



Service Manual - Omega Twin

Important Safeguards/Symbols

This equipment is designed for commercial use. Any servicing other than cleaning and routine maintenance should be performed by an authorized Wilbur Curtis Company 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. There are no user serviceable parts inside.
- · Keep hands and other items away from hot areas of the unit during operation.
- · Never clean with scouring powders or harsh chemicals.

Symbols:



WARNINGS - To help avoid personal injury



Important Notes/Cautions - from the factory



Sanitation Requirements

This Curtis G4 Unit is Factory Pre-Set and Ready to Go Right from the Box.

Following are the Factory Settings for your G4 Coffee Brewing System:

- Brew Temperature = 200°F
- Water Bypass = On for LARGE & SMALL Brew Only
- Brew Volume = Set to Vessel Requirement.

System Requirements:

- Water Source 20 90 PSI (Minimum Flow Rate of 4 GPM)
- Electrical: See attached schematic for standard model or visit www.wilburcurtis.com for your model.

SETUP STEPS

- 1. The unit should be level (left to right front to back), on a secure surface.
- 2. Connect the water line to the water inlet fitting at the rear of the unit. Water volume flow to the machine should be consistent. Use tubing sized sufficiently to provide a minimum flow rate of four gallons per minute.



NOTE: A water filtration system must be used to help maintain trouble-free operation. In areas with extremely hard water, we highly recommend the use of a Curtis approved water filter. For our full line of filters, please log on to www.wilburcurtis.com. A water filtration system will greatly prolong the life of the unit and enhance the quality and taste of the product.



NSF International requires the following water connection:

- 1. A quick disconnect or additional coiled tubing (at least 2x the depth of the unit) is required so that the unit can be moved for cleaning.
- 2. This unit must 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.
- 3. Connect the unit to electrical outlet with appropriate amperage rating (see serial tag on machine).
- 4. Once power has been supplied to the unit, flip the main power switch to the 'ON' position (located on the right side of the unit), the water tank will begin to fill. When the water level in the tank reaches the probe, the heating element(s) will turn on.
- 5. Water in the heating tank will require approximately 45 minutes before reaching operating temperature (factory setting of 200°F). Where applicable, turn on the Universal Control Module (UCM). When the unit reaches operating temperature, it will display "READY TO BREW".



Model
• OMGT



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 govern-

mental plumbing/electrical codes having jurisdiction.



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

not rated for hot water.



ISO 9001:2008 REGISTERED

WILBUR CURTIS CO., INC. 6913 West Acco Street Montebello, CA 90640-5403 For the latest information go to www.wilburcurtis.com Tel: 800-421-6150 Fax: 323-837-2410

QUICK START

Your Curtis G4/Gold Cup Series is Factory Pre-Set for Optimum Performance.

After connection to water and power; turn on the brewer at the rear toggle switch. You will hear a beep and the status lights will come on for a moment.

The screen will display

| MODEL NUMBER | |
|-------------------|--|
| CONTROL BD NUMBER | |

is displayed. Water will fill the tank (3-5 minutes depending on water flow rate).

When the proper level is reached

HEATING

will appear on the screen. It takes approximately 45 minutes to reach the set point temperature.

Control will display READY TO BREW when temperature reaches the set point. The unit is now ready to brew.

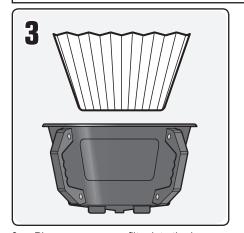
COFFEE BREWING INSTRUCTIONS

- 1. Brewer should be ON. Confirm this at the toggle switch on the right side of the brewer. The touch screen should read Ready to Brew.
- 2. Place an empty coffee container centered beneath the brew cone.



WARNING - AVOID SCALDING: USE BOTH HANDLES FOR BETTER CONTROL. The brew cone may be filled with hot coffee grounds and is difficult to manage with one hand.

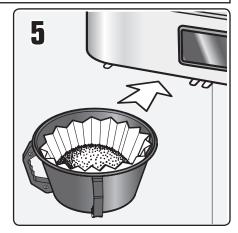
The coffee vessel is heavy when full. Take precautions to avoid dropping while moving.



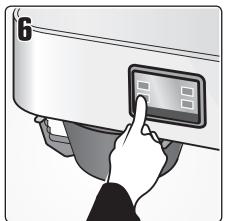
Place a new paper filter into the brew cone.



Fill the brew cone with the proper amount of ground coffee.



5. Transfer the filled brew cone to the brewer.



Start the brew cycle by hold your finger on the desired brew icon. As soon as you hear the click of the brew valve, the brew cycle has started and you can lift your finger.

Brew Code: You may find that when a brew button is pressed, a key pad appears on the screen. This is a brew lock-out feature that



requires a code to be entered before a brew will start. The default is OFF.

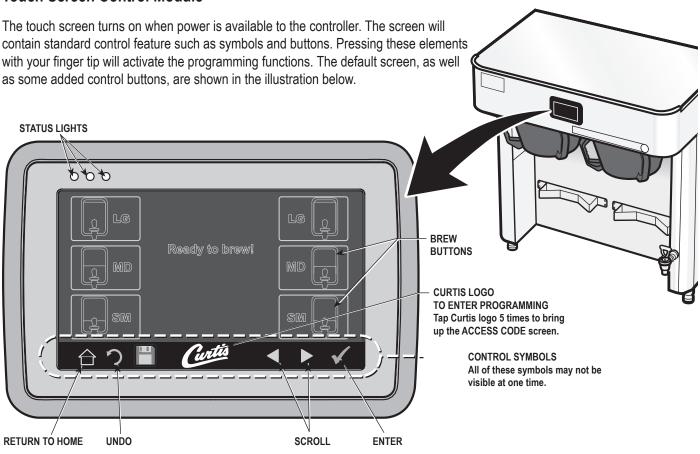
CAUTION: When enabled, as soon as you enter the brew code a brew cycle starts.

Refer to page 8 for more information about the Brew Code.



During the brew cycle, an animated 3 gallon server icon will appear on the screen and a brew timer will count down the time remaining on the brew cycle.

Touch Screen Control Module



PROGRAMMING

| ENTER ACCESS CODE | | |
|-------------------|---|----|
| 1234 | | |
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| Del | 0 | OK |

ACCESS CODE screen. Default is 1 2 3 4. Once the code is entered, press OK. The Main Menu screen will appear.

The access code can be reset in Control Settings, PASSWORDS.

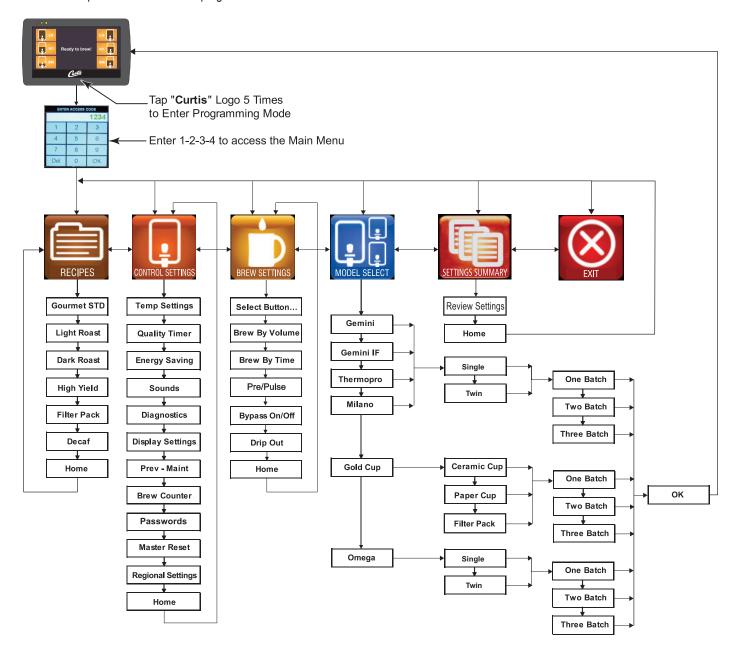


MAIN MENU screen contains six control icons:
RECIPES, CONTROL SETTINGS, BREW SETTINGS,
MODEL SELECT, SETTINGS SUMMARY and EXIT.

PROGRAMMING Continued . . .

Menu Tree

This chart explains how to enter the program mode and menu selections available from the MAIN MENU.



Menu Features

RECIPES

| FUNCTION TO SET | SETTING RANGE | FACTORY SET DEFAULT | NOTES / COMMENTS |
|-----------------|---|---------------------|------------------|
| Global Recipes | Gourmet STD, Light Roast, Dark Roast, High Yield, Filter Pack, Decaf, Home | Gourmet STD | |

CONTROL SETTINGS

| FUNCTION TO SET | SETTING RANGE | FACTORY SET DEFAULT | NOTES / COMMENTS |
|---|--|---|---|
| Temperature 175°F - 206°F , 1°F Settings Increments | | Tank Temp = 200°F | |
| | | Minimum Brew Temp = 195°F | |
| | Disabled, 1 Hr - 12 Hr, 1 Hr Increments. | <disabled gems="" gemt="" on=""></disabled> | Note: This function is only visible on |
| Warmer Settings | 1 Hr - 12 Hr, 1 Hr Increments. | <10 Hr. on GEMTIF/GEMSIF> | Gemini Units. |
| | <off>, <high>, <med.>, <low></low></med.></high></off> | <med.> During Brewing</med.> | |
| Quality Timer | Disabled, 20min - 240min, 10 Minute Increments. | <pre><disabled gems="" gemt="" omg="" on="" tp2s="" tp2t="" tpc2s="" tpc2t=""> <120min on GEMTIF/GEMSIF></disabled></pre> | Audible alarm when time is expired. (Only shows available when a machine has Warmer Elements). (Also this function is visible when Gemini models are selected). |
| Energy Save Mode | No Change | | Tank temperature is maintained at the temp setpoint default |
| (Activates after 4 | Turn Tank Heater Off | No Change | Tank is turned off. |
| Hours of Inactivity) | Reduce tank temp to: 140°F | | Tank temperature maintained at 140F. |
| Sounds | Beeper On/Off | On | Turns Board sounds Off or On |
| Diagnostics | - | Auto Test | Runs Diagnostic Tests |
| | Brew Timer-Hide/Show | Show | Displays Brew Time |
| | Quality Timer Hide/Show | Hide (Models: GEMT/GEMS/TP2T/TP2S/OMGT/OMGS) | Displays Quality Times |
| Display Settings | | Show (Models: GEMTIF/GEMSIF) | Displays Quality Timer |
| Display sellings | "Rinse Server"-Hide/Show | Show | Displays "Rinse Server" Message |
| | Screen Saver | Off | Displays Screen Saver |
| | Display Name | Blank | Displays Banner Name |
| Prev. Maintenance | Maintenance Interval | Off | Off, 1000 to 20000 Gallons, 1000 Increments |
| riev. Mainienance | Service Telephone Number | 1-800-000-0000 x0000 | |
| Brew Counter | Resettable | Resettable | For maintenance purpose (Resettable) |
| | Programming | 1234 | Reprogrammable; allows access to programming screens |
| Passwords | Brew (Enabled/Disabled) | Disabled | Reprogrammable; allows access to brewing screens |
| Master Reset | Reset | Are you sure? (Yes / No) | Select to Reset to Restore Factory Defaults |
| Regional Settings | SI/US | US | US Units or Metric Units |
| Home | - | - | Select to go to Home Page |

Menu Features

| FUNCTION TO SET | SETTING RANGE | LARGE BREW FACTORY DEFAULT | MEDIUM BREW FACTORY DEFAULT | SMALL BREW FACTORY DEFAULT | NOTES / COMMENTS |
|-------------------|-------------------------------|----------------------------|-----------------------------|----------------------------|---|
| | | LARGE BREW: 384oz ± 16oz | | | |
| Brew by Volume | OFF, 30sec to 19Min.59sec. | | MEDIUM BREW: 288oz ± 16oz | | To Set: Press Brew to start / Press Brew to stop. |
| | | | | SMALL BREW: 1920z ± 10oz | |
| | | LARGE PREW South CO. | | | |
| | 0 to 19Min - 59sec, | LARGE BREW: 5min-00secs | | | |
| Brew by Time | 1min-01secs increments | | MEDIUM BREW: 3min-50secs | CALALL PREMI C | Note: These are the default times |
| | | | | SMALL BREW: 2min-30secs | |
| | Disabled | | | | OFF |
| | 10 secs On/10 secs Off | | | | When this is Chosen"COLD BREW LOCK set to 5°F, Pulse Brew On/Off" Function < Disabled> |
| | 20 secs On/20 secs Off | | | | When this is Chosen"COLD BREW LOCK set to 5°F, Pulse Brew On/Off" Function <disabled></disabled> |
| Pre-Infusion | 30 secs On/30 secs Off | Disabled | Disabled | Disabled | When this is Chosen"COLD BREW LOCK set to 5°F, Pulse Brew On/Off" Function <disabled></disabled> |
| | 40 secs On/40 secs Off | | | | When this is Chosen"COLD BREW LOCK set to 5°F, Pulse Brew On/Off" Function < Disabled> |
| | 50 secs On/50 secs Off | | | | When this is Chosen"COLD BREW LOCK set to 5°F, Pulse Brew On/Off" Function < Disabled> |
| | 60 secs On/60 secs Off | | | | When this is Chosen"COLD BREW LOCK set to 5°F, Pulse Brew On/Off" Function < Disabled> |
| Pulse Brew On/Off | OFF | OFF | OFF | OFF | OFF |
| | A | | | | A = "10 seconds ON 4 Times"/"10 seconds OFF 4 Times", then "ON" Till End of Brew Cycle. |
| | В | | | | B = "1 Minute ON", "10 seconds OFF 4 Times"/10 seconds ON 4 Times", Till end of Brew Cycle. |
| | С | | | | C = "25 seconds ON 5 Times"/"20 seconds OFF 5 Times", then "ON" Till End of Brew Cycle. |
| | D | | | | D = Manual Program: "PULSE COUNT = 1 to 20 pulses", "ON TIME = 5 - 150 seconds", "OFF TIME = 5 150 seconds", 5 second increments. |
| | E | | | | E = Manual Program: "PULSE COUNT = 1 to 8 pulses", "ON TIME = 0 - 150 seconds", "OFF TIME = 150 seconds", 1 second increments. |
| | | LARGE BREW: 20% | | | |
| By-Pass On/Off | Off, 5%-50%, in 1% | LANGE BREW: 20% | MEDIUM BREW: 20% | | Reprogrammable |
| | increments | | | SMALL BREW: 10% | |
| | | LADOE DDEWL 2 mg/m | | | |
| Drip-Out Mode | Off, 10 Seconds - 15min, | LARGE BREW: 3 min | MEDIUM BREW: 3 min | | Reprogrammable |
| Diip-Out Mode | 10 Second Increments | | | SMALL BREW: 2 min | |
| | | - | - | - | |
| Home | - | - | - | - | Select to go to Home Page |

System Fault Messages

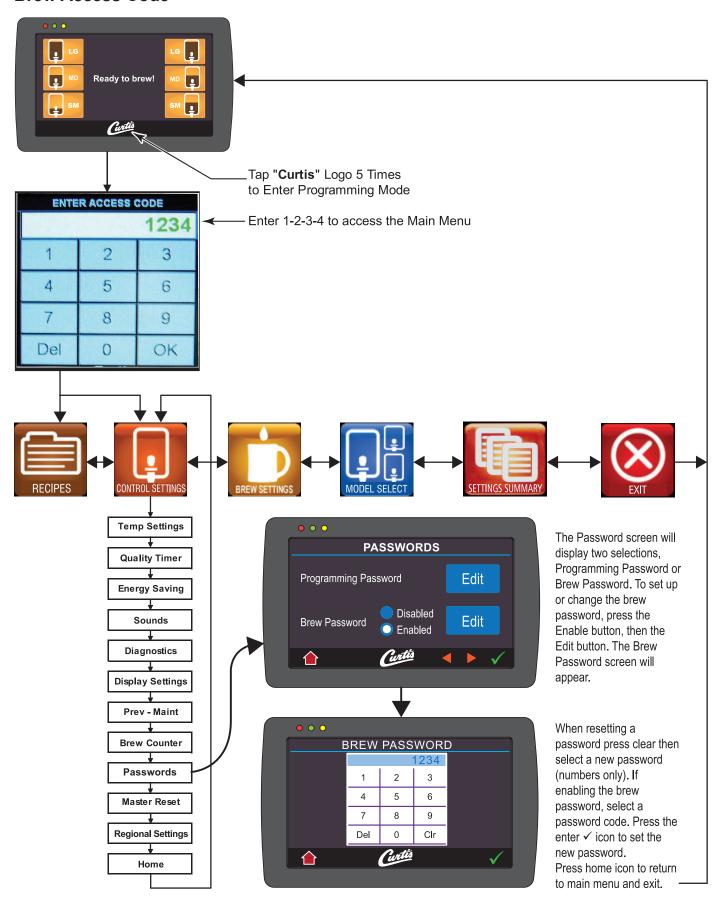
WARNING MESSAGES - ALLOWS BREWING

| MESSAGE DISPLAY | WARNING DESCRIPTION | CAUSE |
|------------------------|----------------------|--|
| Maintenance Required | Maintenance Required | Brew count "Gallons Since Reset" exceeds programmed Preventative Maintenance period |
| Low Water Flow Warning | Low Water Flow | If the Inlet valve remains on longer than XX Seconds (during the brew cycle only) and repeats TWICE during that brew cycle. It shall clear upon the next brew and if the same low flow exists again, it will re-appear. XX = Omega 30 secs |

ERROR MESSAGES - STOPS BREWING

| MESSAGE DISPLAY | ERROR ESCRIPTION | CAUSE | |
|-------------------|---------------------------|---|--|
| Water Level Error | Fill run error / Overflow | The fill solenoid has either run for more than 10 minutes on the initial tank fill or 120 Seconds on Large Brewers and 30 Seconds on CGC Brewer in normal operation | |
| Sensor Error | Open Sensor | Break in the temperature thermistor circuit or short curcuit. | |
| Over Temp. Error | Excess Temperature | The sensor is reading that temperature in the heating tank has risen above 210°F, or sensor has shorted to ground. | |
| Internal Error 1 | UPM-UCM Communication | Break in the UPM-UCM Communication circuit. | |

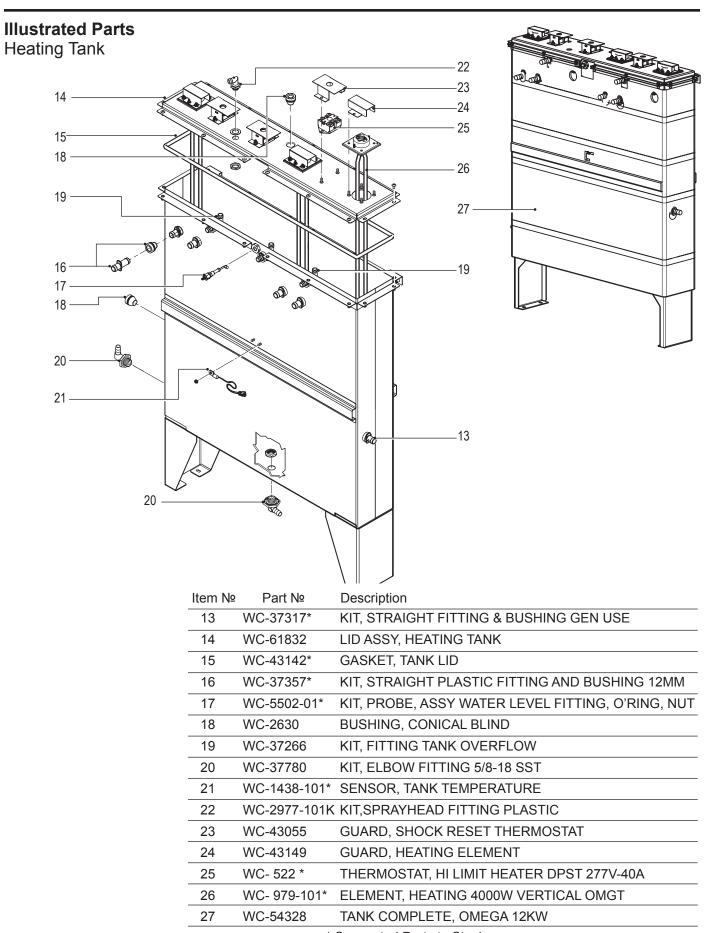
Brew Access Code



Illustrated Parts Main View 54 55 56 _10 11-

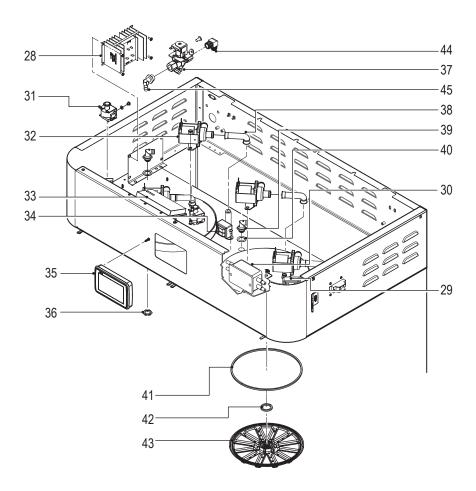
| Item № | Part № | Description |
|--------|--------------|---|
| 1 | WC-3705HW* | KIT, FAUCET S SERIES HOT WATER |
| 2 | WC-1825* | FAUCET, ASSY HOT WATER TP2S |
| 3 | WC-61912 | LID, ASSY OMGT |
| 4 | WC-53115 | TRIM, EDGE VINYL METAL CORE (4 FT) |
| 5 | WC-13464 | HARNESS ASSY, OMGT |
| 6 | WC- 172 * | SWITCH, ROCKER STYLE "SWITCH ONLY" 50 AMP |
| 7 | WC-10008 | UNIVERSAL HOST ADAPTER (USB - G4) |
| 8 | WC-14017 | PLUG, DOME 0.75"DIA HOLE BLACK NYLON 6/6,OMGT/S |
| 9 | WC-3528 | LEG, 4" ADJUSTABLE 3/8-16 THREAD |
| 10 | WC-5310 * | TUBE, 5/16 ID X 1/8 W SILICONE (10 FT) |
| 11 | WC-61818-103 | FRONT COVER ASSY, NON-METAL BREW CONE OMGT |
| 12 | WC-61819 | BRACKET, SERVER STOP |
| | * | Overseeted Deste to Otests |

^{*} Suggested Parts to Stock



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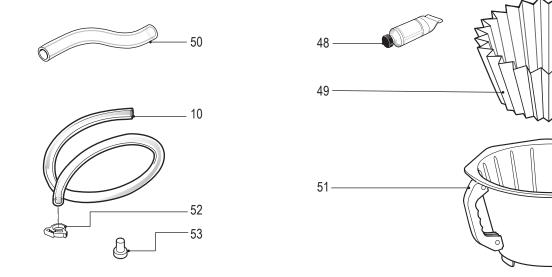
Illustrated PartsTop Wrap



| Item № | Part № | Description |
|--------|--------------|---|
| 28 | WC-8559* | RELAY, SOLID STATE 40A W/INTEGRATED HEATSINK |
| 29 | WC-1516 | BREAKER, CIRCUIT 2-POLE 20A/250VAC |
| 30 | WC- 588* | NOISE, EMI FILTER 250VAC 20A |
| 31 | WC- 442 | SOLENOID, LOCK BREW CONE RIGHT 120VAC |
| 32 | WC-12012* | VALVE, DUMP .50 INCH 120VAC 50-60HZ |
| 33 | WC-10001* | UNIVERSAL POWER MODULE G4 |
| 34 | WC- 589-101* | TRANSFORMER, 120/230VAC-24VAC 4.8VA W/LEADS |
| 35 | WC-10000* | CONTROL MODULE (UCM), TOUCH SCREEN G4 |
| 36 | WC-4212-02 | NUT, 5/8-18 JAM PLASTIC ULTEM |
| 37 | WC- 890-102* | VALVE, INLET 120V-10W 4GPM |
| 38 | WC-2471 | ELBOW, SILICONE |
| 39 | WC-2977-02 | FITTING, SPRAYHEAD ULTEM (NO INSERT) |
| 40 | WC-43089 | GASKET, 1.00"OD x .625" I.D. x .030" THK SILICONE |
| 41 | WC-43141* | O-RING, 7.484 I.D. X .139 THICK BUNA-N |
| 42 | WC-43140* | O-RING, .984 I.D. X .130 THICK BUNA-N |
| 43 | WC-29086 | SPRAYHEAD, PLASTIC 8 INCH DIAMETER |
| 44 | WC-2402P | ELBOW, 3/8 NPT x 3/8 FLARE PLATED |
| 45 | WC-29089-101 | FITTING, 3/8" MNPT x 3/8" HOSE BARB SS |
| | | |

^{*} Suggested Parts to Stock

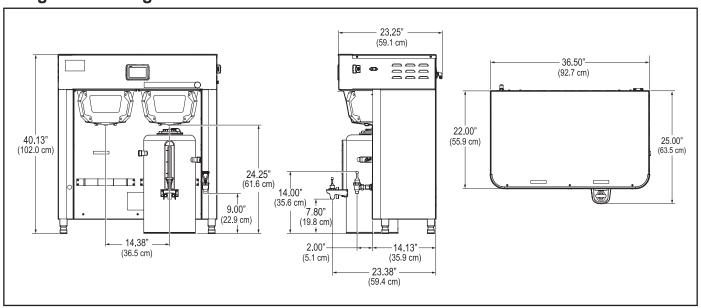
Illustrated Parts List



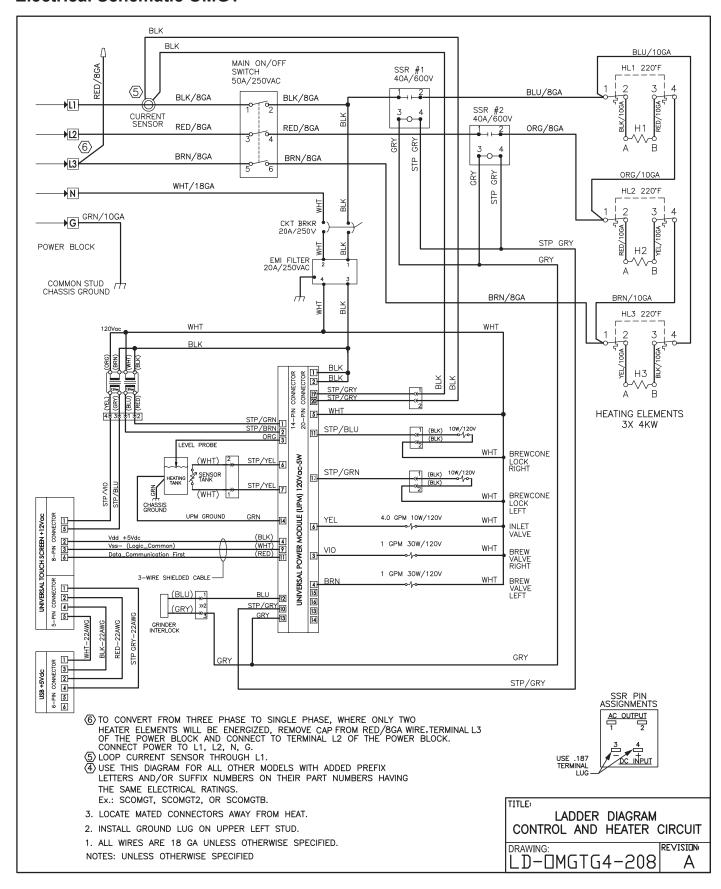
| Item № | Part № | Description |
|--------|------------|---------------------------------------|
| 48 | WC-5231* | COMPOUND, SILICONE 5 OZ TUBE |
| 49 | GEM-6-103* | FILTER, PAPER 20 X 8 OMEGA |
| 50 | WC-5350 * | TUBE, SILICONE .50 ID x .75 OD (3 FT) |
| 51 | WC-33004 | BREW CONE ASSY, NON-METALIC OMEGA |
| 52 | WC-43059* | CLAMP, HOSE SNAP NYLON .616/.707 |
| 53 | WC-43058 | PLUG, TANK DRAIN |
| 54 | WC-390092 | LABEL, FRONT OMEGA CURTIS LOGO |
| 55 | WC-39982 | LABEL, FRONT WRAP OMEGA |
| 56 | WC-39805 | LABEL, GOLD CUP NAMEPLATE |

^{*} Suggested Parts to Stock

Rough-In Drawing



Electrical Schematic OMGT



Cleaning the Coffee Brewer

Regular cleaning and preventive maintenance is essential in keeping your coffee brewer looking and working like new. Mix a mild cleaning solution of detergent and water.



CAUTION – Do not use cleansers, bleach liquids, 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.

DAILY CLEANING

- 1. Wipe exterior surfaces with a damp cloth, removing spills and debris.
- 2. Slide the brew cone out and rinse it. Thoroughly soap the sprayhead area with a mild detergent solution.
- 3. Dry the brew cone and sprayhead area.
- 4. Drain drip trays of coffee.
- 5. Dry the tray.

WEEKLY CLEANING

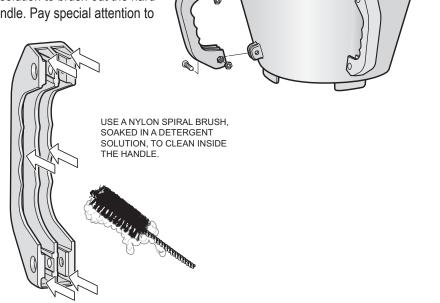
- 1. Turn off unit at the power switch, right side of the top wrap.
- 2. Remove the brew cone and clean the sprayhead and dome plate area.
 - a. Remove the sprayhead, unscrewing counterclockwise from the dome plate. Rinse the sprayhead.
 - b. With a cloth soaked in cleaning solution, thoroughly clean dome plate area.
 - c. Clean the brew cone rails with a brush. Rinse with a water soaked cloth. Dry the area with a clean cloth.
- 3. Attach the sprayhead and insert the brew cone into the brew rails.
- 4. Restore the electrical power to the urn.

Cleaning the Non-Metal Brew Cone

Once a week clean the brew cone and handle. Prepare a mild solution of dish washing detergent and warm water.

1. Use a nylon brush soaked in cleaning solution to remove coffee oils and coffee grounds within the brew cone. Brush between the filter suspending ribs.

- 2. Disassemble the two handles from the brew cone for cleaning.
 - a. Use a slotted screwdriver to remove the four slotted screws.
 - b. Take a nylon brush soaked in cleaning solution to brush out the hard to reach recessed, inside part of the handle. Pay special attention to the attachment channels of the handle.
 - c. Rinse the handles and the brew cone to remove all detergent residue.
- 3. Dry the brew cone and handle.
- Assemble handles onto the brew cone.



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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.

12/20/12@10.5 . ECN 14647 . revA



WILBUR CURTIS CO., INC.

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

E-Mail: techsupport@wilburcurtis.com

Web Site: www.wilburcurtis.com

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