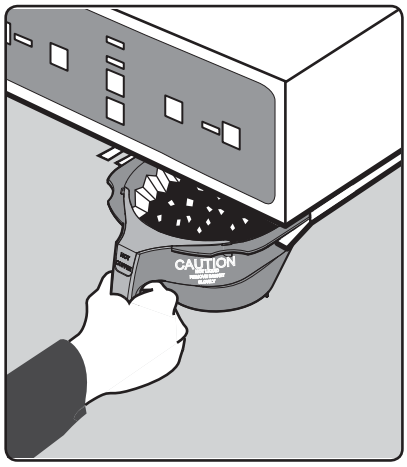


2 Place an empty satellite under the brew basket. Make sure it is pushed all the way back against the front cover.

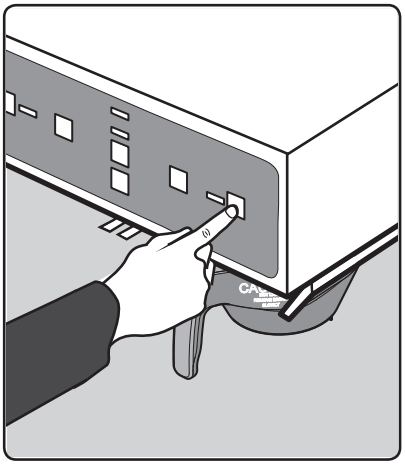


3 Insert a clean paper filter into the brew basket.

4 Fill with the proper amount of ground coffee. Level the coffee in the filter.



5 Slide the filled brew basket into the brew rails under the control panel. Slide it all the way back until it stops.



6 Press the BREW button. Brewing will begin immediately. When brewing starts, the warmer will come on automatically.

The brewer will brew coffee based on the settings programmed into the universal control module (UCM). To change the settings, see the ***PROGRAMMING GUIDE*** section.

To turn the warmer on manually, press the WARMER button. Press the WARMER button repeatedly to change the temperature or to turn it off completely. The warmer timer shuts off the warmer automatically after and extended period of time. See the ***PROGRAMMING GUIDE*** section to set the auto shut-off timer.

Sleep Mode

This function conserves energy. See the ***PROGRAMMING GUIDE*** section to turn sleep mode on or off. When enabled, the SLEEP light (►) comes on and the brewer reduces the temperature of the water in the tank to 140°F, when the unit has not brewed for more than two hours.

- To reheat the water to brewing temperature without brewing, press the ON/OFF button. The RECOVERY light (◄) will come on while the water is reheating. The READY TO BREW light will come on when the water reaches brewing temperature.
- To brew when the brewer is in sleep mode, place an empty satellite underneath a filled brew basket, then press the appropriate BREW button. The RECOVERY light (◄) will come on and the water will reheat. Brewing will start automatically when the water reaches brewing temperature.

WARNING: HOT SURFACES - To avoid injury, allow the brewer and dispenser(s) to cool before cleaning.

NOTICE - Do not use cleaning liquids, compounds or powders containing chlorine (bleach) or corrosives. These products promote corrosion and will damage the finishes. **USE OF THESE PRODUCTS WILL VOID THE WARRANTY.**

Cleaning The Brewer - Daily

WARNING: DO NOT immerse the brewer in water or any other liquid.

The brewer should be OFF. Turn the brewer off by flipping the rear toggle switch to the OFF position.

1 Remove the dispenser(s). Wipe exterior brewer surfaces with a damp cloth to remove spills and debris.

2 Remove the brew basket(s) and clean them in a mild detergent solution. Use a soft bristled brush for hard to clean areas. Rinse with clean water, then dry.

3 Wipe the spray head area with a cloth soaked in a mild detergent solution. Rinse with a cloth soaked with clean water removing any residual detergent. Use a clean, soft cloth to dry.

4 Dump out the drip tray(s) (if applicable). Rinse with clean water, then dry with a soft, clean cloth.

Cleaning The Brewer - Weekly

The brewer should be OFF. Turn the brewer off by flipping the rear toggle switch to the OFF position.

1 Remove the spray head(s), unscrewing counterclockwise from the dome plate.

2 Thoroughly clean and rinse the dome plate area.

3 Clean the brew basket rails with a brush soaked with a mild detergent solution. Rinse the area with a cloth soaked with clean water, removing any residual detergent.

4 Dry the area with a soft, clean cloth.

5 Reattach the spray head(s).

Cleaning the Satellite (Daily)

WARNING: DO NOT immerse the satellite in water or any other liquid. Do not place the satellite in a dishwasher. Placing the satellite in a dishwasher will void the warranty.

Cleaning the Liner

1 Prepare a mild solution of detergent and warm water. Remove the satellite from the brewer and remove the lid. Rinse.

2 **Wash** - Wipe the exterior surfaces of the satellite with a sponge soaked with the detergent solution to remove spills and debris. Fill the liner with the detergent solution. Take a sponge brush and scrub out the stainless steel liner and the lid.

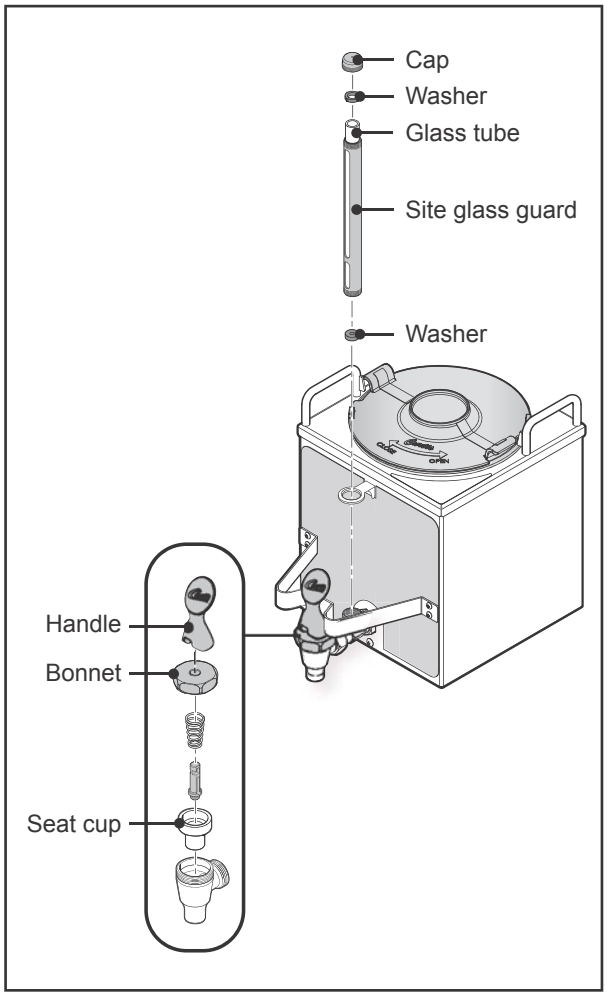
3 **Rinse** - Rinse with clean, warm water.

4 **Sanitize** - Sanitize the interior of the satellite and the lid, using a commercial sanitizer suitable for food grade applications. Sanitize according to the directions on the package.

5 Disassemble the faucet - Unscrew the handle/ bonnet assembly from the top of the faucet and remove it. Inspect the seat cup for wear. Replace the seat cup if it is damaged.

Disassemble the sight gauge (some versions). Remove the cap and unscrew the guard, as shown, to disassemble the gauge. Remove the glass tube. Inspect it for cracks or chips. If broken, replace the glass with a new one.

6 **Air Dry** - Turn the satellite and lid upside down and allow to air dry.



Cleaning the Faucet Parts and Site Gauge

7 **Wash** - Wash <u>all</u> faucet and gauge glass parts with the detergent solution. Clean the inside of the gauge glass with a gauge brush soaked with detergent solution.

8 **Rinse** - Thoroughly rinse all parts with clean, warm water.

9 **Sanitize** - After rinsing, place <u>all</u> faucet and gauge parts in a sink to be sanitized. Immerse them in a commercial sanitizer suitable for food grade applications. Sanitize according to the directions on the package.

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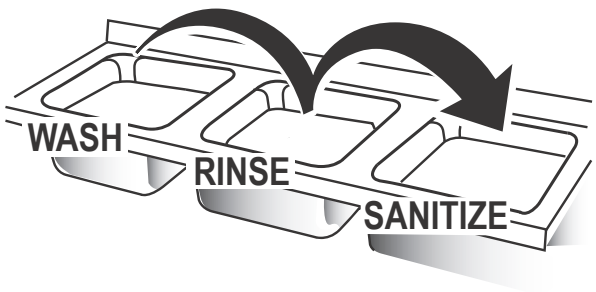
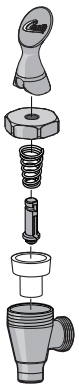


Cleaning the Faucet Parts and Site Gauge (cont.)

10 **Air Dry** - Allow all parts to thoroughly air dry.

11 Reassemble - When dry, reassemble the handle/bonnet. Hand tighten the handle/bonnet onto the top of the faucet assembly. Reinstall the site gauge (if applicable). If replacing a broken gauge glass, carefully remove any traces of glass from the silicone parts before inserting the new gauge glass tube. Reinstall the lid.



IMPORTANT: Change the program settings only if necessary. Before programming, allow the brewer to reach brewing temperature. Make sure air is purged from the lines according to the *INSTALLATION INSTRUCTIONS*.

Programming Options

Changing the Brew Temperature (Factory Default: 200°F)

This function sets the tank water temperature.

1 If the control panel is lit, turn off power by pressing the ON/OFF button.

2 Press and hold the right BREW button. While holding the BREW button, press and release the ON/OFF button. Continue holding the BREW button until the READY TO BREW light **starts** to blink, then release.

3 Press the right BREW button a second time, for two seconds, then release.

4 The READY TO BREW light with start blinking. Each blink equals 2°F, starting at 170°F.

5 To change the temperature setting, press and hold the right BREW button. The READY TO BREW light will flash quickly. Each flash indicates a 2°F increase in temperature. When the temperature reaches 204°F, the flashing will pause, then start over at 170°F.

6 When the desired temperature is reached, release the BREW button.

7 Press the ON/OFF button to save and exit.

Changing the Brew Volume (Factory Default: 250 Seconds)

This function sets the volume of the brew cycle. Each side can be set independently.

1 If the control panel is lit, turn off power by pressing the ON/OFF button.

2 Press and hold the right BREW button. While holding the BREW button, press and release the ON/OFF button. Continue holding the BREW button until the READY TO BREW light **starts** to blink, then release.

3 Place an empty satellite under the brew basket on the appropriate side (left or right). Make sure it is pushed all the way back against the front cover.

WARNING: Keep hands, arms and other items away from hot surfaces of the brewer during operation.

4 Press and hold the appropriate BREW button (left or right). When hot water begins to flow, release the button.

5 When the desired brew volume is reached, press and release the BREW button again.

6 Press the ON/OFF button to save and exit.

Viewing the Brew Cycle Counter

This function allows you to monitor the number brew cycles the brewer has performed for maintenance purposes.

1 If the control panel is lit, turn off power by pressing the ON/OFF button.

2 Press and hold the right BREW button. While holding the BREW button, press and the ON/OFF button. Continue holding the BREW button until the READY TO BREW light **stops** blinking, then release.

3 The READY TO BREW light will start a pattern of short and long blinks. The blinks indicate the number of brew cycles. The number of short blinks indicate the digit. The long blinks separate the 1's, 10's, 100's, 1000's and 10,000's.

4 Press the ON/OFF button to exit.

Enabling/Disabling Sleep Mode

The unit must be on (the control panel must be lit) to enable/disable sleep mode.

1 Press the ON/OFF button until the SLEEP light (►) comes on, then release.

2 Press the ON/OFF button a second time to save and exit.

To disable:

1 Press the ON/OFF button until the SLEEP light (►) goes off, then release.

2 Press the ON/OFF button a second time to save and exit.

Setting the Warmer Timer

The unit must be on (the control panel must be lit) and the warmer must be off.

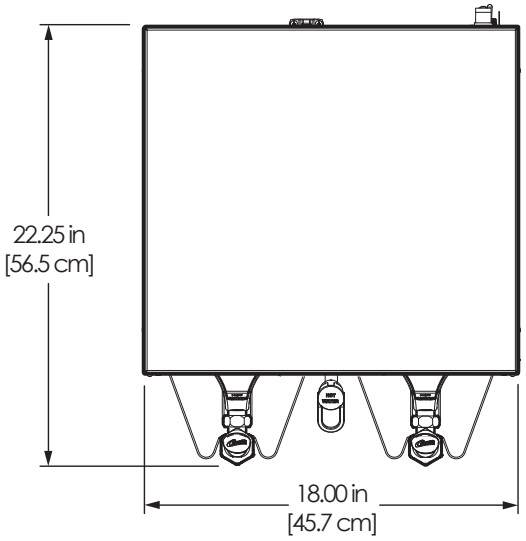
1 Press and hold the WARMER button until the warmer light comes on and goes off. Release the WARMER button.

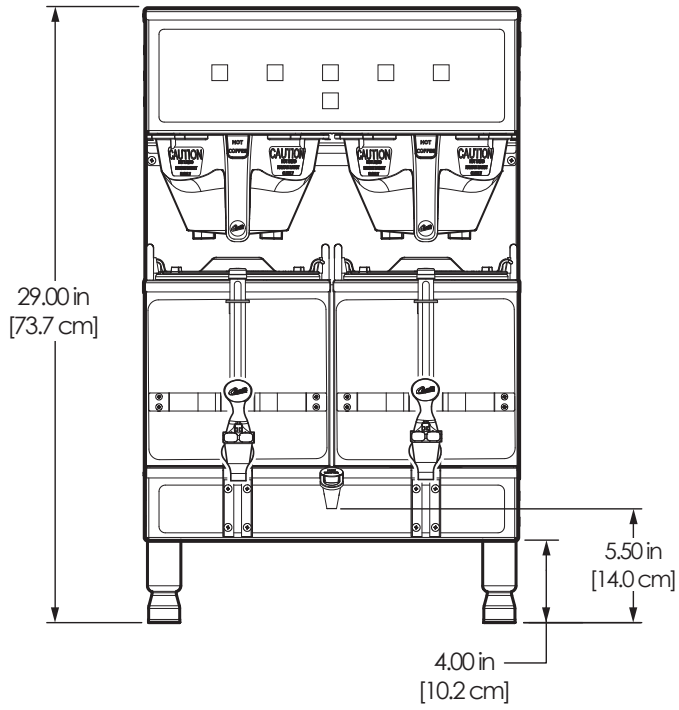
2 The warmer light will blink to indicate the amount of time before the warmer shuts off after it is turned on. Each blink indicates 20 minutes (200 minutes max.).

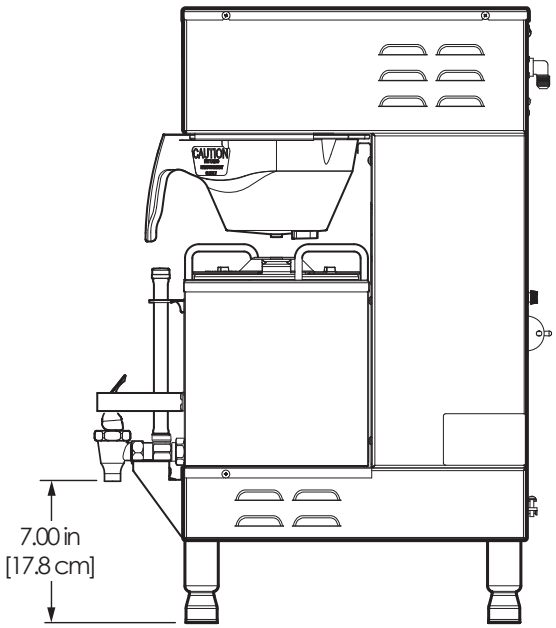
3 At the end of the flashing cycle, press and hold the WARMER button until the warmer light begins to blink quickly. The flashing cycle will repeat. Release the WARMER button to select the warmer shut off time (20 minutes per blink). Selecting 11 blinks disables the timer (the warmer will run continuously until it is shut off manually using the WARMER button).

4 Press the ON/OFF button a second time to save and exit.

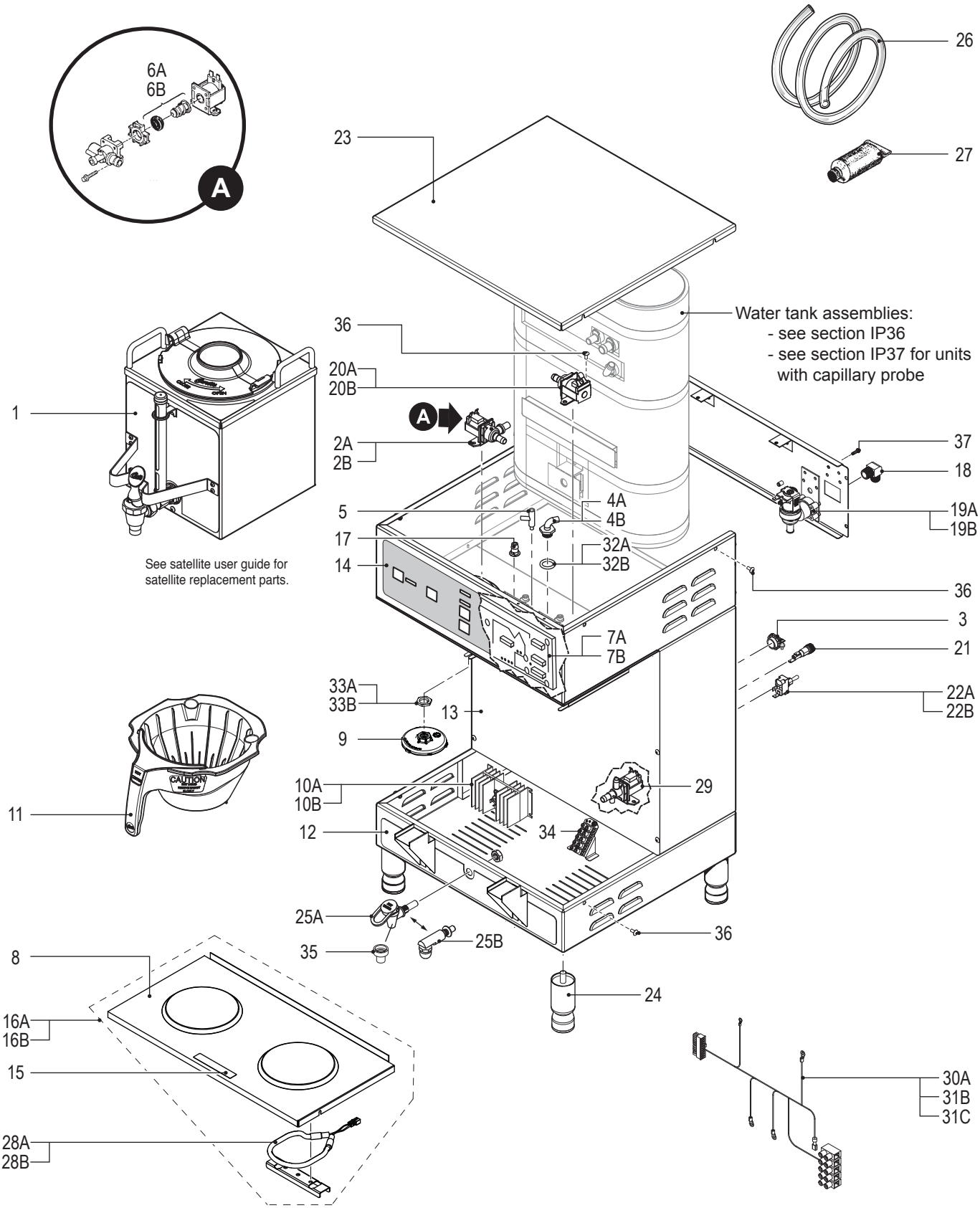
GEM-12D - Twin Coffee Brewer







GEM-12D - Main Chassis - Exploded View



GEM-12D - Main Chassis - Parts List

ITEM #	PART #	DESCRIPTION
1	GEM-3	SATELLITE SERVER, 1-1/2 GAL.
2A*	WC-821WDR[1]	VALVE, DUMP LEFT 120V 12W W/INTERNAL RESISTOR & DIODE
2B	WC-853[2,3]	VALVE, BREW DUMP LEFT 240V 12W GEM12D/ TP/TPC
3	WC-1412	CORD GRIP, 3/4" FOR METAL CORD TO .81"OD
4A*	WC-2962K[a]	KIT, FITTING SPRAYHEAD SS
4B	WC-2962-101K[b]	KIT, FITTING SPRAYHEAD KYNAR
5	WC-2987	BYPASS ASSEMBLY, ADJUSTABLE (WC-2984,WC-2985 & WC-43011)
6A	WC-37132	KIT, VALVE REPAIR FOR INVENSYS WC-820WDR,WC-821WDR, WC-844WDR (OLDER UNITS)
6B	WC-37132-101	KIT, VALVE REPAIR FOR DELTROL WC-820WDR,WC-821WDR, WC-844WDR (NEWER UNITS)
7A	WC-670[1]	CONTROL BOARD 120V 50/60HZ GEM-12D
7B	WC-758[2,3]	CONTROL BOARD 220V 50/60HZ GEM12D-30
8	WC-5423	DECK, WARMER W/ASSY GEM12 312IL/612IL/12ILD/612ILD
9*	WC-29025	SPRAYHEAD, PURPLE ADVANCE FLOW
10A*	WC-8560[1,3]	HEATSINK, ASSY 1PH GEM612ILD GEM-12D/ TL9002-10/D1000AP/T
10B	WC-8557[2]	HEATSINK, ASSY 3PH TL9002/GEM-12D/612ILD
11*	WC-3417-P	BREW CONE,ASSY W/SPLASH POCKET BRWN STYLIZED GEMIN HOT COFFEE
12	WC-39198	LABEL, BOTTOM PANEL GEM12D/612 ILD CURTIS
13	WC-5829	COVER, FRONT W/A GEM-12 GEM-12D/312IL/612ILD
14	WC-39197	MEMBRANE CONTRL PANEL CURTIS GEM-12D
15	WC-38310	LABEL, CAUTION HOT SURFACE GEN USE
16A	WC-5430[1]	WARMER DECK, COMPLETE W/WARMER ELEMENTS GEM-12,312IL
16B	WC-37163[2,3]	KIT, WARMER ELEMENT 100W 220V GEN USE
17	WC-29044-101	SLEEVE, OVERFLOW
18*	WC-2402P-P	ELBOW, 3/8"FL x 3/8" NPT PLATED
19A*	WC-847[1]	VALVE, INLET 2 GPM 120V 10W GEN USE BROWN BODY
19B	WC-883[2,3]	VALVE, INLET 2 GPM 240V 6W
20A*	WC-820WDR[1]	VALVE, DUMP RIGHT 120V 12W W/INTERNAL RESISTOR & DIODE
20B	WC-854[2,3]	VALVE, BREW DUMP RIGHT 240V 12W GEM12D/ TP/TPC

ITEM #	PART #	DESCRIPTION
21*	WC-1501	FUSE, HOLDER ASSY W/5A FUSE
22A*	WC-102[1]	SWITCH, TOGGLE NON-LIT SPST 15A 125/6A 250VAC RESISTIVE
22B	WC-103[2,3]	SWITCH, TOGGLE NON-LIT DPST 25A 125/250VAC RESISTIVE
23	WC-5421	COVER, TOP SS GEM-12D GEM-612ILD,TL9002,312IL
24*	WC-3528	LEG, 4" ADJUSTABLE 3/8-16 THRD ITALIAN STYLE
25A*	WC-1809[1]	FAUCET, PS/HPS SERIES HOT WTR 1/2-20 UNF AP/ALP
25B	WC-2912BK[4]	SPOUT, HOT WATER "NO SPLASH"
26*	WC-5310	TUBE, 5/16 ID x 1/8W SILICONE GEN USE
27*	WC-5231	COMPOUND, HEAT SINK 5OZ
28A	WC-37102[1]	KIT, WARMER ELEMENT 100W 120V GEN USE
28B	WC-37163[2,3]	KIT, WARMER ELEMENT 100W 220V GEN USE
29	WC-892[4]	VALVE, HOT WATER 220V 17W GEM-12D
30A	WC-13256[1]	HARNESS, ASSY GEM-12D-10 (INCLUDES TERMINAL BLOCK)
30B	WC-13372[2]	HARNESS, ASSY GEM-12D-16 (INCLUDES TERMINAL BLOCK)
30C	WC-13350[3]	HARNESS ASSY, TLPGT 120V (INCLUDES TERMINAL BLOCK)
31	WC-1250 [3]	CORD, 4mm² 90ºC 49A 450/750V 6 FT LG W/ FERRULES ONE END (NOT SHOWN)
32A	WC-4320 [a]	O'RING, 0.487I.D.x 0.693OD x0.103CS BUNA-N #112
32B	WC-43089 [b]	GASKET, 1.00OD X .625 I.D. X .030 THK WHITE EPDM 70 SHORE
33A	WC-4213-P [a]	NUT, 5/8 LOCK PLATED
33B	WC-4212-02 [b]	NUT, 5/8-18 JAM PLASTIC
34	WC-314	POWER BLOCK, 5 STATION
35	WC-1806	SEAT CUP, SILICONE USE ON WC-1809 FAUCET
36	WC-4426	SCREW, 8-32x3/8 PH HEAD TRUSS
37	WC-4616	SCREW, 1/4-20 x 1/2 PHILLIPS PAN HEAD STAINLESS STEEL

[1] GEM-12D-10, [2] GEM-12D-16, [3] GEM-12D-30

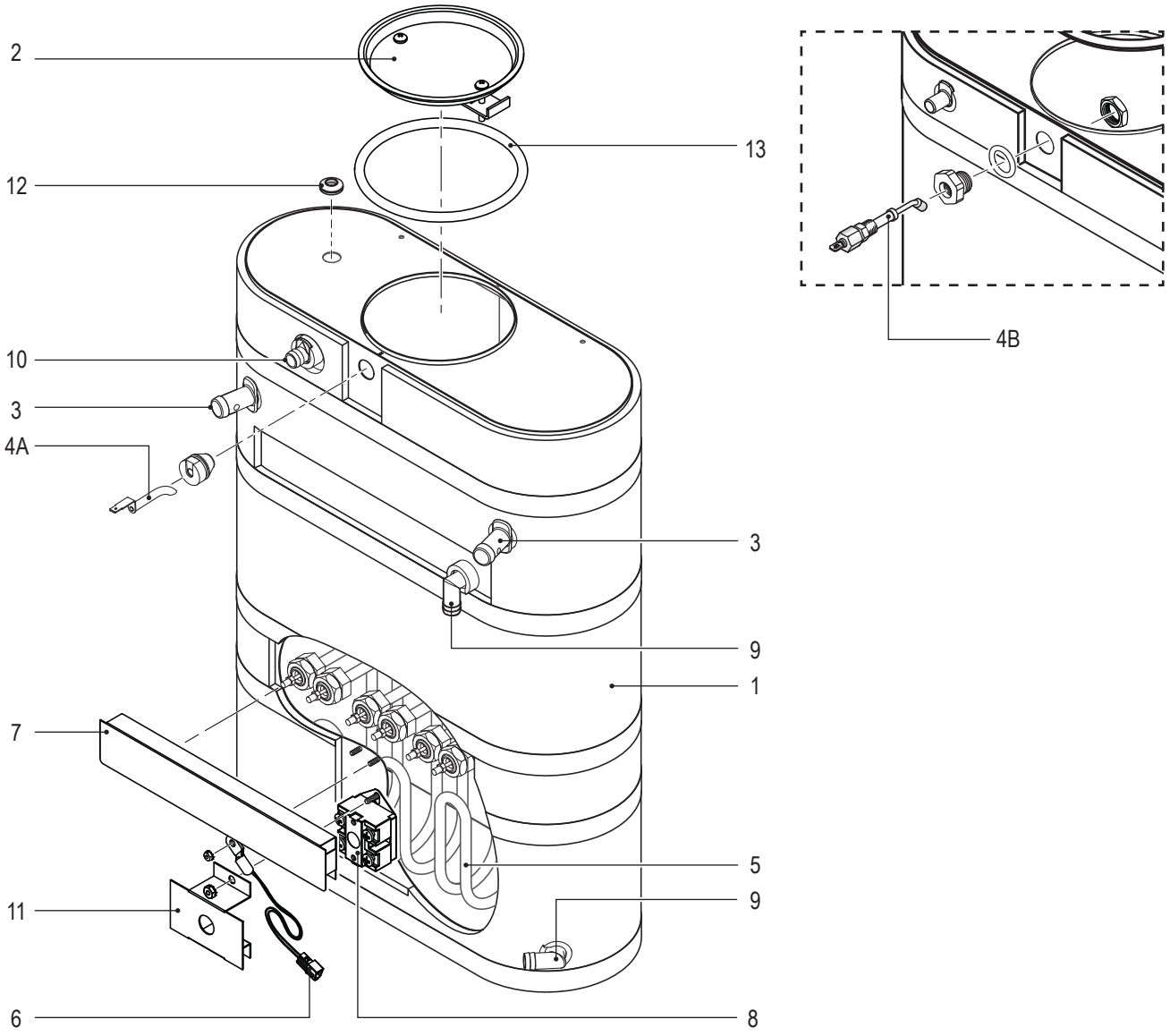
[4] Used on units manufactured before 4/12, equipped with an electric faucet.

[a] Units built 05/15/17 and later. Stainless steel fitting kit (4A) is compatible with older units.

[b] Units built before 05/15/17.

* Recommended parts to stock.

WC-54005 - Tank Assembly



WC-54005 - Tank Assembly - Parts List

ITEM #	PART #	DESCRIPTION
1	WC-54005	TANK, COMPLETE GEM-612ILD/G12D/TL9002
2	WC-37008	KIT, TANK LID ROUND (INCLUDES GASKET)
3	WC-37357*	KIT, STRAIGHT PLASTIC FITTING AND BUSHING 12MM
4A[1]	WC-5528K*	KIT, WATER LEVEL PROBE, SILICONE
4B[2]	WC-5502-01*	KIT, PROBE, ASSY WATER LEVEL W/HEX FITTING, O-RING & NUT
5	WC-906-04*	KIT, ELEMENT, HEATING 2KW 220V W/ JAM NUT & SILICONE O-RING
6	WC-1438-101*	SENSOR, TEMPERATURE TANK

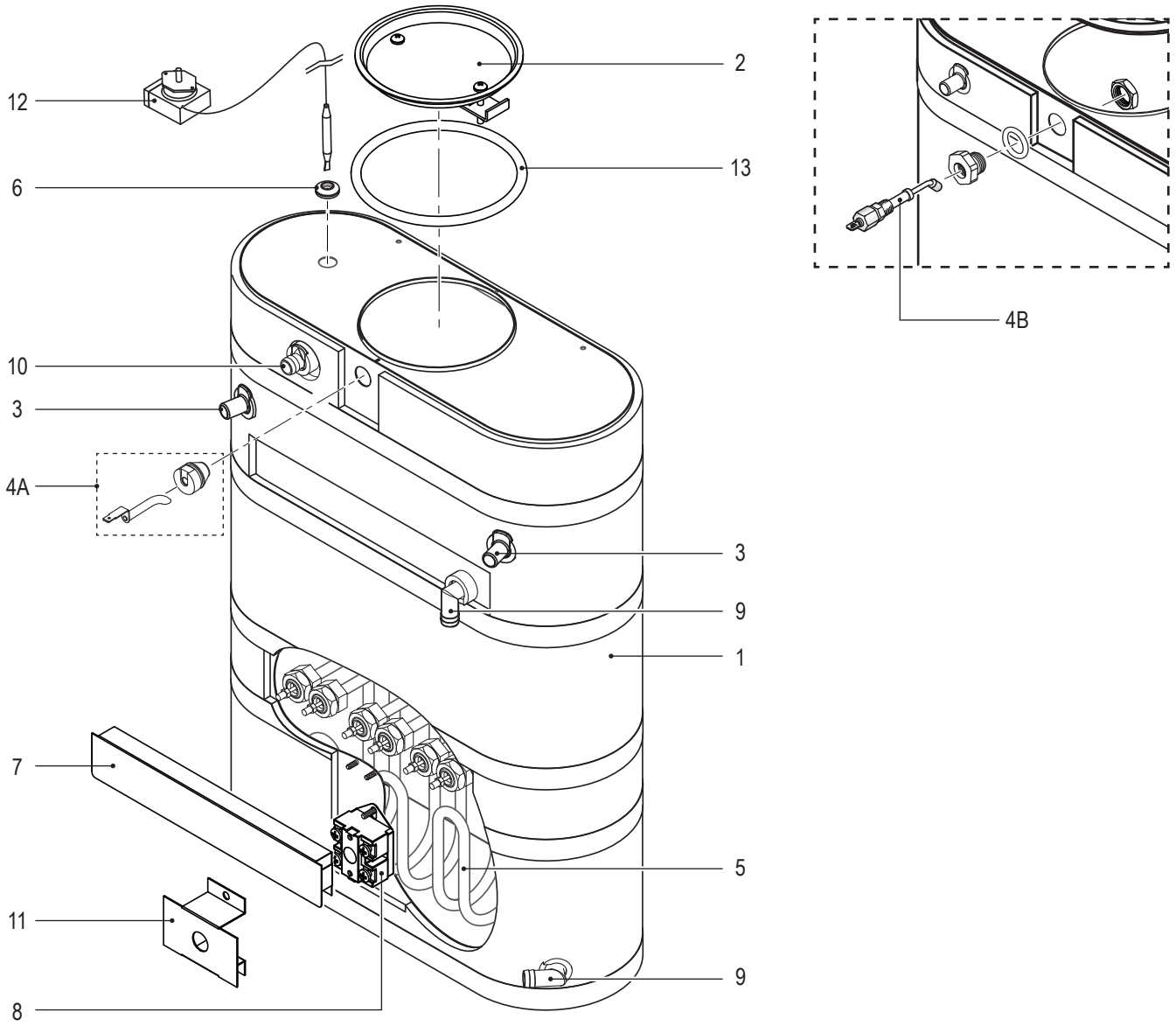
ITEM #	PART #	DESCRIPTION
7	WC-4382*	GUARD, SHOCK HTNG ELMNT DOUBLE
8	WC-522*	THERMOSTAT, HI LIMIT HEATER CONTROL DPST 277V 40A
9	WC-37365*	KIT, FITTING TANK INLET
10	WC-37266*	KIT, FITTING TANK OVERFLOW
11	WC-43055*	GUARD, SHOCK RESET THERMOSTAT (WC-522)
12	WC-4314*	INSERT, SILICONE GROMMETS RD FDA GRADE
13	WC-43067*	SILICONE TANK LID O-RING, 4-1/2" I.D. X Ø.285

[1] Units built 01/04/2019 and later.

[2] Units built before 01/04/2019. Replaces WC-5527.

* Recommended parts to stock.

WC-5432 - Tank Assembly



WC-5432 - Tank Assembly - Parts List

ITEM #	PART #	DESCRIPTION
1	WC-5432	TANK, ASSY. COMPLETE GEM-12/GEM-312IL
2	WC-37008*	KIT, TANK LID ROUND (INCLUDES GASKET)
3	WC-37317*	KIT, STRAIGHT FITTING & BUSHING 8mm GEN USE
4A[1]	WC-5528K*	KIT, WATER LEVEL PROBE, SILICONE
4B[2]	WC-5502-01*	KIT, PROBE, ASSY WATER LEVEL W/HEX FITTING, O-RING & NUT
5	WC-906-04*	KIT, ELEMENT, HEATING 2KW 220V W/ JAM NUT & SILICONE O-RING
6	WC-4314*	INSERT, SILICONE GROMMETS RD FDA GRADE

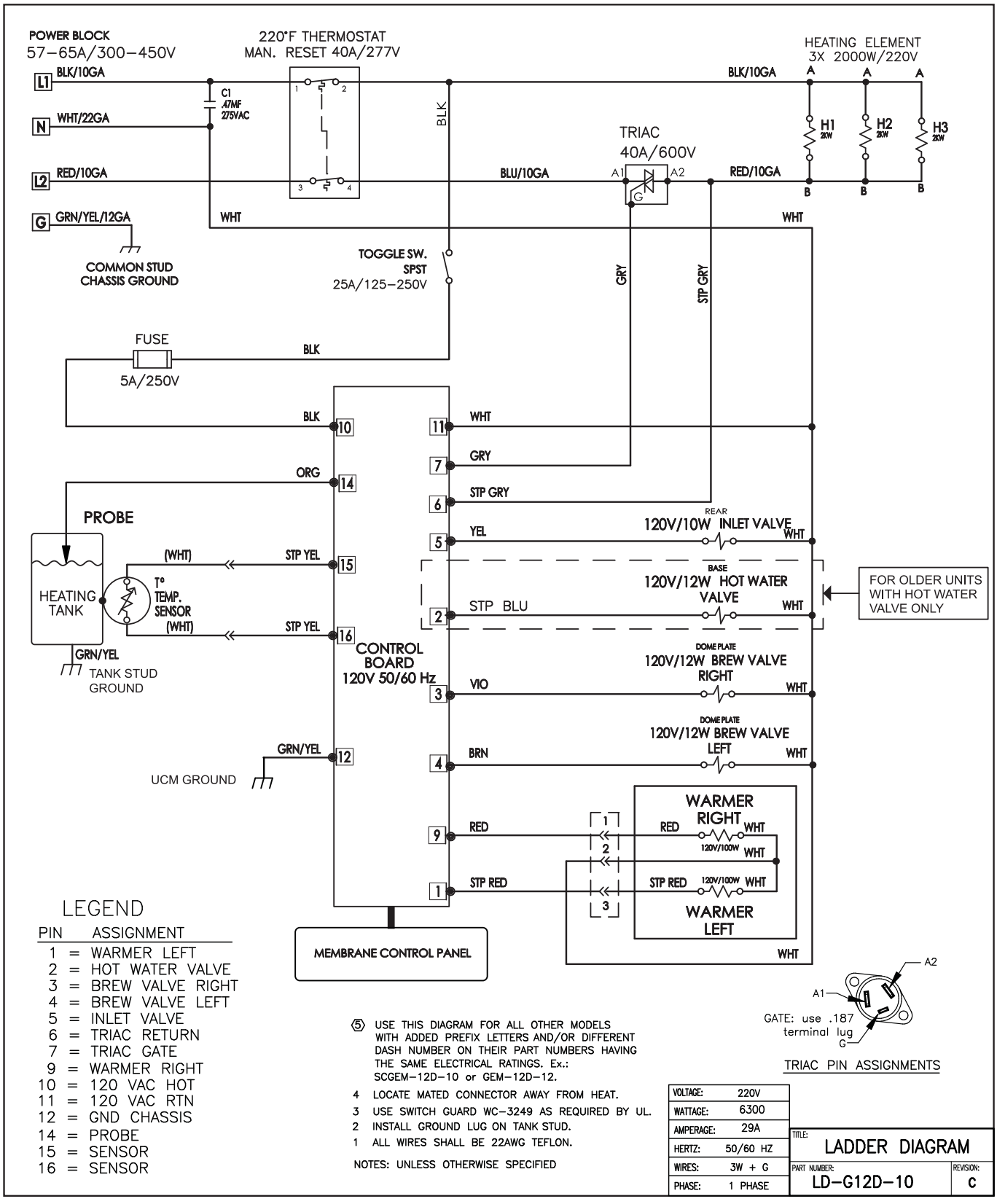
ITEM #	PART #	DESCRIPTION
7	WC-4382*	GUARD, SHOCK HTNG ELMNT DOUBLE
8	WC-522*	THERMOSTAT, HI LIMIT HEATER CONTROL DPST 277V 40A
9	WC-37365*	KIT, FITTING TANK INLET
10	WC-37266*	KIT, FITTING TANK OVERFLOW
11	WC-43055*	GUARD, SHOCK RESET THERMOSTAT (WC-522)
12	WC-504*	THERMOSTAT, CAPILLARY SPST 250V 25A GEM
13	WC-43067*	SILICONE TANK LID O-RING, 4-1/2" I.D. X Ø.285

[1] Units built 01/04/2019 and later.

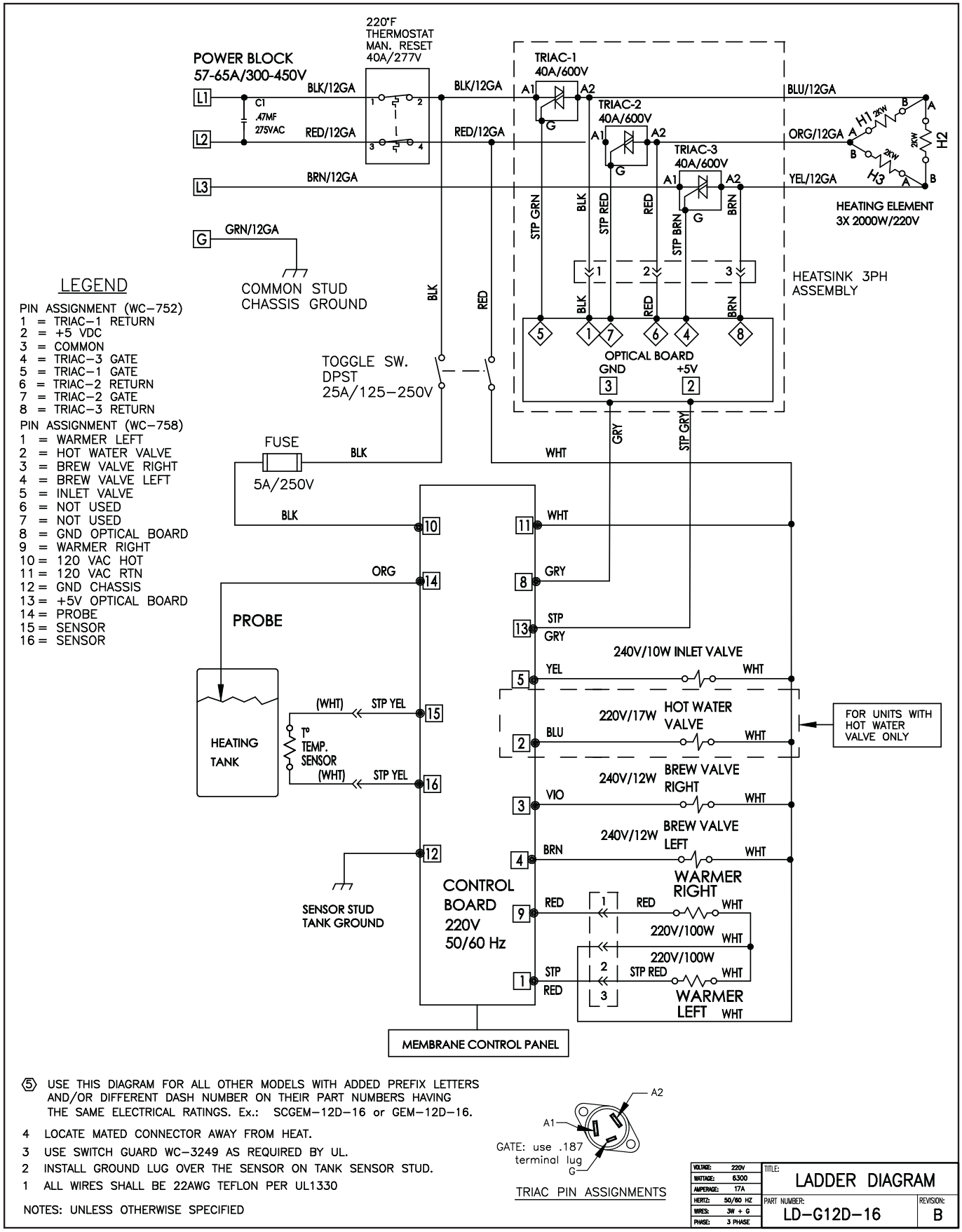
[2] Units built before 01/04/2019. Replaces WC-5527.

* Recommended parts to stock.

GEM-12D-10


POWER BLOCK
57–65A/300–450V
220°F THERMOSTAT
MAN. RESET 40A/277V
HEATING ELEMENT
3X 2000W/220V
L1
BLK/10GA
N
WHT/22GA
L2
RED/10GA
G
GRN/YEL/12GA
C1
.47MF
275VAC
BLK
BLK/10GA
H1
2KW
H2
2KW
H3
2KW
TRIAC
40A/600V
A1
A2
G
BLU/10GA
RED/10GA
WHT
COMMON STUD
CHASSIS GROUND
TOGGLE SW.
SPST
25A/125–250V
GRY
STP GRY
FUSE
5A/250V
BLK
10
11
WHT
7
GRY
ORG
14
6
STP GRY
PROBE
REAR
120V/10W INLET VALVE
5
YEL
WHT
(WHT)
STP YEL
15
BASE
120V/12W HOT WATER
VALVE
HEATING
TANK
T°
TEMP.
SENSOR
(WHT)
STP YEL
16
2
STP BLU
WHT
FOR OLDER UNITS
WITH HOT WATER
VALVE ONLY
GRN/YEL
TANK STUD
GROUND
CONTROL
BOARD
120V 50/60 Hz
DOME PLATE
120V/12W BREW VALVE
RIGHT
3
VIO
WHT
DOME PLATE
120V/12W BREW VALVE
LEFT
GRN/YEL
12
4
BRN
WHT
UCM GROUND
WARMER
RIGHT
9
RED
RED
WHT
120V/100W
WHT
1
STP RED
STP RED
120V/100W
WHT
WARMER
LEFT
WHT
MEMBRANE CONTROL PANEL
LEGEND
PIN ASSIGNMENT
1 = WARMER LEFT
2 = HOT WATER VALVE
3 = BREW VALVE RIGHT
4 = BREW VALVE LEFT
5 = INLET VALVE
6 = TRIAC RETURN
7 = TRIAC GATE
9 = WARMER RIGHT
10 = 120 VAC HOT
11 = 120 VAC RTN
12 = GND CHASSIS
14 = PROBE
15 = SENSOR
16 = SENSOR
A2
A1
GATE: use .187
terminal lug
G
TRIAC PIN ASSIGNMENTS
⑤ USE THIS DIAGRAM FOR ALL OTHER MODELS WITH ADDED PREFIX LETTERS AND/OR DIFFERENT DASH NUMBER ON THEIR PART NUMBERS HAVING THE SAME ELECTRICAL RATINGS. Ex.: SCGEM–12D–10 or GEM–12D–12.
4 LOCATE MATED CONNECTOR AWAY FROM HEAT.
3 USE SWITCH GUARD WC–3249 AS REQUIRED BY UL.
2 INSTALL GROUND LUG ON TANK STUD.
1 ALL WIRES SHALL BE 22AWG TEFLON.
NOTES: UNLESS OTHERWISE SPECIFIED
VOLTAGE: 220V
WATTAGE: 6300
AMPERAGE: 29A
HERTZ: 50/60 HZ
WIRES: 3W + G
PHASE: 1 PHASE
TITLE: LADDER DIAGRAM
PART NUMBER: LD–G12D–10
REVISION: C

GEM-12D-16



LEGEND

PIN ASSIGNMENT (WC−752)
1 = TRIAC−1 RETURN
2 = +5 VDC
3 = COMMON
4 = TRIAC−3 GATE
5 = TRIAC−1 GATE
6 = TRIAC−2 RETURN
7 = TRIAC−2 GATE
8 = TRIAC−3 RETURN

PIN ASSIGNMENT (WC−758)
1 = WARMER LEFT
2 = HOT WATER VALVE
3 = BREW VALVE RIGHT
4 = BREW VALVE LEFT
5 = INLET VALVE
6 = NOT USED
7 = NOT USED
8 = GND OPTICAL BOARD
9 = WARMER RIGHT
10 = 120 VAC HOT
11 = 120 VAC RTN
12 = GND CHASSIS
13 = +5V OPTICAL BOARD
14 = PROBE
15 = SENSOR
16 = SENSOR

⑤ USE THIS DIAGRAM FOR ALL OTHER MODELS WITH ADDED PREFIX LETTERS AND/OR DIFFERENT DASH NUMBER ON THEIR PART NUMBERS HAVING THE SAME ELECTRICAL RATINGS. Ex.: SCGEM−12D−16 or GEM−12D−16.

4 LOCATE MATED CONNECTOR AWAY FROM HEAT.

3 USE SWITCH GUARD WC−3249 AS REQUIRED BY UL.

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

1 ALL WIRES SHALL BE 22AWG TEFLON PER UL1330

NOTES: UNLESS OTHERWISE SPECIFIED

TRIAC PIN ASSIGNMENTS

VOLTAGE:	220V
WATTAGE:	6300
AMPERAGE:	17A
HERTZ:	50/60 HZ
WIRES:	3W + G
PHASE:	3 PHASE

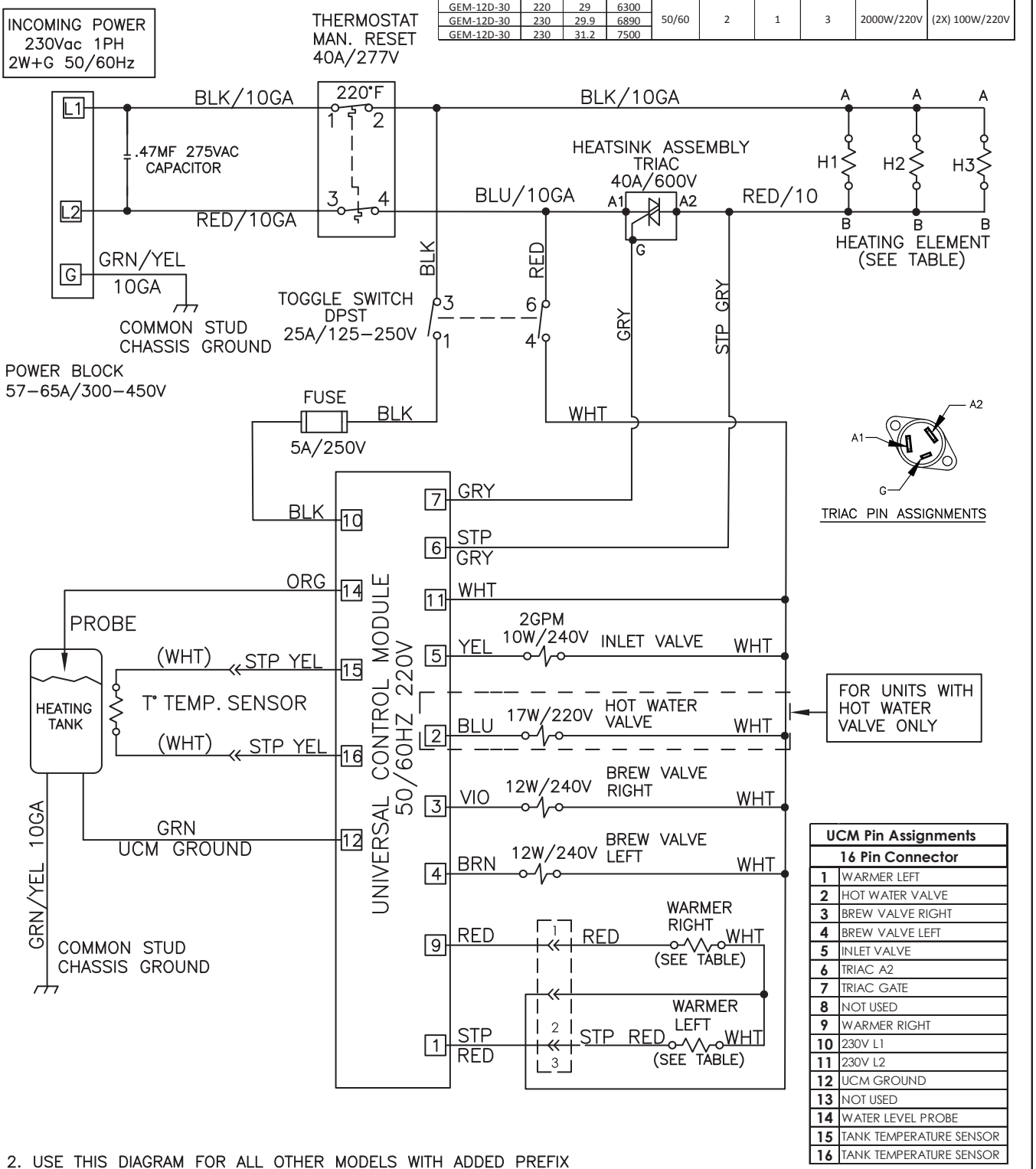
TITLE: LADDER DIAGRAM

PART NUMBER: LD−G12D−16

REVISION: B

GEM-12D-30

ELECTRICAL RATING TABLE									
Model	Voltage V	Amps A	Watts W	Hertz Hz	# of Conductor Wires	Phase	# of Tank Elements	Tank Element Rating W/V	Warmer Element Rating W/V
GEM-12D-30	220	29	6300	50/60	2	1	3	2000W/220V	(2X) 100W/220V
GEM-12D-30	230	29.9	6890						
GEM-12D-30	230	31.2	7500						



UCM Pin Assignments	
16 Pin Connector	
1	WARMER LEFT
2	HOT WATER VALVE
3	BREW VALVE RIGHT
4	BREW VALVE LEFT
5	INLET VALVE
6	TRIAC A2
7	TRIAC GATE
8	NOT USED
9	WARMER RIGHT
10	230V L1
11	230V L2
12	UCM GROUND
13	NOT USED
14	WATER LEVEL PROBE
15	TANK TEMPERATURE SENSOR
16	TANK TEMPERATURE SENSOR

2. USE THIS DIAGRAM FOR ALL OTHER MODELS WITH ADDED PREFIX LETTERS AND/OR DIFFERENT DASH NUMBER ON THEIR PART NUMBERS HAVING THE SAME ELECTRICAL RATINGS.
1. ALL WIRES SHALL BE MIN 22AWG TEFLON PER UL10086.

NOTES: UNLESS OTHERWISE SPECIFIED

VOLTAGE:	SEE TABLE	TITLE:	LADDER DIAGRAM
WATTAGE:	SEE TABLE		
AMPERAGE:	SEE TABLE	PART NUMBER:	REVISION:
HERTZ:	SEE TABLE	LD-G12D-30	D
WIRES:	2W+GND		
PHASE:	SINGLE		

WARNING:

Electric Shock Hazard - the following procedures are to be performed only by a qualified service technician. Disconnect power when replacing components. Lock out and tag the circuit breaker. Neither Wilbur Curtis Co., Inc. nor the seller can be held responsible for the interpretation of this information, or any liability in connection with its use.

Scald and Burn Hazard - keep body parts clear of hot surfaces during troubleshooting.

IMPORTANT: If it is necessary to replace the control board, always check all inlet and dump (brew) valve coils for a short and replace the valve as necessary, before replacing the control board. See the ***Valve Test Procedure***, below to test for defective valves.

Troubleshooting Guidelines

- A brewer that is not level may not function properly. Make sure the brewer is properly leveled before proceeding.
- This troubleshooting guide identifies some, but not all, of the possible causes for common problems that can occur.
- Use this troubleshooting guide along with the appropriate *ELECTRICAL SCHEMATIC.*

Valve Test Procedure

Use a digital multi-meter to measure the resistance of valve coils.

Measure the resistance across the valve coil terminals with the wiring harness disconnected. Reverse the meter leads on the terminals and measure the resistance in the opposite direction. A resistance of less than 100 ohms, in either direction, indicates a shorted coil. The valve must be replaced.

If a shorted coil is not detected, test for an open coil:

1 Reconnect the valve terminals to the wiring harness.

2 Power up the brewer with the appropriate cover removed to allow access to the valve.

3 Run a brew cycle while monitoring the voltage at the valve coil terminals. If voltage is present on the terminals, you should hear the valve click open/closed at the moment power is applied or removed from the terminals.The inlet valve should open any time the water tank is not full. If the valve does not open, replace the valve. If voltage is not detected, first check the wiring. If the wiring is OK, replace the control board.

Water Not Hot Enough

1 If the water heats, but is not hot enough, first check for the correct temperature setting (see the ***PROGRAMMING GUIDE*** section). Reprogram as necessary.

2 If the temperature setting is OK, and the actual water temperature does not match the setting on the control board, replace the temperature sensor.

Water Heats More Slowly Than Usual

1 Check for power across the terminals of the heating element(s). If power is being supplied, disconnect the heating element(s) and check for continuity. Replace a heating element if the resistance is too high (nominal resistance is 13 Ohms).

2 If there is no power to the heating element(s), check the wiring to any element that does not have the proper voltage across it. Also check for corroded connections anywhere between the power cord and the heating element(s).

Dispenser Overflows <u>During Brewing</u>

1 Make sure the dispenser is empty before starting the brew cycle. If not, empty it before brewing.

2 Check for a missing spray head. Replace as needed.

3 Check to make sure that the by-pass flow is set properly. See ***By-Pass Flow Adjustment*** at the end of this section.

No Power - Control Panel Not Lit

1 Make sure the circuit breaker to the circuit supplying power to the brewer is not tripped and is turned on.

2 On brewers with a power plug, make sure it is connected to the power receptacle.

3 Make sure that the main power toggle switch on the back panel is turned ON.

4 Verify that all wires from the power cord are properly connected inside the unit. Check to make sure that the wires are not burned/overheated. Loose connections can create heat. Check chassis ground.

5 Check to make sure power and ground are being supplied to the control board. If there is power into the control board, but the control panel is not lit, the control board is probably bad.

6 If there is no power into the control board, trace the circuit back (using the wiring diagram) to the power cord to find out where power is lost. If there is power into the thermostat reset switch, but not out, see step 7.

7 If there is power into the thermostat reset switch, but not out, check to make sure that the water tank is not empty. If the tank is empty, the reset switch has probably opened up due to a low water level, go to ***Water Tank Does Not Fill***. If there is water in the tank, but no power out, push in on the reset switch button to see if it restores power. If power is restored, check to make sure that the switch is not opening up at the wrong temperature (the switch should not open up at normal water temperatures). If there is still no power through the switch after pushing the button, replace the thermostat reset switch.

Brewer Does Not Start When Brew Button is Pressed

1 If the brewing light goes on when BREW is pressed, but brewing does not start, check for faulty wiring and connections between the universal control board and the valves.

2 If the brewing light does not go on, check for a faulty control board.

Water Tank Overfills

1 Turn the toggle switch on the back of the brewer ON and OFF. If water continues to flow when the switch is in both positions, replace the inlet valve.

2 If water stops flowing to the water tank when the toggle switch is turned OFF and resumes when the switch is turned back ON, remove the orange wire from the water probe on the tank. While power is ON, short the end of the orange wire to the metal surface on the outside of the tank. If the water tank stops filling when the orange wire is shorted to the tank, check for a corroded connection at the water probe.

3 If water does not stop flowing when the orange wire is shorted to the tank, check the tank ground connection and the continuity of the orange wire connecting to the control board. If both are OK, replace the control board.

Dispenser Overflows <u>All Of The Time</u>

1 Check to see if water continues to flow from the spray head, when the toggle switch is turned OFF. Replace any valve that is stuck open.

2 If one or more of the valves mentioned in step 1 turns on when the toggle switch on the back is ON and turns off when the switch is OFF, replace the control board.

Coffee/Tea Too Strong

See *Dispenser Not Filled To Normal Level During Brewing*.

Water Tank Does Not Fill

IMPORTANT: No water or low water in the tank can cause the tank to overheat, resulting in the thermostat reset switch opening. If after correcting a tank fill problem there is no power to the control panel, push the reset switch button to reset.

1 Check to make sure the water supply is turned on. Check for a plugged water supply line, water filter or inlet valve.

2 If there are no plugs in the water supply line, check for power across the inlet valve terminals. If power is being supplied, but there is no water flow, replace the inlet valve.

3 If power is not being supplied to the inlet valve, check the wires between the control board and the inlet valve. Check for corroded connections.

4 If the wiring between the control board and the inlet valve is OK, but there is no power to the inlet valve, remove the orange wire from the water tank probe. If the water tank starts to fill, replace the water probe. If the water tank does not start to fill, replace the control board.

Dispenser Not Filled To Normal Level During Brewing

1 Check to make sure that the brew volume is set properly. See the *PROGRAMMING GUIDE* section.

2 Check to make sure that the flow rate and water pressure from the water supply line meet the minimum specifications for the brewer. See the *SPECIFICATIONS* section.

3 Check to make sure that the spray head is clean and free of debris. Clean or replace as needed. Also make sure that the spray head is correctly aligned and that the tubing is routed properly to allow for maximum water flow (no kinks).

4 Check to make sure that the by-pass flow is set properly. See *By-Pass Flow Adjustment* at the end of this section..

5 Remove the brew basket and place a large container under the dump (brew). Run a brew cycle and confirm that the dump valve opens during the brew cycle. If flow is restricted, check for obstructions in the related tubing or valve. If there are no obstructions, but flow through the valve is slow, it can be assumed that the particular valve is not opening all the way and should be replaced. If water does not flow at all through the valve during the brew cycle, check to make sure that power is being supplied to the valve in question. Replace a valve that is not opening when power is applied to the terminals. If power is not being supplied to the valve, check the wiring between the valve and the control board. If the wiring is OK, replace the control board.

No Water Flows From Brewer During Brewing

1 Make sure that the water supply is turned on.

2 Check to see if the water in the tank is level with the water tank probe. If not, see *Water Tank Does Not Fill*.

3 If the water tank is full, the water is hot and power is on, but NO water flows during a brew cycle, check for power from the control board to the dump (brew) valve, during the brew cycle. If there is power to the valve, but no water flows, replace the valve. If there is no power at the valve terminals, first check the wiring, then the control board.

Water Does Not Heat At All

- Check to see if the water level in the tank is in contact with the water level probe. If not, see *Tank Does Not Fill*. The water will not heat unless it is in contact with the probe.
- If the water heats, but is not hot enough, see *Water Not Hot Enough*.
- If the READY TO BREW light is on, but the water is not hot, check the resistance across the leads of the temperature sensor. If the resistance is less than 10 k and the water is not hot, replace the temperature sensor. If the sensor resistance is above 10 k when the water is cool, replace the control board.

The following steps are performed with the rear toggle switch in the ON position.

1 Check for power across the terminals of the heating element(s). If power is being supplied, remove the wires and check for an open heating element.

2 If there is no power to the element(s), trace the circuit back (using the *ELECTRICAL SCHEMATIC*) to the power cord to find out where power is lost. If there is power into the triac but not out, see the following step.

3 If there is power into a triac, but not out, check for power at the gate terminal. Also check the wire to A2 from the control board. If the connections are good and power is being supplied to the triac, but there is no voltage out of A2, replace the triac. Check the wiring from the control board to the triac. If the wiring is OK, suspect the control board.

Water Too Hot (Boiling or Excessive Steaming)

IMPORTANT: Before proceeding, make sure that the control panel temperature is adjusted to compensate for higher elevations. The factory setting is 200°F. Reduce the temperature setting two degrees for every 1000 feet of elevation above 4000 feet.

1 First check to make sure that the temperature sensor is attached tightly to the tank and that heat sink compound was used. A properly mounted sensor should have a resistance of around 7 k when the water is hot. If not, replace the sensor.

2 Check to see if the control board constantly has power output to the triac, regardless of the resistance of the temperature sensor. If so, the control board is probably bad.

3 If the control board is working properly, check for a bad triac.

Warmer Does Not Heat

NOTE: The satellite heating element is designed to keep brewed coffee hot, but is not of sufficient wattage to reheat cold coffee.

1 Turn on power to the warmer that is not working. The warmer comes on automatically when the brew button is pressed. The warmer is also turned on manually by pressing the WARMER button on the control panel. Check for power at the terminals of the warmer element. If power is supplied to the element terminals, but the element does not heat, replace the element.

2 If the warmer is not receiving power, check to see if power is being supplied by the control board. If there is no power out of the board, it may be defective. If there is power output, check the wiring harness.

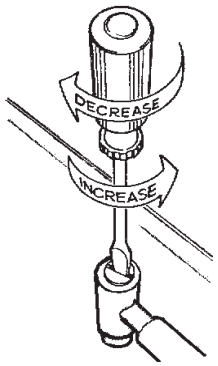
By-Pass Flow Adjustment

1 Slide the brew basket out to expose the by-pass outlet. Place a measuring cup under the by-pass fitting and another measuring cup under the brew basket outlet. Press the BREW button for 15 seconds, then press the ON/OFF button to stop the brew cycle.

2 Divide the number of ounces collected from the by-pass outlet into the total ounces collected from the spray head and by-pass. This will determine the percentage of by-pass.

3 To increase or decrease the volume of by-pass water, remove the brewer lid and turn the adjustment screw on the by-pass fitting as shown in the illustration (left). Turn clockwise for less water or counterclockwise for more.

4 After making the adjustment, you must reprogram the brew volume to maintain the proper total amount of finished coffee brewing into the insulated server. See the ***PROGRAMMING GUIDE*** section. Reprogramming is required every time you make a by-pass adjustment or when a different spray head us installed.



Wilbur Curtis Co., Inc. 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 other electrical components, fittings and tubing

Additionally, Wilbur Curtis Co., Inc. warrants its grinding burrs for forty (40) months from the date of purchase or 40,000 pounds of coffee, whichever comes first. Stainless steel components are warranted for two (2) years from the date of purchase against leaking or pitting. Replacement parts are warranted for ninety (90) days from the 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 800-995-0417. 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. Wilbur Curtis Co., Inc., assumes no responsibility for substitute replacement parts installed on Curtis equipment that have not been purchased from Wilbur Curtis Co., Inc. Wilbur Curtis Co., Inc. will not accept any responsibility if the following conditions are not met. The warranty does not cover:

- **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.*
- **Replacement of items subject to normal use and wear:** *This shall include, but is not limited to, spray heads, faucets, light bulbs, shear disks, "O" rings, gaskets, silicone tubing, silicone elbows, canister assemblies, whipper chambers and plates, mixing bowls, agitation assemblies and whipper propellers.*

The warranty is void under the following circumstances:

- **Improper operation of equipment:** *The equipment must be used for its designed and intended purpose and function.*
- **Improper installation of equipment:** *This equipment must be installed by a professional technician and must comply with all local electrical, mechanical and plumbing codes.*
- **Improper voltage:** *Equipment must be installed at the voltage stated on the serial plate supplied with this equipment.*
- **Improper water supply:** *This includes, but is not limited to, excessive or low water pressure and inadequate or fluctuating water flow rate.*
- **Damaged in transit:** *Equipment damaged in transit is the responsibility of the freight company and a claim should be made with the carrier.*
- **Abuse or neglect (including failure to periodically clean or remove lime accumulations):** *The 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.*

Repairs and/or Replacements are subject to Curtis' 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. Wilbur Curtis Co., Inc. will allow up to 100 miles, round trip, per in-warranty service call.

Return Merchandise Authorization (RMA): All claims under this warranty must be submitted to the Wilbur Curtis Technical Support Department prior to performing any repair work or return of this equipment to the factory. **All returned equipment must be properly re-packaged in the original carton and received by Curtis within 45 days following the issuance of a RMA.** 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). THE RMA NUMBER MUST BE MARKED ON THE CARTON OR SHIPPING LABEL. All warranty claims must be submitted within 60 days of service. Invoices will not be processed or accepted without a RMA number. Any defective parts must be returned in order for warranty invoices to be processed and approved.** 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.