WILBUR CURTIS COMPANY, INC.

Service Manual – Gemini IntelliFresh Brewer

Important Safeguards/Conventions

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

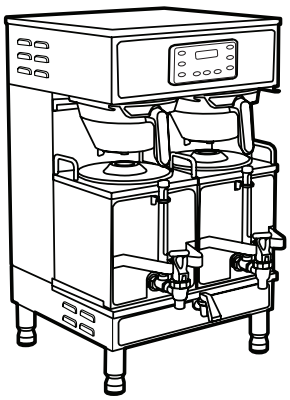
- DO NOT immerse the unit in water or any other liquid
- To reduce the risk of fire or electric shock, DO NOT open the service panels. There are no user serviceable parts inside.
- Keep hands and other items away from hot surfaces of unit during operation.
- Never clean with scouring powders, bleach or harsh chemicals.

Symbols

WARNINGS – To help avoid personal injury

Important Notes/Cautions – from the factory

Sanitation Requirements



Models

- *GEMTIF*
- *GEMSIF*
- *GEM3IF*

Your IntelliFresh brewer is Factory Pre-Set and Ready to Go… Right from the Box.

Following are the Factory Settings for IntelliFresh brewer:

- *Brew Temperature = 200°F*
- *Brew Volume = Large-Medium-Small*
- *Quality Timer = 120 Minutes*
- *Water Bypass = On LARGE & MEDIUM brew only*
- *Energy Save Mode = Off*
- *Warmer Auto-Off = 10 Hours*

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.*

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.

SETUP STEPS

The unit should be level (left to right and front to back) and located on a secure counter top. Connect a water line from the water filter with a minimum flow rate of 1 gallon per minute to the brewer.
NOTE: A water filtration system may be used to maintain trouble-free operation. In areas with extremely hard water, we suggest that a sedimentary and taste & odor filter (Curtis p/n CSC5AC00, CSC10AC00, & CS-C15AC00) be installed. This will prolong the life of your brewing system and enhance coffee quality.

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 the unit.
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.

1. A 3/8"Flare x 3/8" Male pipe elbow is supplied with the brewer for water line connection. Use tubing sized sufficiently to provide a minimum of 1.0 GPM.
2. Connect the unit to an appropriate electrical power circuit.
3. 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 the IntelliFresh brewer, there is no danger of element burnout caused by overheating an empty tank.
4. The heating tank typically requires 20 to 30 minutes to reach operating temperature (200°F), indicated when READY is displayed on the LCD screen.
5. Prior to brewing, dispense 12 ounces of hot water through the hot water faucet.
6. Brew a cycle of at least 12 ounces, to purge the water lines of any air that may be trapped after filling.

ISO 9001:2008
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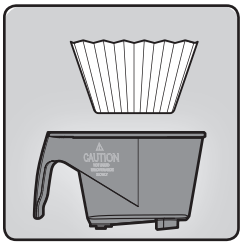
INTELLIFRESH BREWING INSTRUCTIONS

1. Brewer should be ON. Confirm this at rear toggle switch, then press the ON/OFF button on the UCM (Universal Control Module). Ready-to-Brew should be on the display. If the brewer is connected to an InterLock grinder, the grinder should be on. When Interlock connection is made, grind coffee at this time.

2. Position an empty Satellite onto the brew deck.

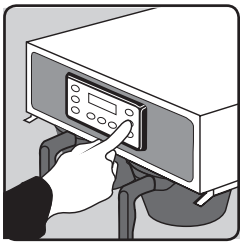
IMPORTANT NOTE: Only utilize Intellifresh Satellites on Intellifresh Brewers.



3. Place a clean filter into the brewcone.

4. Fill brewcone with appropriate amount of ground coffee.

5. Transfer filled brew-cone to brewer.

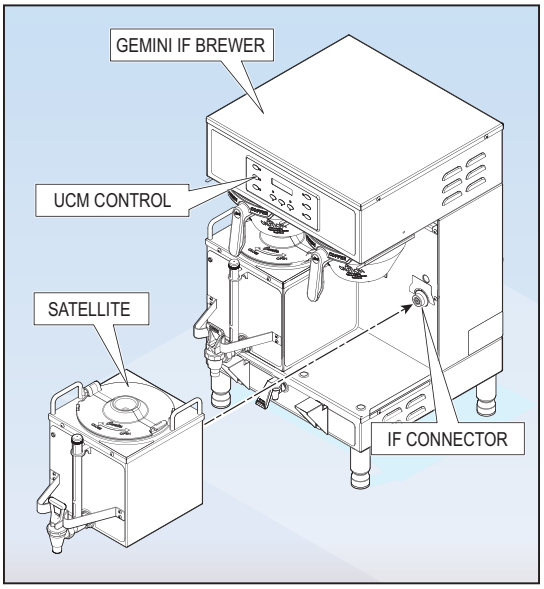


6. Press appropriate brew button. Brewing will begin immediately.

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

INTELLIFRESH FUNCTION & FEATURES

The IntelliFresh system will alert you when the coffee has exceeded the desired holding time. The Intellifresh system is activated by a connector on the Satellite connecting to the corresponding connector on the center panel. IntelliFresh is adjustable through the UCM controller on the brewer.



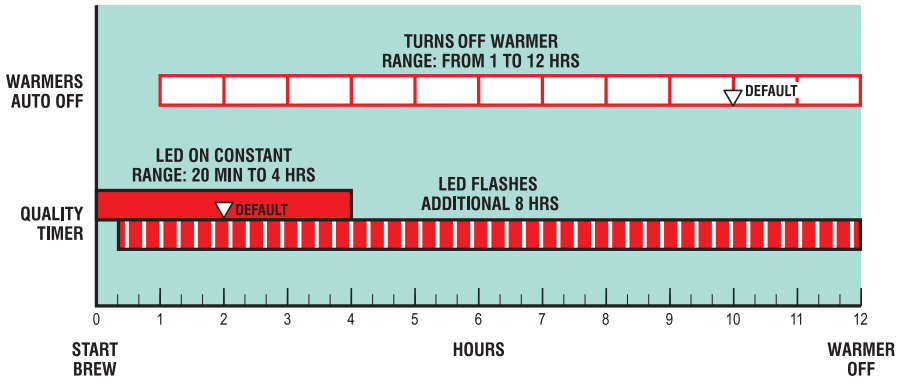
Quality Timer (Factory Set to 2 hours)

Press ⊙ to select, press < or > to choose the desired setting. Range 20 min. to 240 min. The timer is intended to notify the user when the coffee loses its freshness. The indicator light (LED) on the satellite will remain solid red until the Quality Timer expires (Factory Set to 2 hours). At expiration the LED will flash and remain flashing at the factory setting for an additional 8 hours. The additional 8 hours is controlled by the Warmer Auto-Off setting (see below Warmer Auto Off).

- Setting Range: 20 – 240 minutes. The default time is 2 hours.
- Time Expiration Indicator: LED flashes after expiration of Quality Timer Setting for up to a total of 12 hours. The default time is 8 hours after expiration of the Quality Timer.

Warmer Auto-Off (Factory set to 10 Hrs.)

Press ⊙ to select < or > to adjust from 1-12 hours. This feature has higher priority than the Quality Timer. It shuts off the warmers after a pre-determined time (factory set at 10 hours) starting when the Brew Button is pushed. The Quality Timer does not affect this function.



Quick Start GEM INTELLIFRESH

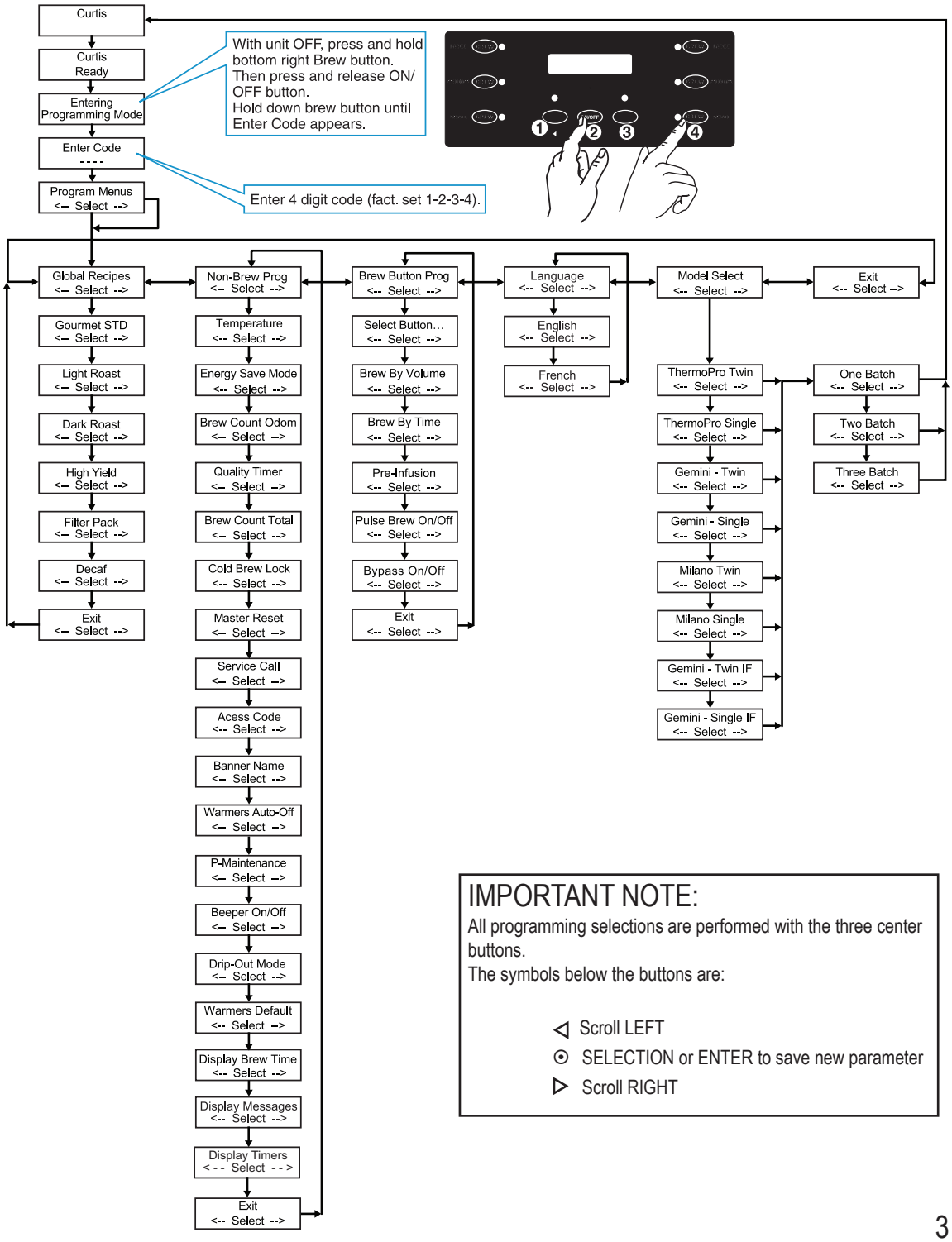
The G3/Gold Cup Series Brewing System is Factory Pre-Set for Optimum Performance.
After connection to water and power; the rear toggle switch must be on. You will hear a beep sound, indicating power is available to the controller.

The control displays CURTIS *. Press ON/OFF button and the screen will display* <GEMINI TWIN> WILBUR 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 *when temperature reaches the setpoint (200°F). Unit is now ready to brew.*

PROGRAM MENUS



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

Program Menus GEMIF Brewer

Program Menus

*From **Program Menus** press > display will show the next feature Global Recipes.*

GLOBAL RECIPES

Global Recipes

***Global Recipes** (Factory set to Gourmet STD)*
Press ⊙ to select. If selected, press < or > to choose a recipe based on the type of coffee being brewed. Selections are Gourmet STD, Light Roast, Dark Roast, High Yield, Filter Pack, or Decaf. Press ⊙ to select the desired recipe.

NON-BREW PROGRAMMING

Temperature

***Temperature** (Factory set to 200ºF)*
Press ⊙ to Select. Press < or > to move to desired temperature and then ⊙ to set. Temperature is programmable from 170ºF to 206ºF in 2-degree increments.

Energy Save Mode

***Energy Save Mode** (Factory set to OFF)*
Press ⊙ to Select, < or > ON, OFF or ON 140ºF , ⊙ to set. When in ON, unit will automatically shut off 4 hours from last brew. When feature is OFF, unit does not utilize the energy saving mode.
In the ON 140ºF position, temperature lowers to 140ºF, if unit has not brewed in 4 hours. This feature will save energy by maintaining a lower temperature in the tank in periods of non-operation.

Brew Count Odom

Brew Count Odom
Press ⊙ to display total brew cycles. Press EX or Reset.

Quality Timer

***Quality Timer (**Factory set to 120 Minutes)*
Press ⊙ to select, press < or > to choose desired setting. Range 20 min. to 240 min. The timer is intended to notify the user when the coffee loses its freshness. The indicator light (LED) on the satellite will remain solid until the Quality Timer expires (Factory Set to 120 minutes). At expiration the LED will flash and remain flashing at the factory setting for an additional 8 hours. The additional 8 hours is controlled by the Warmer Auto-Off setting.

NOTE: LED solid means fresh coffee. LED flashing means freshness expired. LED off means warmer off.

Brew Count Total

Brew Count Total
Press ⊙ to Select, Shows total gallons and total brew cycles on the unit. Cannot be reset.

Cold Brew Lock

***Cold Brew Lock** . . . (Factory set to 5º)*
Press ⊙ to select, < or > to select desired setting (CBL 5, 15 or OFF),⊙ to set.
The Cold Brew Lock feature allows the brewer to brew at three different temperature levels from the actual set point. The first setting is within 5 degrees of set point, next is within 15 degrees of set point, OFF is within 30 degrees of set point for the Ready to Brew message, however, it will brew at any temperature.

Master Reset

Master Reset
Press ⊙ to display Are You Sure?
Then < for Yes, > for No. Brewer factory defaults are then reset.

Service Call

***Service Call** (Phone number Factory set to 1-800-000-0000 X0000)*
Press ⊙ to display number and change number or < to move place and EX to exit when complete. This number will be displayed during a Heating system SENSOR ERROR or during a WATER ERROR.

Access Code

***Access Code** (Factory set to 1-2-3-4)*
Press ⊙ to display number and change number, (the number can be changed 1 to 4) or < to move place and EX to exit when complete.

Banner Name

***Banner Name** (Factory set to CURTIS)*
Press ⊙ to display letters and change letters or < to move place and EX to exit when complete
This feature allows up to 14 letters to be programmed for company name or regional name. Programming all blanks disables Banner Name. If programmed, Banner Name is displayed every 5 sec. on and off.

Warmers Auto-Off

***Warmers Auto – Off** (Factory set to 10 Hrs.)*
Press ⊙ to select < or > to adjust from 1-12 hours. This feature has higher priority than the Quality Timer. It shuts off the warmers after a pre-determined time factory set at 10 hours starting when the Brew Button is pushed. The Quality Timer does not affect this function.

Program Menus GEMIF Brewer

P-Maintenance

P-Maintenance *(Factory set to OFF)*
Press ⊙ to Select, Set gallons brewed to indicate P-Maintenance. Press < or > to adjust from Off to 9500 gallons. This feature advances in 100 gallon increments. Press ⊙ to exit.

Beeper On/Off

Beeper On/Off *(Factory set to ON)*
Press ⊙ to display ON or OFF. Pressing either < or > toggles between on and off. ⊙ to set. When ON, this feature allows you to hear a short beep each time a button is pressed.

Drip-out Mode

Drip-out Mode *(Factory set to 2 minutes)*
Press ⊙ to Select. Press < or > to move to desired time. Settings are OFF, 1, 2, 3, 4 and 5 minutes. Press ⊙ to Select time.

Warmers Default

Warmers Default *(Factory setting - MED)*
Press ⊙ to Select. Press < or > to adjust from OFF, HIGH (185ºF), MED (182ºF) or LOW (178ºF). These temperatures are ±3ºF.

Displ. Brew Time

Displ. Brew Time *(Factory set to ON)*
Press ⊙ to display ON or OFF. Pressing either < or > toggles between on and off. After Display Brew Time an EXIT screen will return you to Non-Brew Prog.

Display Messages

Display Messages *(Factory set to On)*
Display Messages allows the operator to change the screen display to read "Rinse Server Before Brewing" or to turn it off. Press ⊙ to display ON or OFF. Pressing either < or > toggles between on and off. ⊙ to set.

Display Timers

Display Timers *(Factory set to OFF)*
Press ⊙ to display ON or OFF. Pressing either < or > toggles between on and off. This feature allows the operator to turn off or on the display for the Quality Timer count-down. At the same time, it also turns off or on the audible alarm. Press ⊙ to set and exit.

BREW BUTTON PROGRAMMING

Brew By Volume

Brew by Volume *(Factory settings: LARGE 200oz ±8oz. MEDIUM 132oz±4oz. SMALL 64oz±4oz.)*
Press ⊙ to Select. Display will ask you to select a brew button, Large, Medium or Small. Press the desired brew button to begin... when desired volume is reached press the same brew button to stop the flow. Now the volume has been set.

Brew By Time

Brew by Time *(Factory settings: LARGE 5min-25sec. MEDIUM 3min-32sec. SMALL 1min-52sec.)*
Next item in the sequence is Brew by Time. Press ⊙ to Select to change the brew time. Display will now show the current time. By pressing < or > you can toggle back and forth from minutes to seconds to exit (ex). Change the time or set and exit by pressing the ⊙ button.

Pre-infusion

Pre-Infusion *(Factory Disabled)*
Press ⊙ to Select. Current setting in seconds is displayed < to decrease or select > to increase (range from OFF to 10 through 60 seconds), ⊙ to set.
If Pre-infusion is selected (ON), Cold Brew Lock is set within 5ºF of set point and Cold Brew Lock disappears from the list of program selections. When Pre-infusion is ON, Pulse Brew disappears from the list of program selections.

Pulse Brew

Pulse Brew *(Factory setting C)*
Press ⊙ to select, < or > to select OFF or one of five pulse patterns (A to E) . The five Pulse Brew options help "tune" or change the coffee flavor.
Guidelines for Pulse Brew:
*Filter Pack type coffees typically extract better with the **A** and **B** pulse setting.*
*Decaf coffees typically extract better with the **B** pulse setting.*
*High-Yield coffees typically extract better with the **C** pulse setting. Of course, any of the **A, B** or **C** settings may be used to suit your taste profile.*
*Settings **D** and **E** are manual pulse counts.*
*To exit from the Pulse Brew mode, select **0** for the time.*
If Pulse Brew is on, Cold Brew Lock is set within 5ºF of set point and Cold Brew Lock disappears from the list of program selections. When Pulse Brew is on, Pre-infusion disappears from the list of program selections.

Program Menus GEMIF Brewer

By-Pass

By-Pass *(Factory settings: LARGE 35%. MEDIUM 10%. SMALL Off.)*
The By-Pass option helps with controlling extraction with larger brews. Contact time that is too long will extract undesirable bitter, harsh flavor compounds. By-passing some of the brew water around the coffee bed will balance the extraction.
Press ⊙ to display current setting. Press < or > to change settings; OFF, 5% to 50%, in 5% increments. Press ⊙ to set.

Language

Language *(Factory set to English)*
Press ⊙ to Select. Press < or > to move to English or French. This feature is programmable for changing and adding languages.

Model Select

Model Select *(Factory set to Gemini-Twin IF)*
Press ⊙ to select, < or > to select model. The selections are: ThermoPro-Twin, ThermoPro-Single, Gemini-Twin, Gemini-Single, Milano-Twin, Milano-Single, Gemini-Twin IF, and Gemini-Single IF. Press ⊙ to set. When the Model Select feature is changed, all settings are reset to the defaults of the newly selected model. Also, the next feature Batch Select appears.

Batch Select *(Factory set to One Batch)*
Press ⊙ to select, < or > to select One Batch, Two Batch or Three Batch. Press ⊙ to set. Display exits programming mode and returns to normal operation.

Warmers

The warmer, under the brewcone will turn on automatically whenever a coffee brew cycle is started. The warmers may be switched on and off using the WARMER buttons on the control panel.

Error Message

An error message will appear on the screen in the event of a malfunction under the following conditions:

1. Water level overflow.
2. Break in temperature control circuit.
3. Excess temperature in heating tank
4. Scale build-up on liquid level probe, inside the heating tank.*

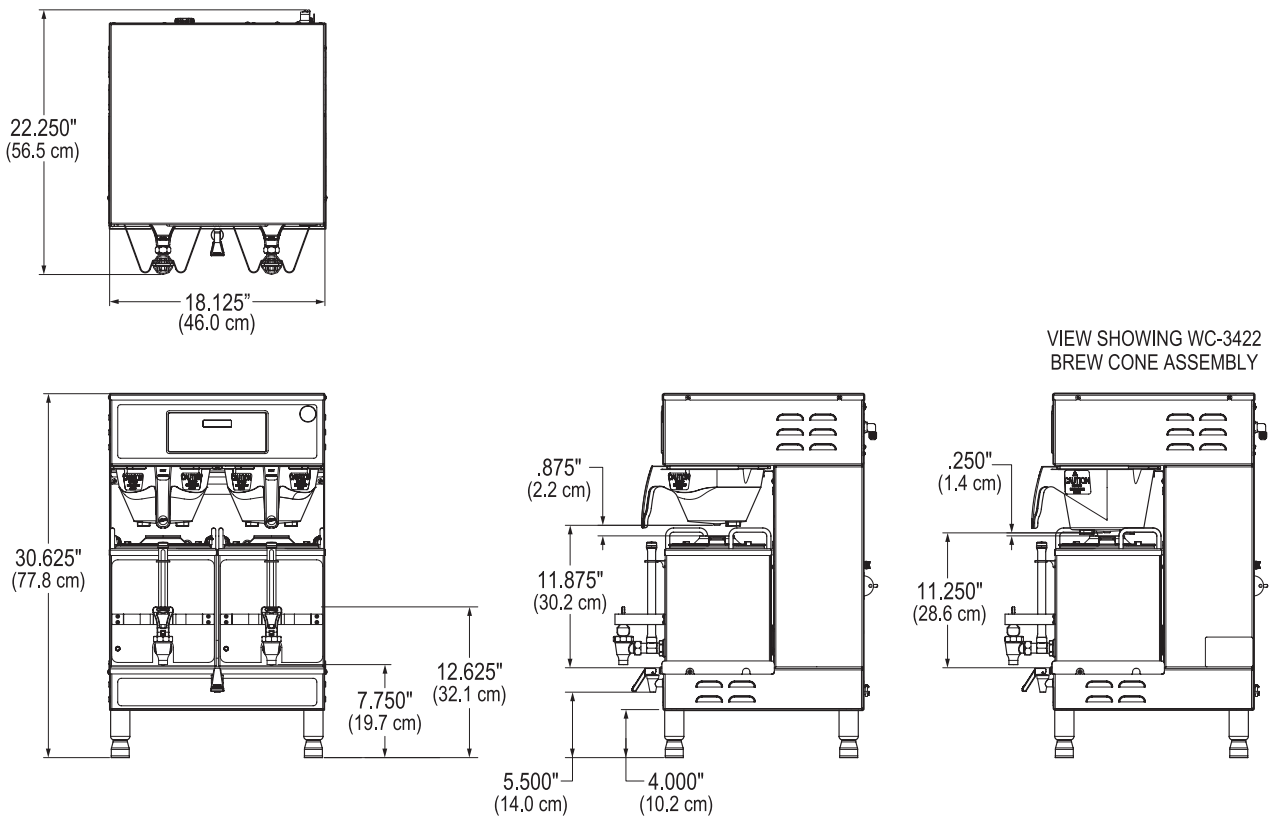
To turn off an error message, press the ⊙ button for five seconds.

* The Scale error features will begin appearing in later versions of GEM Intellifresh brewers.

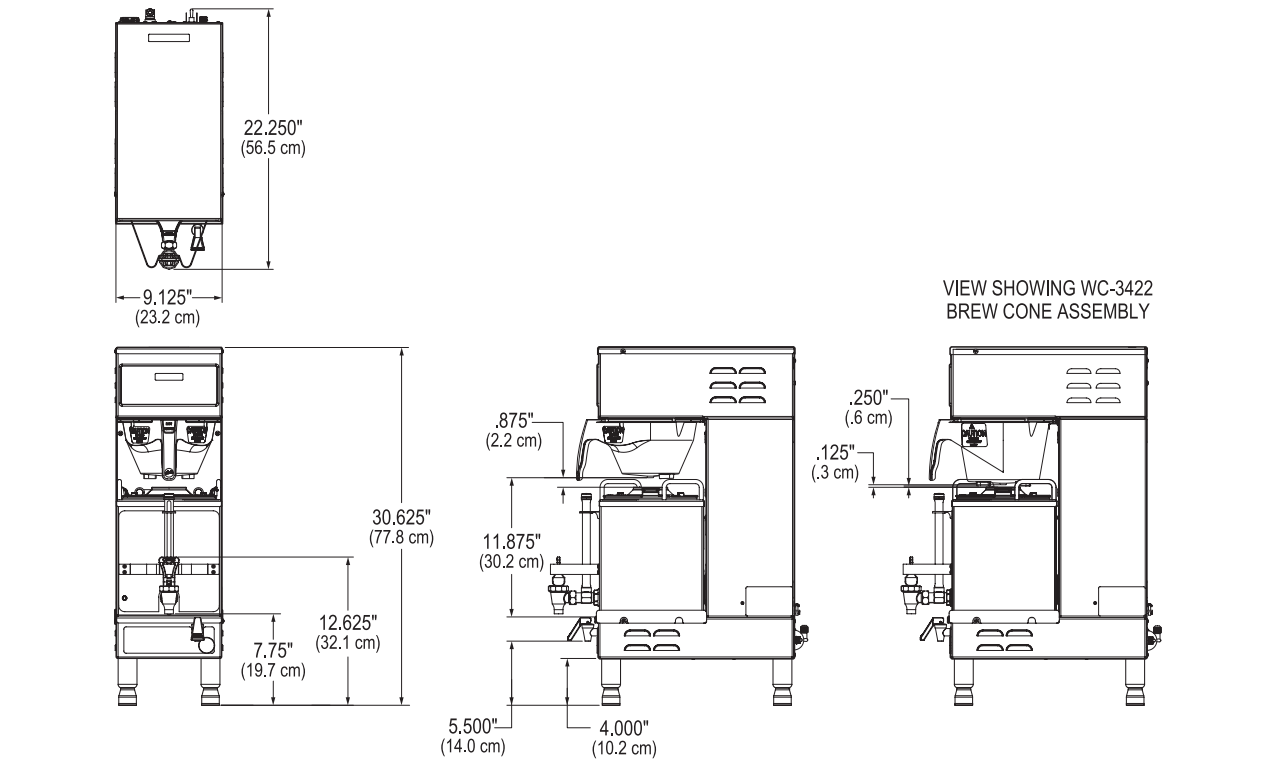
ERROR CODES		
ERROR MESSAGE	**DESCRIPTION**	**CAUSE**
Water Level Error 1-(800)-000-0000	Fill run error / Overflow	The fill solenoid has either run for more than 10 minutes on the initial tank fill or 2.0 minutes in normal operation
Sensor Error 1-(800)-000-0000	Open Probe	Break in the temperature thermistor circuit.
Over Temp. Error 1-(800)-000-0000	Excess Temperature	The sensor is reading that temperature in the heating tank has risen above 210°F.
Scale Warning	Scale Starting to Build Up on Water Level Probe	Water level probe resistance above warning threshold (test value 80kOhm)
Scale Error 1-(800)-000-0000	Scale Build up on Water Level Probe	Water level probe resistance above error threshold (test value 180kOhm)

Rough-In Drawings

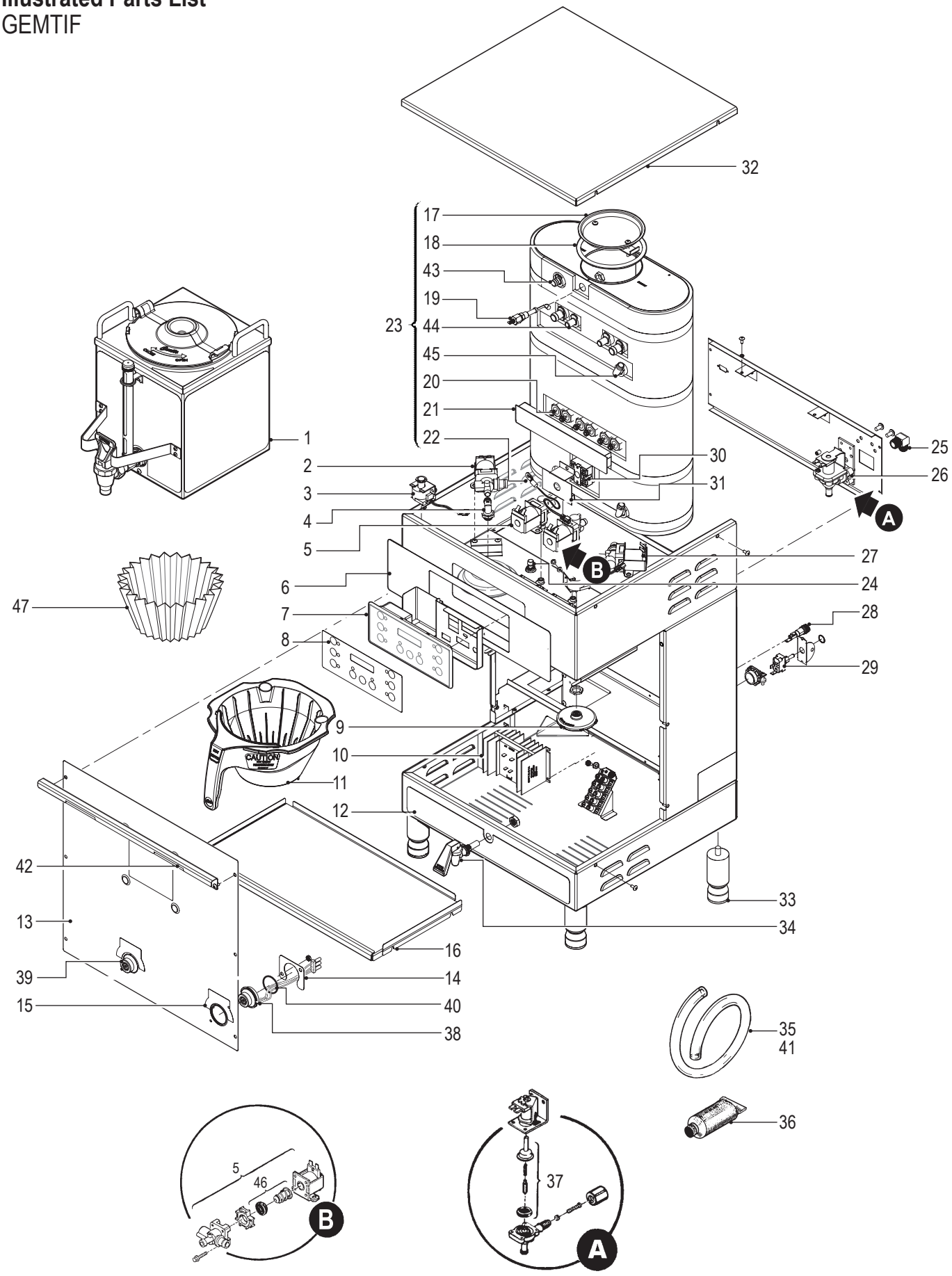
GEMTIF



GEMSIF



Illustrated Parts List
GEMTIF

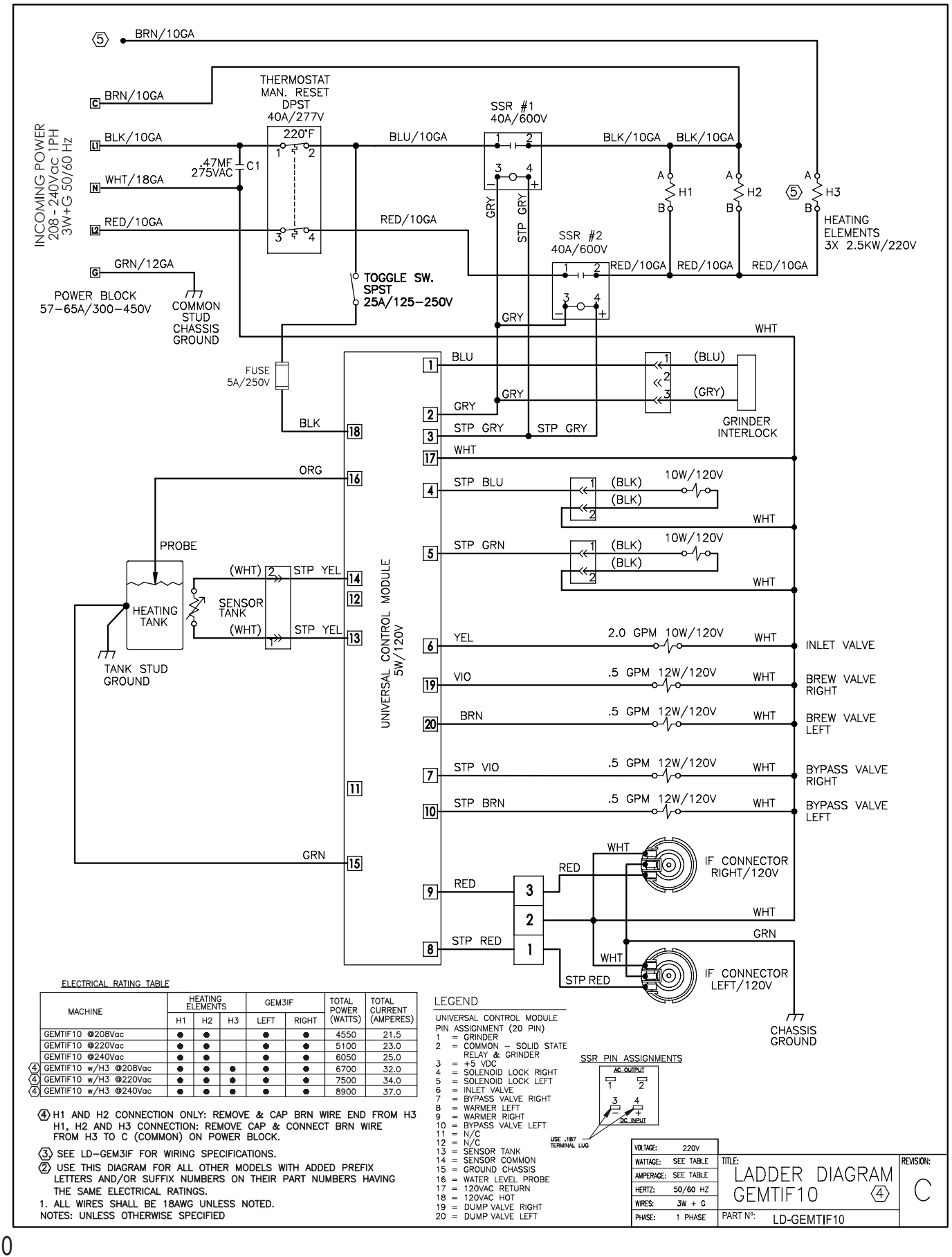


Illustrated Parts List
GEMTIF

INDEX Nº	PART Nº	DESCRIPTION
1	GEM3IF	SATELLITE, INTELLIFRESH
2	WC-37121*	DUMP VALVE LEFT
3	WC- 442	SOLENOID, LOCK BREW CONE RIGHT 120V
4	WC-2977-101K*	KIT, SPRAYHEAD FITTING, GASKET, & JAM NUT
5	WC- 844-101*	VALVE, BY-PASS, NON-ADJUSTABLE W/RSTRCTR
6	WC-39744	LABEL, UCM & OUTER 3-BATCH GEM-IF
7	WC-37388*	KIT, LABEL & UCM GEMTIF 3-BATCH CURTIS
8	WC-39755*	LABEL, UCM OVERLAY 1-BATCH
8A	WC-39756*	LABEL, UCM OVERLAY 2-BATCH
9	WC-29050*	SPRAYHEAD, AFS-AMBER
10	WC-8559*	RELAY, SOLIDSTATE 40A W/HEAT SINK
11	WC-3417*	BREW CONE, ASSY W/SPLASH POCKET BROWN COFFEE
12	WC-39745	LABEL, BOTTOM PANEL
13	WC-61960	COVER, FRONT WELD ASSEMBLY SS
13A	WC-61960-BLK	COVER, FRONT WELD ASSEMBLY BLACK POWDER COAT
14	WC-61963	HOLDER, IF CONNECTORS FEMALE GEMTIF
15	WC-38504	LABEL, WARNING SHOCK HAZARD
16	WC-61962	DECK, WARMER WELD ASSY
17	WC-37008*	KIT, TANK LID ROUND
18	WC-43067*	O'RING, 4.5" ID SILICONE
19	WC-5502-01*	KIT, PROBE, ASSY WATER LEVEL W/FITTING, O-RING, NUT
20	WC- 934-04*	ELEMENT HEATING 2.5KW 220V
21	WC-4382*	GUARD, SHOCK HEATING ELEMENT
22	WC-1438-101*	SENSOR, HEATING TANK
23	WC-62033	TANK, COMPLETE GEMTS NON-METAL FITTINGS
24	WC-29044	SLEEVE, OVERFLOW ASSY GEN USE
25	WC-2402P*	ELBOW, 3/8"FL x 3/8" NPT PLATED
26	WC- 847 *	VALVE, INLET 2 GPM 120V 10W GEN USE YEL BODY
27	WC-37122 *	DUMP VALVE RIGHT
28	WC-1501*	FUSE HOLDER ASSY W/5A FUSE
29	WC- 102*	SWITCH, RESISTIVE TOGGLE NON-LIT SPST 125/250VAC
30	WC- 522 *	THERMOSTAT, RESET
31	WC-43055*	GUARD, SHOCK RESET T-STAT
32	WC-61955	COVER, TOP SS
33	WC-3528 *	LEG, 4" ADJUST 3/8-16 THREAD STYLIZED
34	WC-1809*	FAUCET, PS/HPS SERIES HOT WTR
35	WC-5310*	TUBE, 5/16 ID x 1/8W SILICONE
36	WC-5231*	COMPOUND, SILICONE
37	WC-3765L*	KIT, VALVE REPAIR USE ON WC-847
38	WC- 571K-R	KIT, IF CONNNECTOR-RIGHT
39	WC- 571K-L	KIT, IF CONNECTOR- LEFT
40	WC-43133	O-RING, 1.424ID X 1.630 OD X .103 WALL GEMIF's
41	WC-5350*	TUBE, SILICONE Ø1/2" ID x Ø3/4" OD x 1/8" WALL
42	WC-61954	PLATE, BREWCONE STOP STAINLESS STEEL
42A	WC-61954-BLK	PLATE, BREWCONE STOP BLACK POWDER COAT
43	WC-37266*	KIT, TANK OVERFLOW FITTING WITH BUSHING
44	WC-37317*	KIT, STRAIGHT FITTING WITH BUSHING
45	WC-37365*	KIT, TANK INLET FITTING WITH BUSHING
46	WC-37132*	KIT, VALVE REPAIR USE ON WC-844-101
47	GEM-6	FILTER, 500/PKG

* SUGGESTED PARTS TO STOCK

Electrical Schematic
GEMTIF



ELECTRICAL RATING TABLE

MACHINE	HEATING ELEMENTS H1	H2	H3	GEM3IF LEFT	RIGHT	TOTAL POWER (WATTS)	TOTAL CURRENT (AMPERES)
GEMTIF10 @208Vac	●	●		●	●	4550	21.5
GEMTIF10 @220Vac	●	●		●	●	5100	23.0
GEMTIF10 @240Vac	●	●		●	●	6050	25.0
④ GEMTIF10 w/H3 @208Vac	●	●	●	●	●	6700	32.0
④ GEMTIF10 w/H3 @220Vac	●	●	●	●	●	7500	34.0
④ GEMTIF10 w/H3 @240Vac	●	●	●	●	●	8900	37.0

④ 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.

③ SEE LD-GEM3IF FOR WIRING SPECIFICATIONS.

② USE THIS DIAGRAM FOR ALL OTHER MODELS WITH ADDED PREFIX LETTERS AND/OR SUFFIX NUMBERS ON THEIR PART NUMBERS HAVING THE SAME ELECTRICAL RATINGS.

1. ALL WIRES SHALL BE 18AWG UNLESS NOTED.

NOTES: UNLESS OTHERWISE SPECIFIED

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 = N/C
12 = N/C
13 = SENSOR TANK
14 = SENSOR COMMON
15 = GROUND CHASSIS
16 = WATER LEVEL PROBE
17 = 120VAC RETURN
18 = 120VAC HOT
19 = DUMP VALVE RIGHT
20 = DUMP VALVE LEFT

SSR PIN ASSIGNMENTS

USE .187 TERMINAL LUG

VOLTAGE:	220V
WATTAGE:	SEE TABLE
AMPERAGE:	SEE TABLE
HERTZ:	50/60 HZ
WIRES:	3W + G
PHASE:	1 PHASE

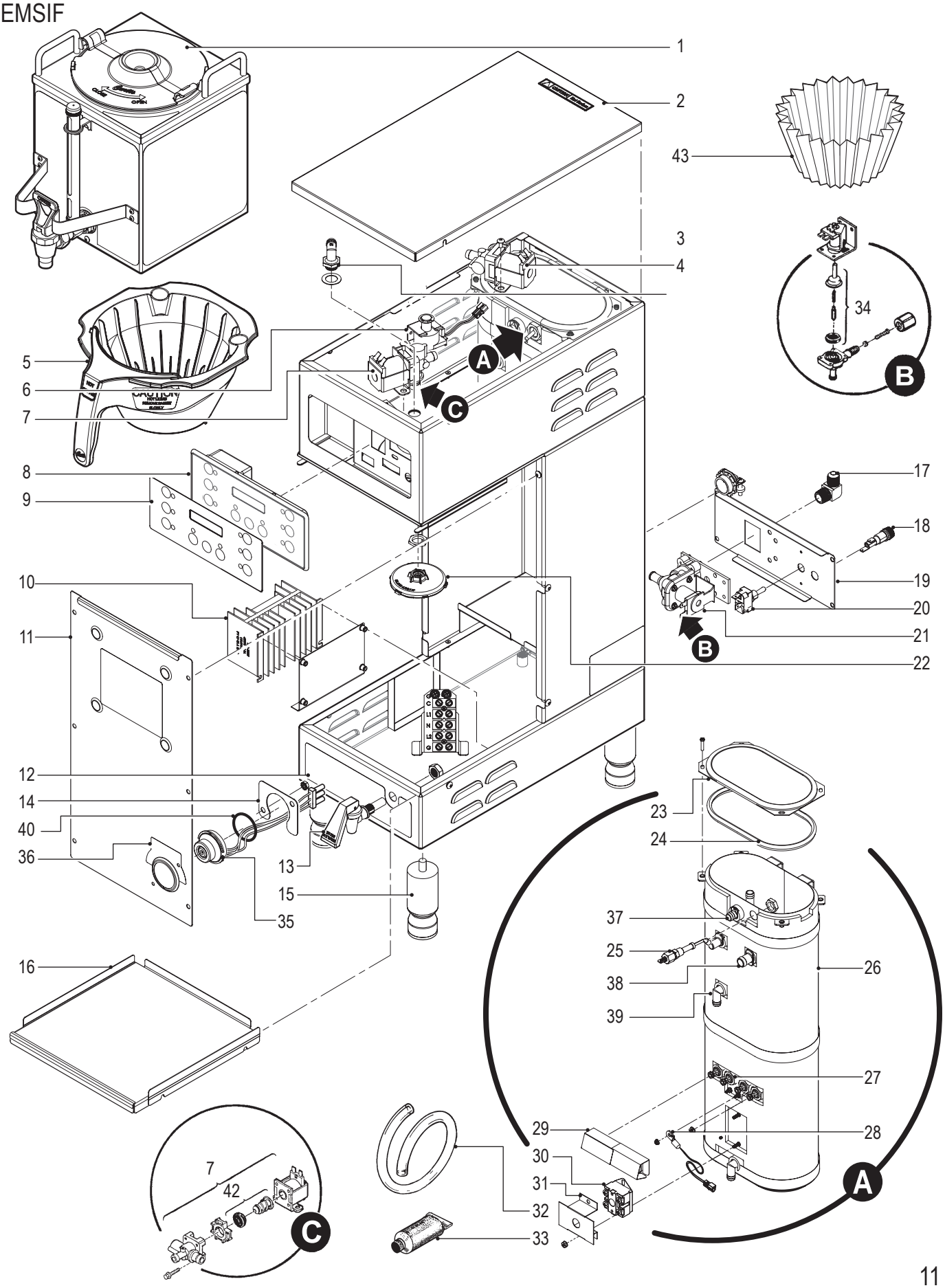
TITLE: LADDER DIAGRAM GEMTIF10 ④

REVISION: C

PART Nº: LD-GEMTIF10

Illustrated Parts List

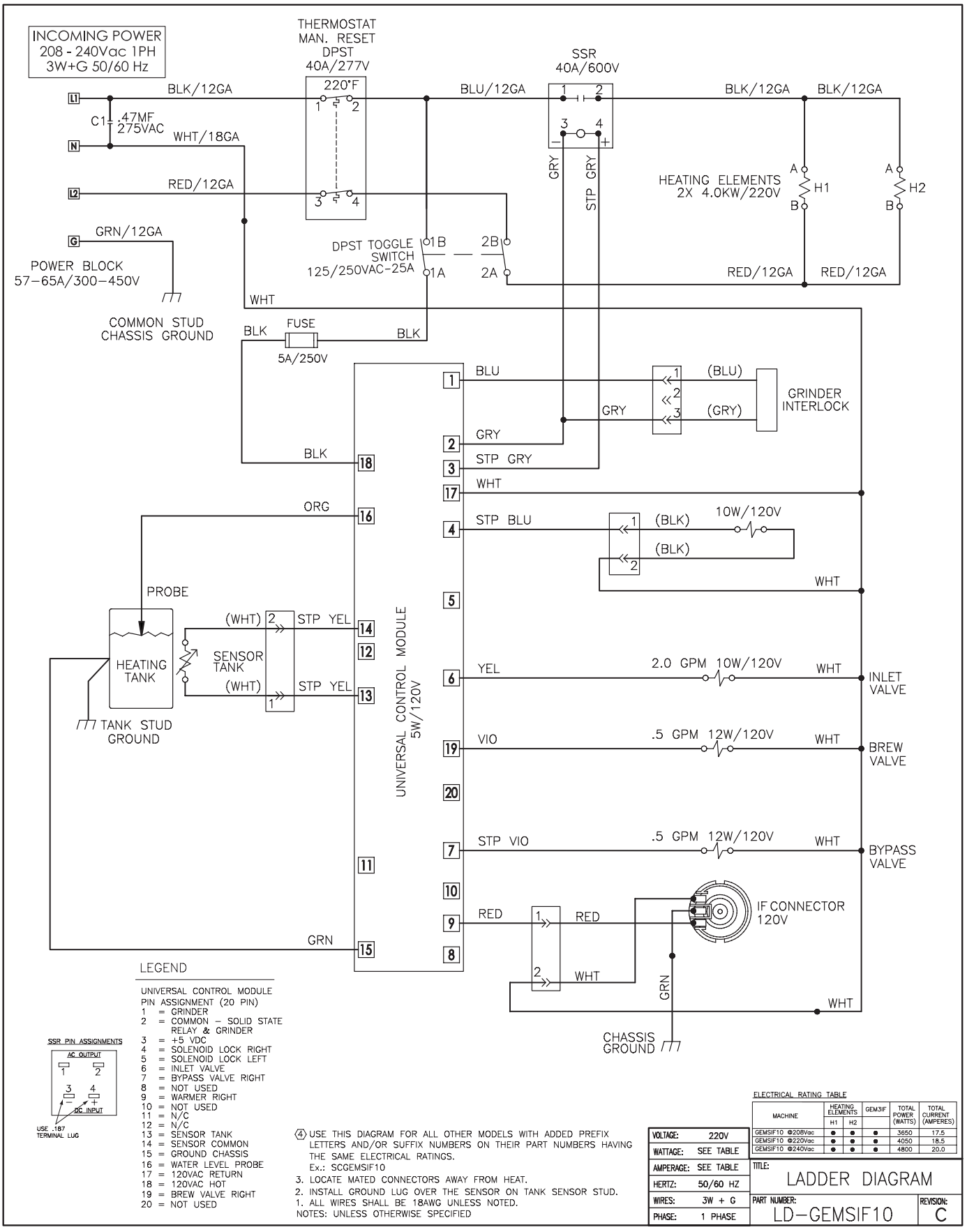
GEMSIF



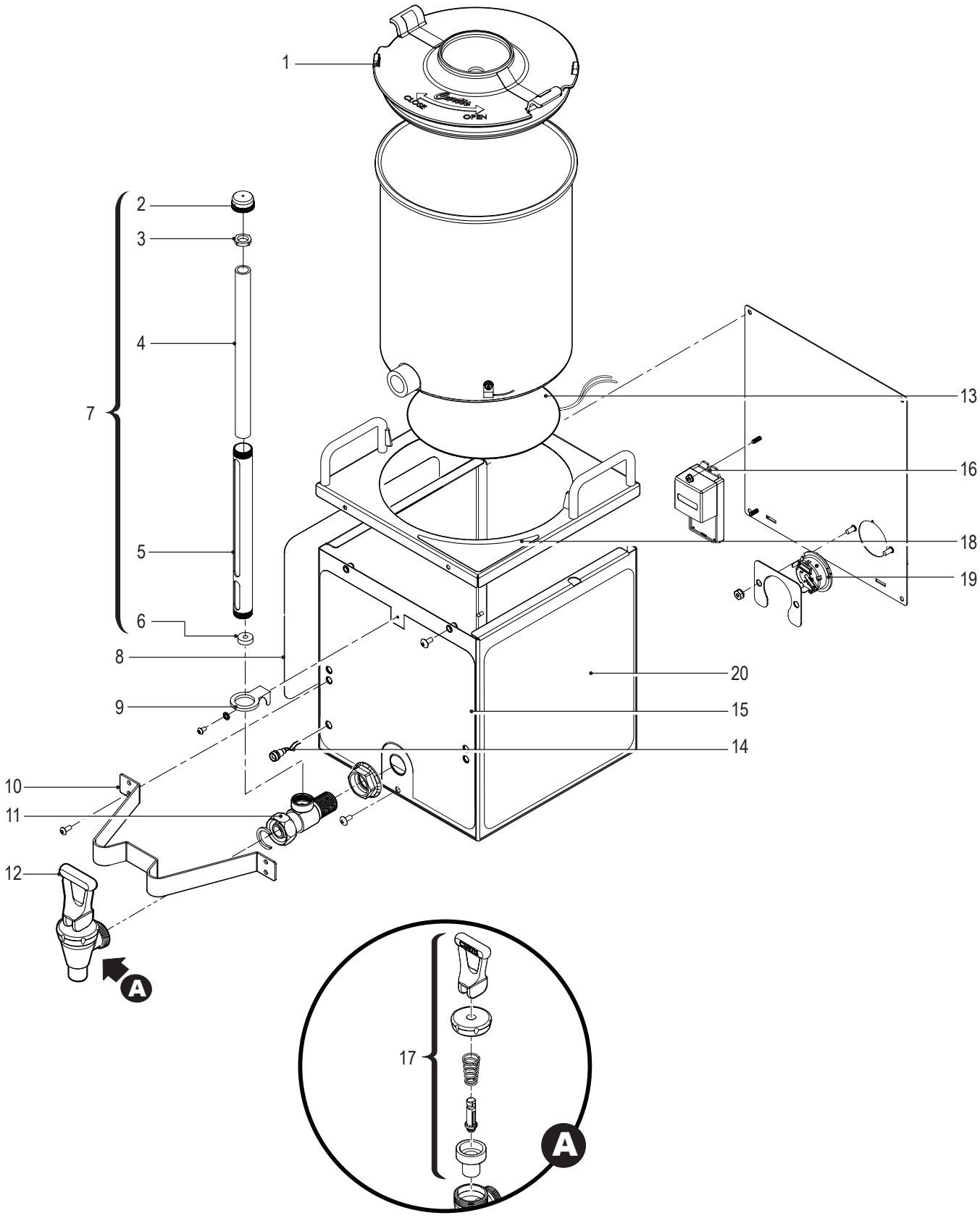
INDEX Nº	PART Nº	DESCRIPTION
1	GEM3IF	SATELLITE, INTELLIFRESH
2	WC-61928	COVER, TOP
3	WC-37122*	DUMP VALVE RIGHT
4	WC-2977-101K*	KIT, SPRAYHEAD FITTING, GASKET, & JAM NUT
5	WC-3417	BREW CONE, ASSY W/SPLASH POCKET BROWN COFFEE
6	WC- 442	SOLENOID, LOCK BREWCONE L/R LABEL
7	WC- 844-101*	VALVE BY-PASS NON-ADJUSTABLE
8	WC-37389	KIT, LABEL & UCM GEMSIF 3-BATCH CURTIS
9	WC-39801*	LABEL, UCM PANEL 3-BATCH GEMSIF
9A	WC-39802*	LABEL, UCM PANEL 2-BATCH GEMSIF
9B	WC-39803*	LABEL, UCM PANEL 1-BATCH GEMSIF
10	WC-8559*	RELAY, SOLIDSTATE 40A W/HT SINK
11	WC-61927	COVER, FRONT
12	WC-39800	LABEL, BOTTOM WRAP GEMSIF
13	WC-1809*	FAUCET, PS/HPS SERIES HOT WTR
14	WC-61963	HOLDER, IF CONNECTOR
15	WC-3528 *	LEG, 4” ADJUST 3/8-16 THRD STYLIZED
16	WC-61930	DECK, WARMER W/A
17	WC-2402P*	ELBOW, 3/8”FL x 3/8” NPT PLATED
18	WC-1501	FUSE HOLDER ASSY W5A FUSE
19	WC-59020	PANEL, BACK GEMSS
20	WC- 103*	SWITCH, TOGGLE NON-LIT DPST 25A 125/250VAC RST
21	WC- 847 *	VALVE, INLET 2 GPM 120V 10W GEN USE YEL BODY
22	WC-29050*	SPRAYHEAD, AFS-AMBER
23	WC-5853-102	COVER, TOP HEATING TANK
24	WC-43062*	GASKET, TANK LID
25	WC-5502-01*	KIT, PROBE, ASSY WATER LEVEL W/FITTING, O-RING, NUT
26	WC-62035	TANK, COMPLETE GEMSS W/ULTEM FITTINGS
27	WC- 904-04*	KIT,ELEMENT, HEATING 1.6KW120V W/JAM NUT, WASHERS
28	WC-1438-101*	SENSOR, HEATING TANK
29	WC-4394*	GUARD, SHOCK HEATING ELEMENT
30	WC- 522 *	THERMOSTAT, RESET
31	WC-43055*	GUARD, SHOCK RESET THERMOSTAT
32	WC-5310*	TUBE, 5/16 ID x 1/8W SILICONE
33	WC-5231*	COMPOUND, SILICONE
34	WC-3765L*	KIT, VALVE REPAIR
35	WC- 571K-R	KIT, IF CONNNECTOR-RIGHT
36	WC-38504	LABEL, WARNING SHOCK HAZARD
37	WC-37266*	KIT, TANK OVERFLOW FITTING WITH BUSHING
38	WC-37317*	KIT, STRAIGHT FITTING WITH BUSHING
39	WC-37365*	KIT, TANK INLET FITTING WITH BUSHING
40	WC-43133	O-RING, 1.424ID X 1.630 OD X .103 WALL GEMIF’s
41	WC-29044	SLEEVE, OVERFLOW ASSY GEN USE (NOT SHOWN)
42	WC-37132*	KIT, BY-PASS VALVE USE ON WC-844-101
43	GEM-6	FILTER, 500PK 12½ x 4

* SUGGESTED PARTS TO STOCK

Electrical Schematic
GEMSIF (-10 Only)



Illustrated Parts List
GEM3IF

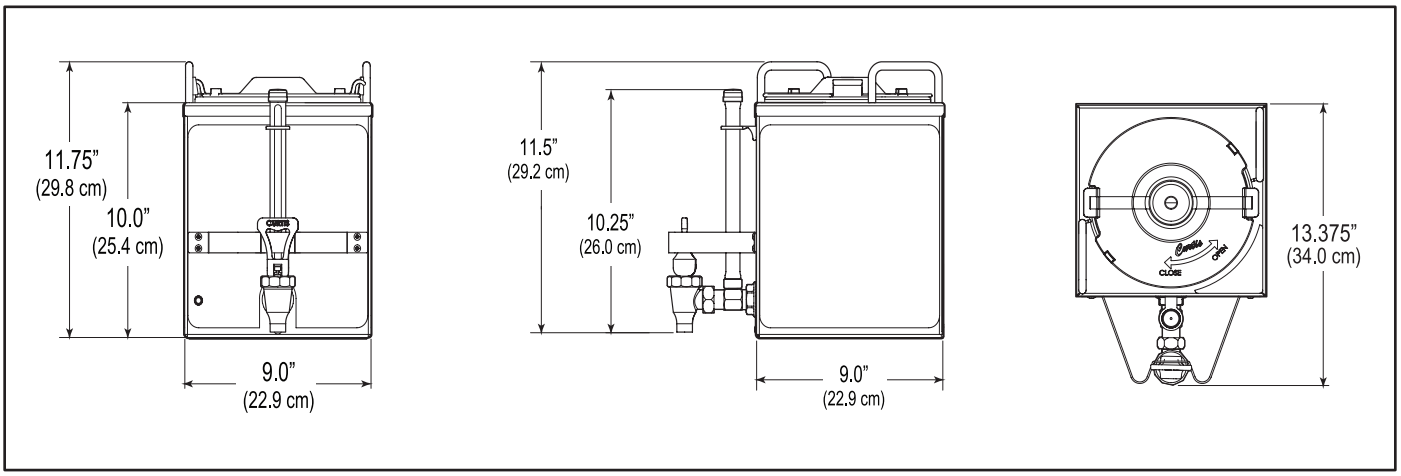


Illustrated Parts List
GEM3IF

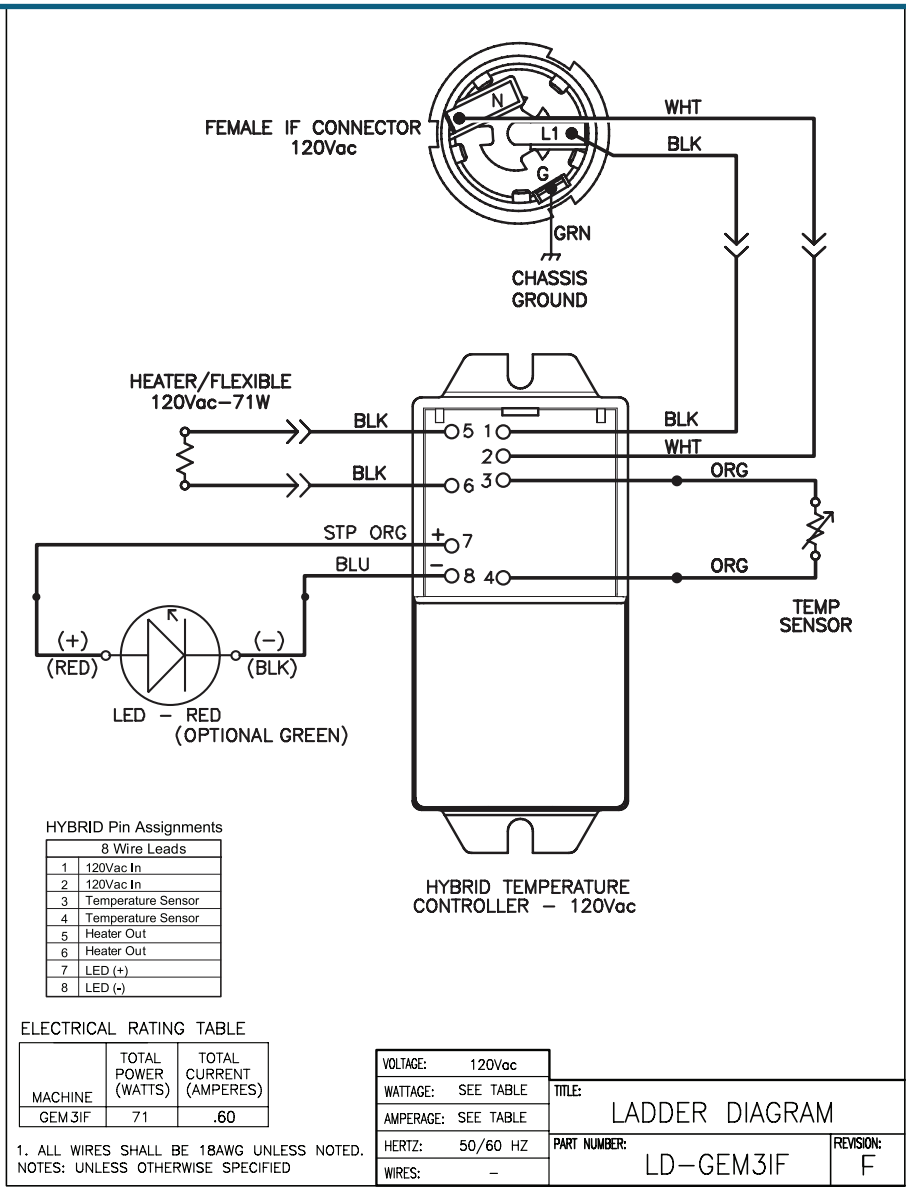
INDEX Nº	PART Nº	DESCRIPTION
1	WC-5622*	LID, BLACK PLASTIC GEM-3
2	WC-2001	CAP, SHIELD W/VENT
3	WC-2005*	WASHER, SHIELD CAP 1/8”
4	WC-2025*	GLASS, GAUGE 8”
5	WC-2010C	SHIELD, GAUGE GLASS ¾” D. x 8”
6	WC-2006*	WASHER, .188ID x .188 THK BOTTOM
7	WC-2102	GAUGE GLASS ASSEMBLY 8”
8	WC-39747	LABEL, SIDE GEM3IF CURTIS LOGO
9	WC-2007	BRACKET, GAUGE GLASS GEM-3
10	WC-6417	GUARD, FAUCET GEM-3
11	WC-1901A	SHANK, FAUCET W/SHIELD BASE
12	WC-1800*	FAUCET, S’ SERIES NON-LOCKING
13	WC-37543*	KIT, INTELLIFRESH HEATER GEM3IF
14	WC-37544*	KIT, RED LED LIGHT GEM3IF
15	WC-39746	LABEL, FRONT GEM3IF CURTIS LOGO
16	WC-37545*	KIT, HYBRID TEMPERATURE CONTROL
17	WC-3705*	KIT, FAUCET S’ SERIES
18	WC-38151	LABEL, LOCK/UNLOCK GEM3
19	WC-13426	IF CONNECTOR, FEMALE W/WIRES
20	WC-39747	LABEL, SIDE GEM-3IF CURTIS LOGO

* SUGGESTED PARTS TO STOCK

Rough-In Drawing
GEM3IF



Electrical Schematic
GEM3IF



HYBRID Pin Assignments

	8 Wire Leads
1	120Vac In
2	120Vac In
3	Temperature Sensor
4	Temperature Sensor
5	Heater Out
6	Heater Out
7	LED (+)
8	LED (-)

ELECTRICAL RATING TABLE

MACHINE	TOTAL POWER (WATTS)	TOTAL CURRENT (AMPERES)
GEM3IF	71	.60

1. ALL WIRES SHALL BE 18AWG UNLESS NOTED.
NOTES: UNLESS OTHERWISE SPECIFIED

VOLTAGE:	120Vac
WATTAGE:	SEE TABLE
AMPERAGE:	SEE TABLE
HERTZ:	50/60 HZ
WIRES:	–

TITLE: LADDER DIAGRAM
PART NUMBER: LD–GEM3IF
REVISION: F

CLEANING

Regular cleaning of your coffee brewer will maintain the highest quality coffee your equipment is capable of producing. A proper cleaning is essential in preserving the appearance and performance of the brewer.

CAUTION: DO NOT use undiluted bleach or chlorine.

1. Turn off the unit at the button on the front control panel.
2. Wipe exterior surfaces with a damp cloth, removing spills and debris.
3. Slide the brewcone out and clean it. Thoroughly soap the sprayhead area with a mild detergent solution.
4. Wash the brew basket. Use a soft bristled brush for hard to clean areas. Wash both parts with a detergent solution or put these parts through a dishwasher.

Liquid Level Probe

Cleaning intervals for the probe are to be determined by the user or the service tech based on water conditions. The use of water filters, or the type of water filter that is being used can impact the service interval. Intervals can be from one month to several years, however, replacing rather than cleaning the probe is preferable.

WARNING: Disconnect electrical power before removing access panels!

CAUTION: This procedure involves working with hot water and hot surfaces!

1. Unplug the power cord and shut off the water line.
2. Remove the top cover of the unit. Locate the top of the tank and remove the cover.
3. Drain the tank to a level about 3" below the tip of the probe.
4. Allow some time for the probe to cool before working on the brewer.
5. Clean the tip of the probe using a Scotch-BriteTM scuff pad.
6. If a residual white layer is still visible on the probe, remove the probe and soak it in vinegar or a scale removing chemical. Repeat this step until the white layer is removed.

CLEANING THE GEM3IF SATELLITE

A daily routine of cleaning the GEM3IF Satellite will maintain the appearance of the unit and ensure great tasting coffee. To clean the Satellite components, prepare a mild solution of detergent and warm water.

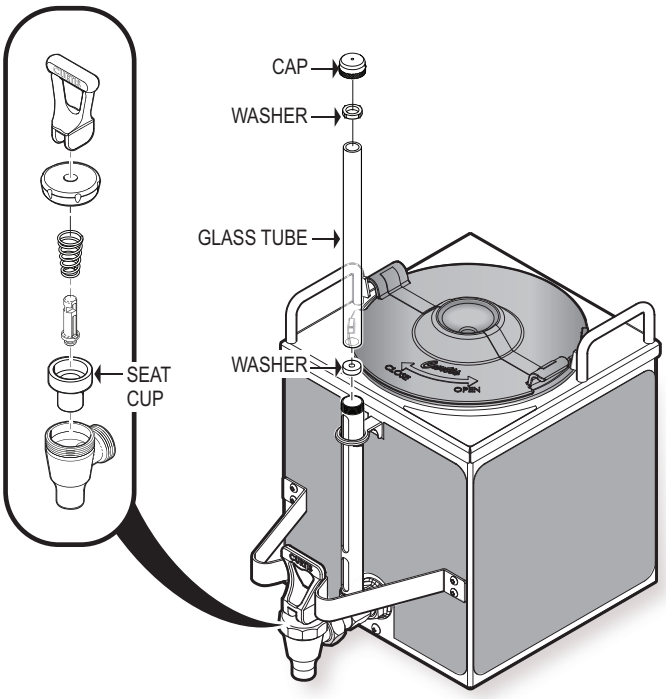
IMPORTANT

CAUTION – Do not use cleansers, liquids containing bleach, powders or any other substance containing chlorine. These products promote corrosion and will pit the stainless steel. USE OF THESE PRODUCTS WILL VOID THE WARRANTY.

Cleaning the Satellite Server

DO NOT immerse the Satellite in water or any other liquid.

1. Remove lid from Satellite. Clean the lid at the funnel area with a spiral brush and detergent solution.
2. Rinse the lid, removing all traces of cleaning solution.
3. Clean inside of the Satellite. Remove coffee residue with the detergent solution.
4. Thoroughly rinse out the Satellite with clean warm water.
5. Unscrew the handle/bonnet assembly and remove it from the dispensing faucet.
6. Inspect the silicone seat cup for wear, cracks, or hardening. If okay, then leave the seat cup attached on the handle/bonnet assembly. Soak then wipe clean. Replace the seat cup if damaged.
7. Remove the gauge glass tube by unscrewing the gauge glass cap.
8. Clean the gauge glass tube with a gauge brush soaked with detergent solution. Soak and wipe the two washers. Rinse with clean water. Dry the parts and assemble them onto the Satellite. Hand tighten the cap.
9. Clean all parts. Thoroughly rinse with clean warm water.
10. Dry and assemble the parts. Hand-tighten when the assembling.



Product Warranty Information

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

3 Years, Parts and Labor, from Original Date of Purchase on digital control boards**.**
2 Years, Parts, from Original Date of Purchase on all other electrical components, fittings and tubing.
1 Year, Labor, from Original Date of Purchase on all electrical components, fittings and tubing.

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

CONDITIONS & EXCEPTIONS

The warranty covers original equipment at time of purchase only. The Wilbur Curtis Company, Inc., assumes no responsibility for substitute replacement parts installed on Curtis equipment that have not been purchased from the
Wilbur Curtis Company, Inc. The Wilbur Curtis Company will not accept any responsibility if the following conditions are not met. The warranty does not cover and is void under the following circumstances:

1) **Improper operation of equipment:** *The equipment must be used for its designed and intended purpose and function.*
2) **Improper installation of equipment:** *This equipment must be installed by a professional technician and must comply with all local electrical, mechanical and plumbing codes.*
3) **Improper voltage:** *Equipment must be installed at the voltage stated on the serial plate supplied with this equipment.*
4) **Improper water supply:** *This includes, but is not limited to, excessive or low water pressure, and inadequate or fluctuating water flow rate.*
5) **Adjustments and cleaning:** *The resetting of safety thermostats and circuit breakers, programming and temperature adjustments are the responsibility of the equipment owner. The owner is responsible for proper cleaning and regular maintenance of this equipment.*
6) **Damaged in transit:** *Equipment damaged in transit is the responsibility of the freight company and a claim should be made with the carrier.*
7) **Abuse or neglect (including failure to periodically clean or remove lime accumulations):** *Manufacturer is not responsible for variation in equipment operation due to excessive lime or local water conditions. The equipment must be maintained according to the manufacturer's recommendations.*
8) **Replacement of items subject to normal use and wear:** *This shall include, but is not limited to, light bulbs, shear disks, "0" rings, gaskets, silicone tube, canister assemblies, whipper chambers and plates, mixing bowls, agitation assemblies and whipper propellers.*
9) **Repairs and/or Replacements** *are subject to our decision that the workmanship or parts were faulty and the defects showed up under normal use. All labor shall be performed during regular working hours. Overtime charges are the responsibility of the owner. Charges incurred by delays, waiting time, or operating restrictions that hinder the service technician's ability to perform service is the responsibility of the owner of the equipment. This includes institutional and correctional facilities. The Wilbur Curtis Company will allow up to 100 miles, round trip, per in-warranty service call.*

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

ECN 14810 . 3/6/13@9.1 . revH

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