

#### Models

- GEM TS
- GEM SS

# WILBUR CURTIS COMPANY, INC.

# Service Manual – GEMTS/SS

#### 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 service panels. 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. Conventions



WARNINGS - To help avoid personal injury



Important Notes/Cautions - from the factory



Sanitation Requirements

Your Curtis Gemini is Factory Pre-Set and Ready to Go... Right from the Box.

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

• Brew Temperature = 200°F

- Water Bypass = On LARGE & MEDIUM brew only
- Brew Volume = Large set to vessel requirements.
- Energy Save 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.



The unit should be located on a solid counter top and leveled (left to right and front to back),. Connect a water line from the water filter to the brower

NOTE: A water filtration system must be installed 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.



CAUTION: Please use this setup procedure

before attempting to use

IMPORTANT: Equipment

to be installed to comply

with applicable federal,

CAUTION: DO NOT

connect this brewer to hot

water. The inlet valve is

WARNING HOT LIQUID,

Scalding may occur.

Avoid splashing.

this brewer. Failure to follow the

state, or local plumbing/electrical

codes having jurisdiction.

not rated for hot water.

voiding of the warranty.

instructions can result in injury or the

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.
- 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.
- 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.
- 4. The heating tank will require 20 to 30 minutes to reach operating temperature (200°F), indicated when READY TO BREW 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.

#### BREWING INSTRUCTIONS

- 1. Brewer should be ON (Confirm at rear toggle switch, then press the ON/OFF button). 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. Place an empty Satellite under the brewcone and press the warmer switch to pre-heat the Satellite.



3. Place a clean filter into the brewcone.



4. Fill brewcone with ground coffee.



5. Transfer filled brew cone to brewer.



6. Press Brew button. Brewing will begin immediately.



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



FOR THE LATEST SPECIFICATIONS AND INFORMATION GO TO WWW.WILBURCURTIS.COM

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Montebello, CA 90640 Tel: (323) 837-2300 www.wilburcurtis.com

ISO 9001:2008

Wilbur Curtis Company

# Quick Start

# **GEM TS & GEM SS**

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

Press ON/OFF button and the screen will display

<GEMINI TWIN> WILBUR CURTIS

After three seconds,

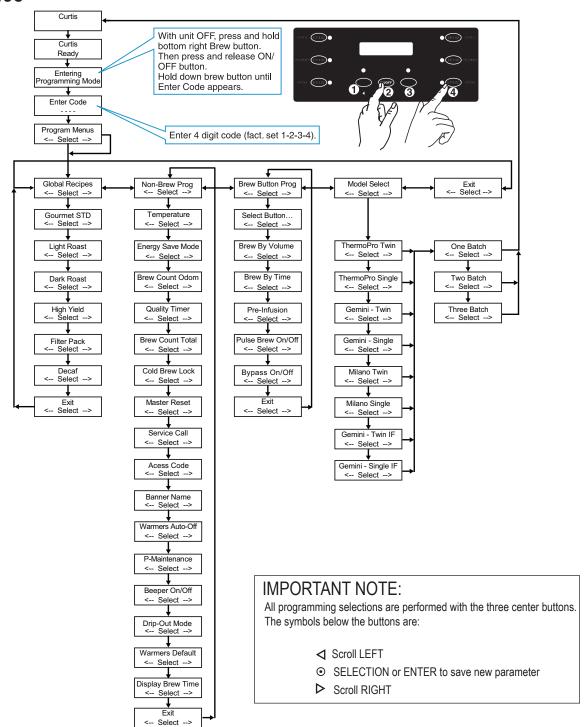
is displayed.

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

will appear on the

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

#### PROGRAM MENUS



## Program Menus GEMTS/SS 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 chose 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 200°F)

Press **⊙** to Select. Press < or > to move to desired temperature and then **⊙** to set. Temperature is programmable from 170°F to 206°F in 2-degree increments.

Energy Save Mode

Energy Save Mode (Factory set to OFF)

Press ⊙ to Select, < or > ON, OFF or ON 140°F, ⊙ 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 140°F position, temperature lowers to 140°F, 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 OFF)

Press ⊙ to select, press < or > to choose desired setting. Range 20 min – 240 min, in 10 minute increments. The timer does two things. It turns on and off a red indicator light and turns off the warmer element. The indicator light signals when a predetermined time has expired. The warmer shuts off 12 hours after the indicator light comes on.

Brew Count Total

#### **Brew Count Total**

Press ⊙ to Select, Shows total gallons and total brew cycles on the unit. Not resettable.

Cold Brew Lock

#### Cold Brew Lock . . . (Factory set to 5°)

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 setting - Disabled)

Press ⊙ to Select. Press < or > to adjust from 1 hour to 12 hours. This feature advances in 1 hour increments.

### Program Menus GEMTS/SS 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, MED or LOW. Power setting for HIGH is 100W watts MED is 82 watts. LOW is 66 watts.

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.

#### **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  $\odot$  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  $\odot$  button.

Pre-Infusion (Factory Disabled)

Pre-infusion

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 5°F 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 (Factory setting C)

Pulse Brew

Press  $\odot$  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 5°F 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.

By-Pass (Factory settings: LARGE 35%. MEDIUM 10%. SMALL Off.)

By-Pass

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 ⊙ to set.

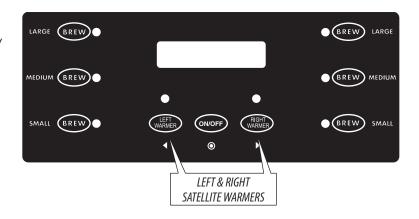
Model Select (Factory set to Gemini-Twin IF)

Model Select

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.

#### 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

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

| ERROR MESSAGE                         | DESCRIPTION             | CAUSE   |
|---------------------------------------|-------------------------|---|
| 1-(800)-000-0000<br>Water Level Error | Fill run error/Overflow | The fill solenoid has either run for more than 10 minutes on the initial tank fill or 1 minute, 30 seconds in normal operation. |
| 1-(800)-000-0000<br>Sensor Error      | Open Probe              | Break in the temperature thermistor circuit.  |
| 1-(800)-000-0000<br>Over Temp. Error  | Excess Temperature      | The sensor is reading the temperature in the heating tank has risen above 210°F.  |

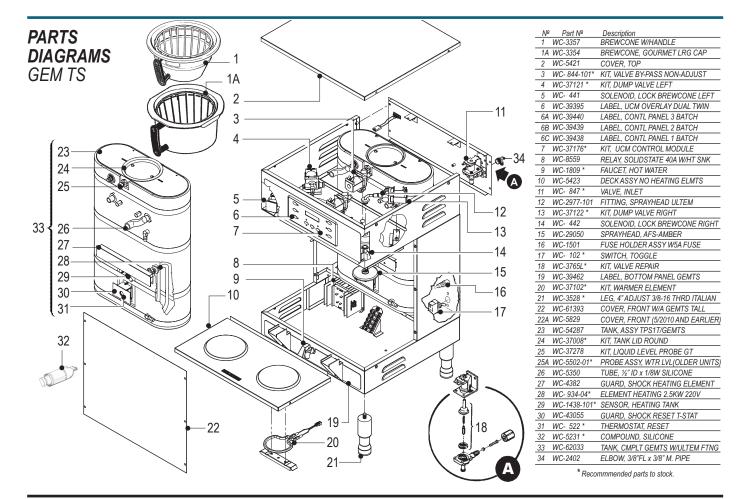
#### **CLEANING**

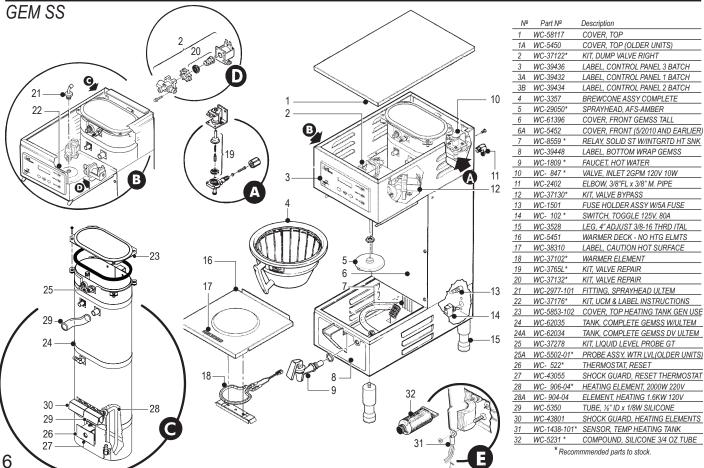
Regular cleaning of your coffee brewer will maintain the highest quality coffee your equipment is capable of producing. A proper cleaning is essential in preserving the appearance of the brewer.

- 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.

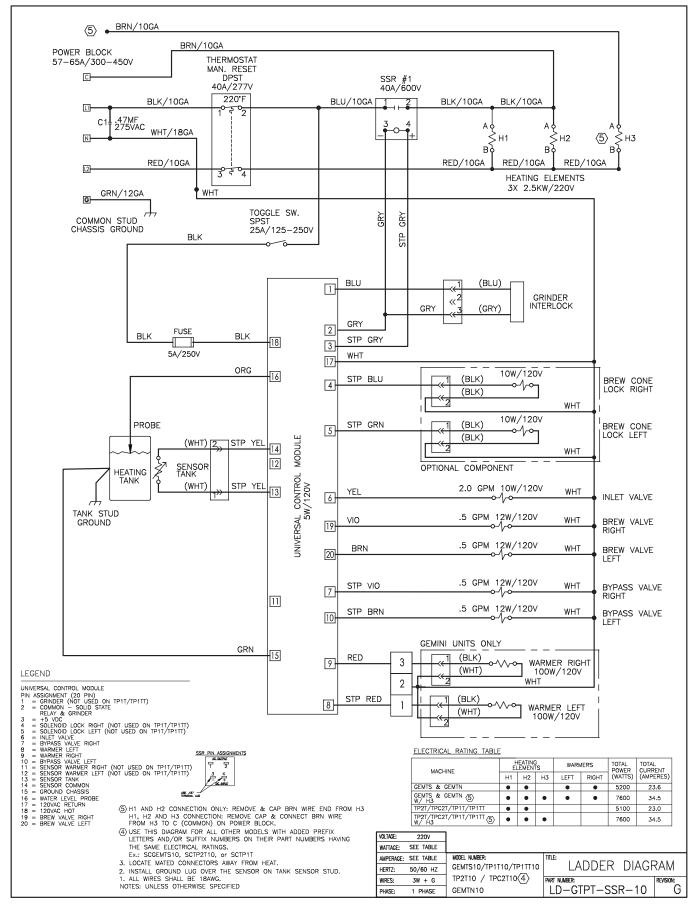


CAUTION: DO NOT use undiluted bleach or chlorine.

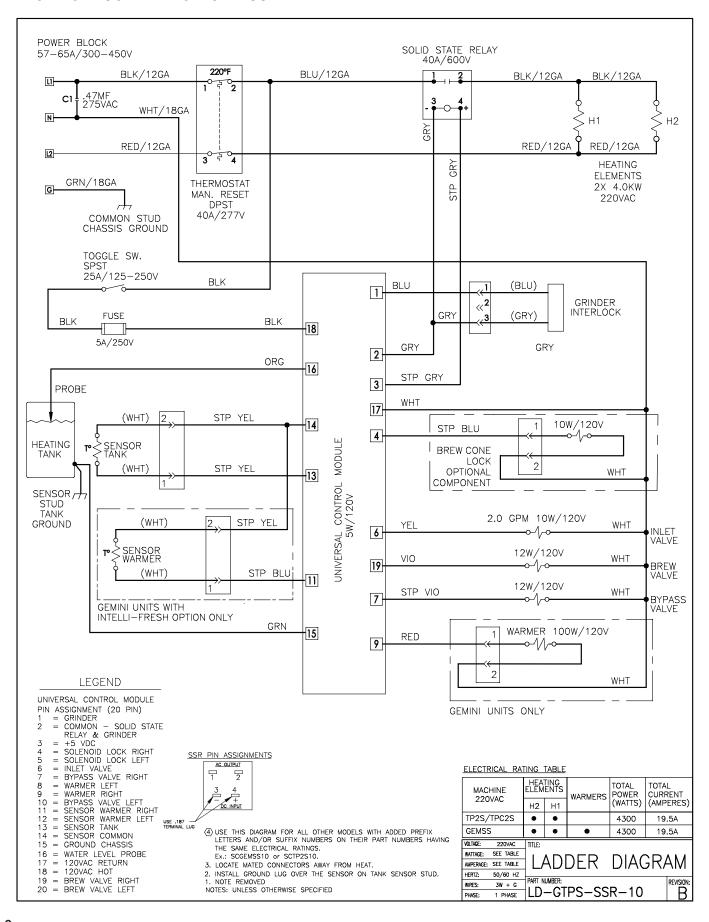




#### ELECTRICAL SCHEMATIC - GEM TS

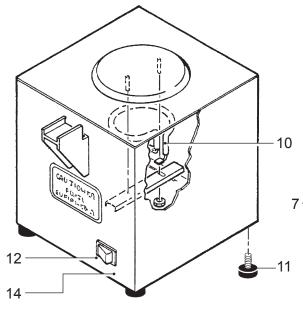


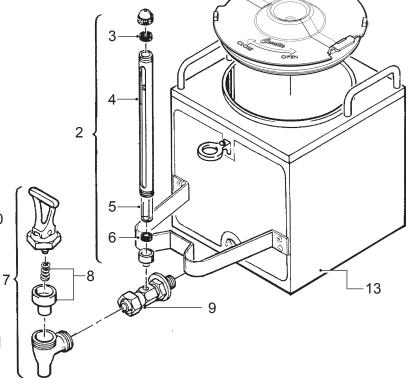
#### ELECTRICAL SCHEMATIC - GEM SS

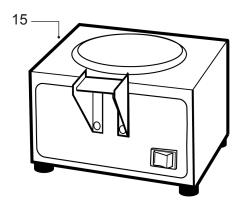


# PARTS DIAGRAMS

GEM-3, SATELLITE COFFEE SERVER GEM-5, SATELLITE WARMER GEM-8, SATELLITE WARMER SHORT







| Nº | Part Nº  | Description                                  |  |
|----|----------|--|--|
| 1  | WC-5622  | LID, SATELLITE PLASTIC GEM3                  |  |
| 1A | WC-3307  | LID, SATELLITE STAINLESS (OLDER UNITS)       |  |
| 2  | WC-2102  | GAUGE GLASS ASSEMBLY 8"                      |  |
| 3  | WC-2005* | WASHER, SHIELD CAP 1/8"                      |  |
| 4  | WC-2010C | SHIELD, 8 INCH GAUGE GLASS                   |  |
| 5  | WC-2025* | GAUGE GLASS, 8 INCH                          |  |
| 6  | WC-2006* | WASHER, SHIELD BASE 3/16"                    |  |
| 7  | WC-1800  | FAUCET, S' NON LOCKING                       |  |
| 7A | WC-1841  | FAUCET, ESP BLACK NON-LOCKING PLASTIC        |  |
| 8  | WC-3705* | KIT, FAUCET S' SERIES                        |  |
| 9  | WC-1901A | SHANK, FAUCET W/SHIELD BASE                  |  |
| 10 | WC-37102 | KIT, WARMER ELEMENT 100W 120V                |  |
| 11 | WC-3503  | LEG, SCREW BUMPER 3/8"- 16 STD               |  |
| 12 | WC- 114R | SWITCH, ROCKER (RED) 120V NEON SPST 15A 250V |  |
| 13 | GEM-3    | SATELLITE SERVER 1/2 GALLON                  |  |
| 14 | GEM-5    | SATELLITE WARMER STAND 120V 100W 1A 1PH 2W+G |  |
| 15 | GEM-8    | SATELLITE WARMER STAND, SHORT 120V 100W      |  |
|    |          |  |  |

<sup>\*</sup> Suggested parts to stock for servicing.

#### **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:

- **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
- 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.
- Damaged in transit: Equipment damaged in transit is the responsibility of the freight company and a claim should be made with the car-
- 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.
- 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.
- 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 

- Technical Support Phone: 800/995-0417 (M-F 5:30A 4:00P PST)
   E-Mail: techsupport@wilburcurtis.com
- ◆ Web Site: www.wilburcurtis.com