

**OMGT Models** 



# 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 = 20% Lrg, 20% Med, 10% Sml Brew
- Brew Volume = Set to Vessel Requirement.

System Requirements:

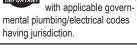
- Water Source 20 90 PSI (138 620 kPA) with a Minimum Flow Rate of 4 GPM (15 LPM).
- Electrical: See attached schematic for standard model or visit www.wilburcurtis.com for your model.

#### **SETUP STEPS**

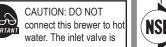
- 1. The unit should be level (left to right front to back), on a secure surface.
- 2. Connect the water line to the water inlet fitting at the rear of the unit. Water volume flow to the machine should be consistent. Use tubing sized sufficiently to provide a minimum flow rate of four gallons per minute.



NOTE: A water filtration system must be used to help maintain trouble-free operation. Air must be



purged from the cartridge prior to connection to equipment. 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.



CAUTION: Please use

before attempting to use

IMPORTANT: Equipment to be installed to comply

this setup procedure

this brewer. Failure to follow the

voiding of the warranty.

not rated for hot water.

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) 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.



NOTE: Electrical source should have a minimum 30A internal common trip circuit breaker between the brewer and the main supply, which breaks all poles with a contact separation of at least 3 mm.

- 3. Connect the unit to electrical circuit with appropriate amperage rating; refer to serial tag on the machine and local/national electrical codes to determine circuit requirements.
- 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".

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.

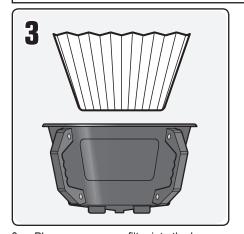
#### **COFFEE BREWING INSTRUCTIONS**

- 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.

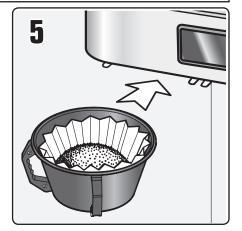
The coffee vessel is heavy when full. Take precautions to avoid dropping while moving.



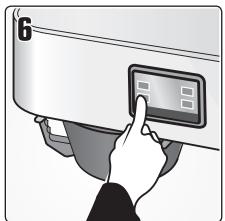
Place a new paper filter into the brew cone.



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.

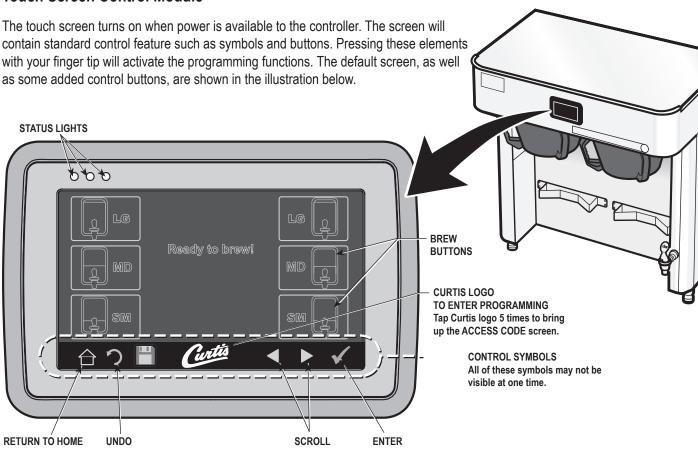
CAUTION: When enabled, as soon as you enter the brew code a brew cycle starts.

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.

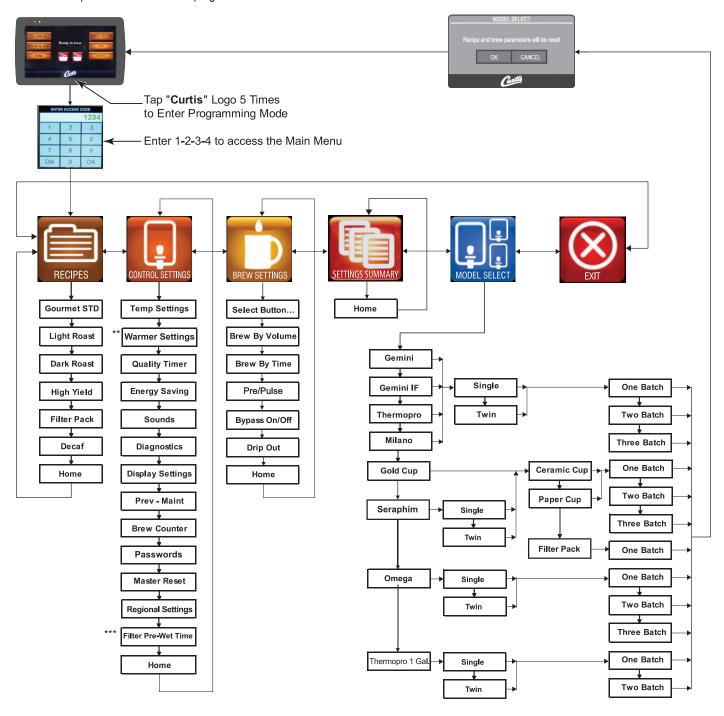


MAIN MENU screen contains six control icons:
RECIPES, CONTROL SETTINGS, BREW SETTINGS,
MODEL SELECT, SETTINGS SUMMARY and EXIT.

PROGRAMMING Continued . . .

## Menu Tree

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



<sup>\*\*</sup> Applies to Gemini Models Only

<sup>\*\*\*</sup> Applies to Gold Cup/Seraphim Models Only

## **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	Tank Temp = 200°F		
Settings	Increments	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="">   &lt;120min on GEMTIF/GEMSIF&gt;</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)	Diamlaya Quality Timor	
Display Settings	Quality Timer Hide/Show	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	
	Maintenance Interval	Off	Off, 1000 to 20000 Gallons, 1000 Increments	
Prev. Maintenance	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.
	17MIII.575EC.			SMALL BREW: 1920z ± 10oz	
	0 to 19Min - 59sec,	LARGE BREW: 5min-00secs			
Brew by Time	1min-01secs increments		MEDIUM BREW: 3min-50secs	SMALL BREW: 2min-30secs	Note: These are the default times
				SMALL BREW. ZIIIII-30secs	
	Disabled				OFF When this is Chosen"COLD BREW LOCK set to 5°F
	10 secs On/10 secs Off				Pulse Brew On/Off" Function <disabled> When this is Chosen"COLD BREW LOCK set to 5°F</disabled>
	20 secs On/20 secs Off				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>
	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></disabled>
					Poise Biew Oil/Oil Policiion Disubled>
	OFF	OFF	OFF	OFF	OFF
Pulse Brew On/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 = 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% increments		MEDIUM BREW: 20%		Reprogrammable
				SMALL BREW: 10%	
	O# 10 Co 15 .	LARGE BREW: 3 min			
Drip-Out Mode	Off, 10 Seconds - 15min, 10 Second Increments		MEDIUM BREW: 3 min	CHALL PREM. C	Reprogrammable
				SMALL BREW: 2 min	
Home	-	-	-	-	Select to go to Home Page

# System Fault Messages

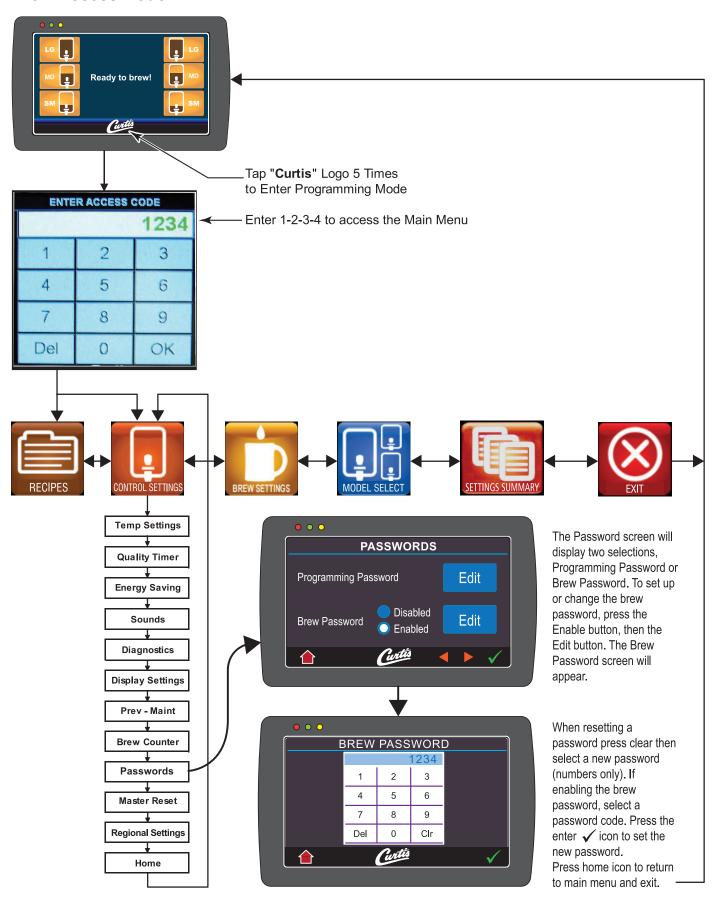
## WARNING MESSAGES - ALLOWS BREWING

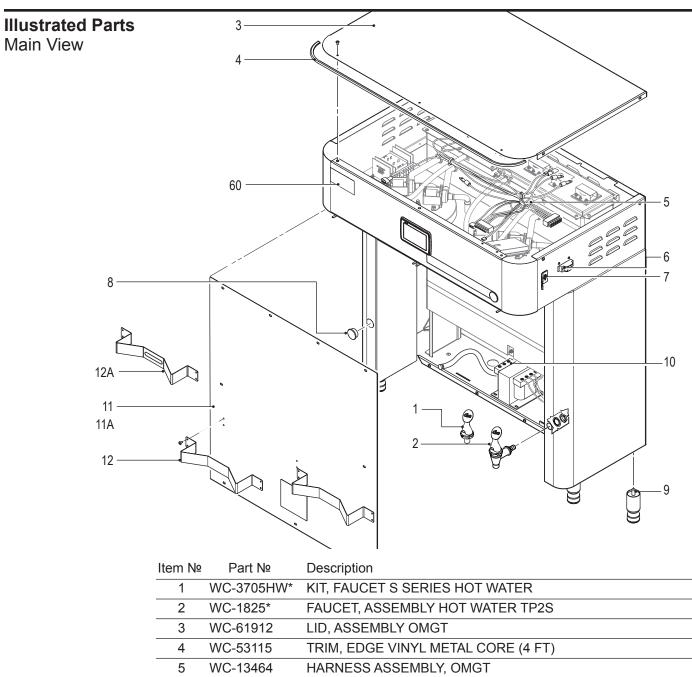
MESSAGE DISPLAY	WARNING DESCRIPTION	CAUSE
Maintenance Required	Maintenance Required	Brew count "Gallons Since Reset" exceeds programmed Preventative Maintenance period
Low Water Flow Warning	Low Water Flow	If the Inlet valve remains on longer than XX Seconds (during the brew cycle only) and repeats TWICE 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 DESCRIPTION	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.
Internal Error 1	UPM-UCM Communication	Break in the UPM-UCM Communication circuit.

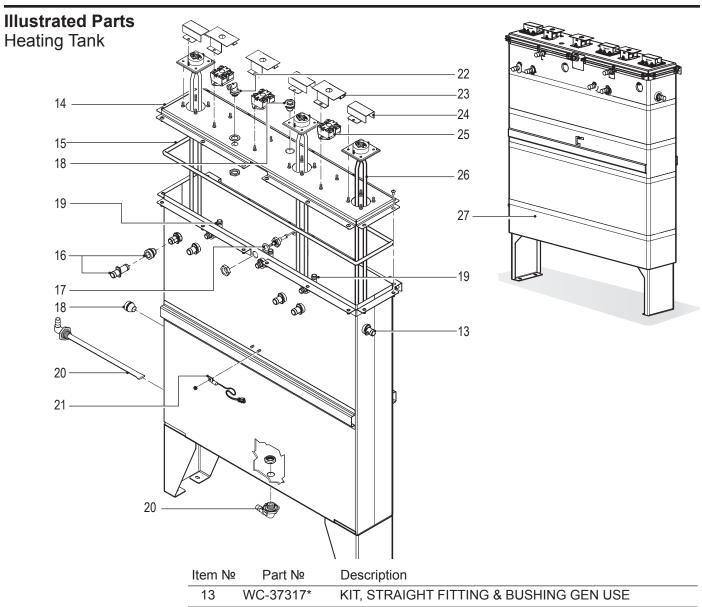
## **Brew Access Code**





Item №	Part №	Description
1	WC-3705HW*	KIT, FAUCET S SERIES HOT WATER
2	WC-1825*	FAUCET, ASSEMBLY HOT WATER TP2S
3	WC-61912	LID, ASSEMBLY OMGT
4	WC-53115	TRIM, EDGE VINYL METAL CORE (4 FT)
5	WC-13464	HARNESS ASSEMBLY, OMGT
5A	WC-13464-101	HARNESS, ASSEMBLY OMGT10 & OMGT16
5B	WC-13464-102	HARNESS, ASSEMBLY OMGT30
6	WC-172 *	SWITCH, ROCKER STYLE "SWITCH ONLY" 50 AMP
6B	WC-102	SWITCH, TOGGLE SPST 15A 125/6A 250VAC <b>OMGT30</b>
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-594-101	TRANSFORMER, 250VA, 208/230/400/460/575VAC TO 24/115/230VAC <b>OMGT16 &amp; OMGT30</b>
11	WC-61818-103	FRONT COVER ASSEMBLY, NON-METAL BREW CONE OMGT
11A	WC-61818-101	FRONT COVER ASSY, OMGT (METAL BREW CONE)
12	WC-61819	BRACKET, SERVER STOP (BOTTOM BRACKET)
12A	WC-61819-103	BRACKET, SERVER STOP (METAL BREW CONE)

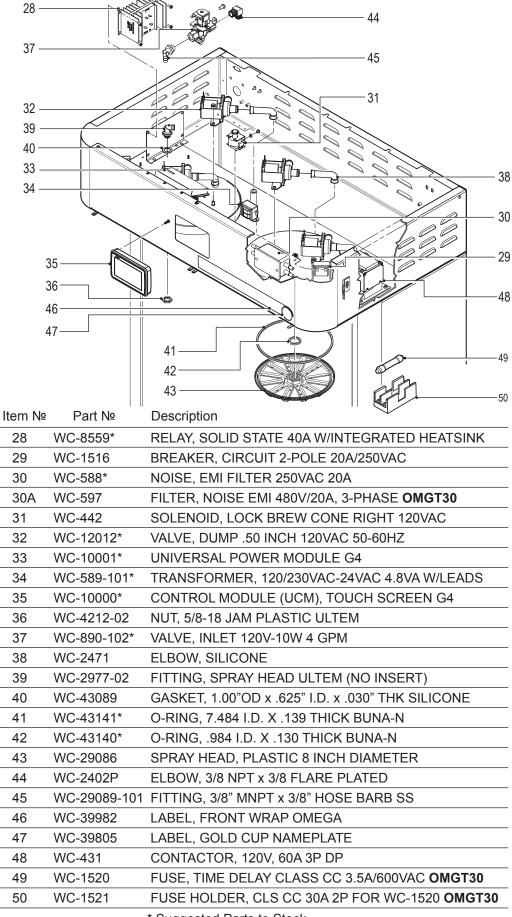
<sup>\*</sup> Suggested Parts to Stock



Item №	Part №	Description
13	WC-37317*	KIT, STRAIGHT FITTING & BUSHING GEN USE
14	WC-61832	LID ASSEMBLY, HEATING TANK
15	WC-43142*	GASKET, TANK LID
16	WC-37357*	KIT, STRAIGHT PLASTIC FITTING AND BUSHING 12MM
17	WC-5527K*	KIT, PROBE WATER LEVEL FITTING, O'RING, NUT
18	WC-2630	BUSHING, CONICAL BLIND
19	WC-37266	KIT, FITTING TANK OVERFLOW
20	WC-37780-101	TUBE, INLET MANIFOLD ASSEMBLY
21	WC-1438-101*	SENSOR, TANK TEMPERATURE
22	WC-2977-101K	KIT,SPRAY HEAD FITTING PLASTIC
23	WC-43055	GUARD, SHOCK RESET THERMOSTAT
24	WC-43149	GUARD, HEATING ELEMENT
25	WC-522 *	THERMOSTAT, HI LIMIT HEATER DPST 277V-40A
26	WC-979-101*	ELEMENT, HEATING 4000W 208V VRT <b>OMGT &amp; OMGT30</b>
26A	WC-979*	ELEMENT, HEATING 4000W 240V OMGT10
27	WC-54328	TANK, COMPLETE 208V 12KW OMGT & OMGT30
27A	WC-54328-102	TANK, COMPLETE 240V 12KW <b>OMGT10</b>

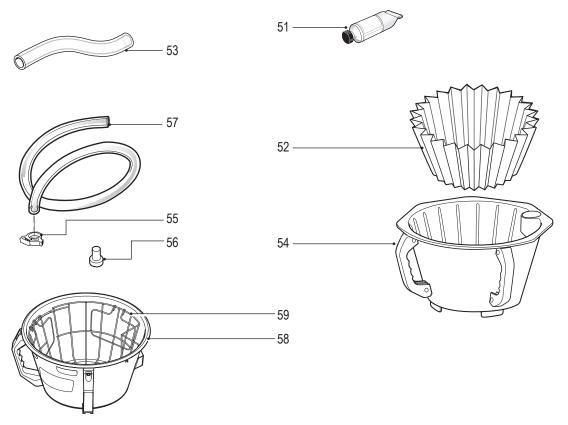
<sup>\*</sup> Suggested Parts to Stock

# **Illustrated Parts**Top Wrap



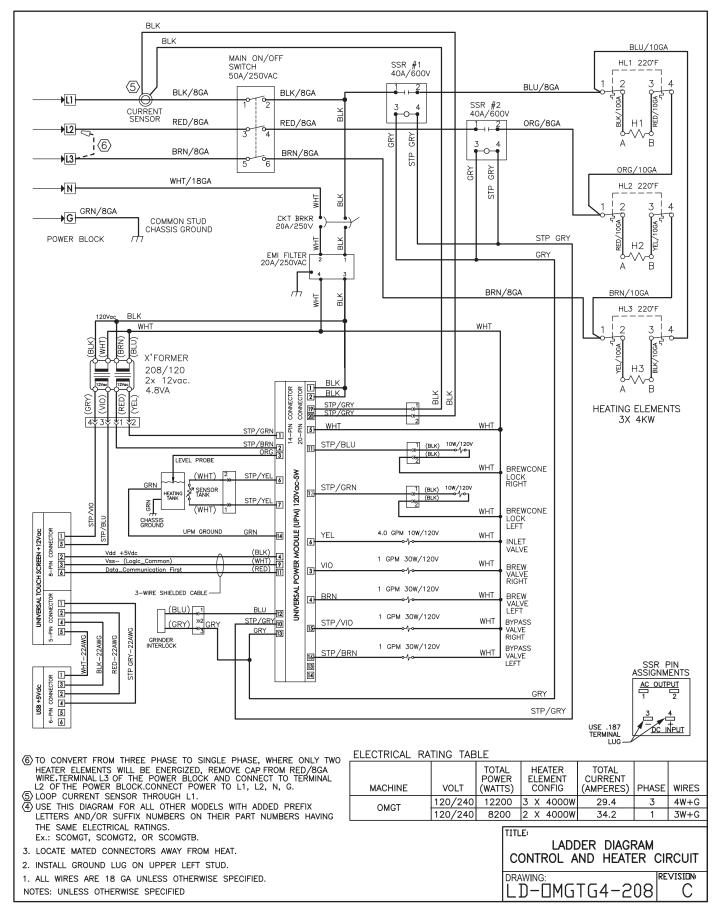
<sup>\*</sup> Suggested Parts to Stock

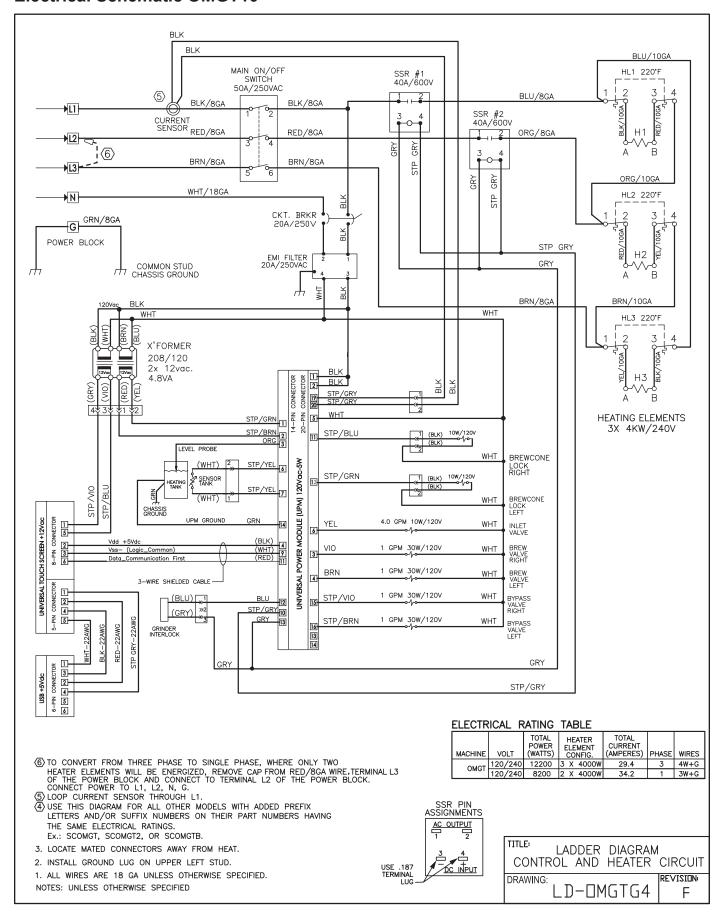
# **Illustrated Parts List**

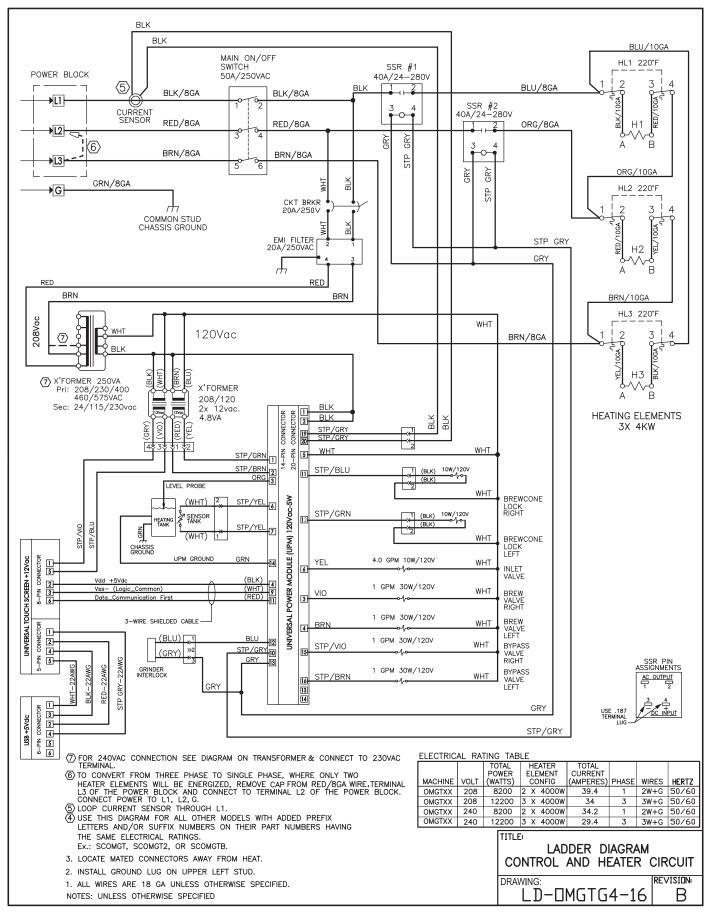


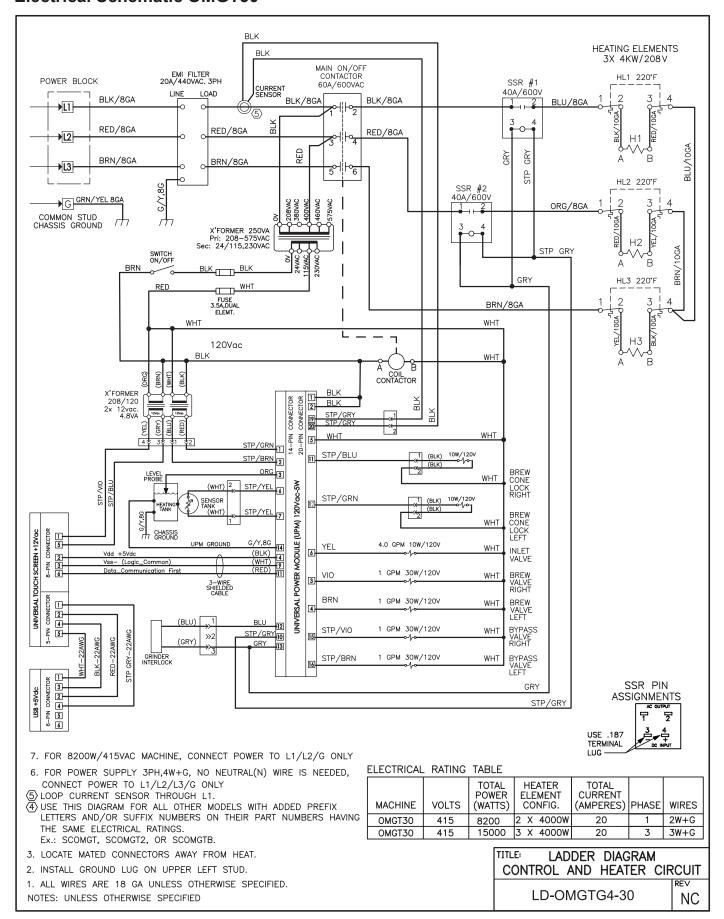
Item №	Part №	Description
51	WC-5231*	COMPOUND, SILICONE 5 OZ TUBE
52	GEM-6-103*	FILTER, PAPER 20 X 8 OMEGA
53	WC-5350 *	TUBE, SILICONE .50 ID x .75 OD (3 FT)
54	WC-33004	BREW CONE ASSEMBLY, NON-METAL OMEGA
55	WC-43059*	CLAMP, HOSE SNAP NYLON .616/.707
56	WC-43058	PLUG, TANK DRAIN
57	WC-5310 *	TUBE, 5/16 ID X 1/8 W SILICONE (10 FT)
58	WC-37593	KIT, BREW CONE & WIRE BASKET (METAL)
59	WC-3394	BASKET, WIRE ASSY OMGT (METAL BRW CONE)
60	WC-390092	LABEL, FRONT OMEGA CURTIS LOGO

<sup>\*</sup> Suggested Parts to Stock









## **Cleaning the Coffee Brewer**

Regular cleaning and preventive maintenance is essential in keeping your coffee brewer looking and working like new.



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.

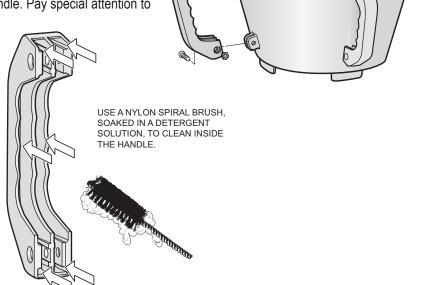
- 1. Wipe exterior surfaces with a clean cloth. Scrub off coffee spots, spills, or coffee grounds.
- Remove the brew cone to clean. Rinse and dry the brew cone.
- 3. With the brew cone removed, wipe the spray head and the area surrounding the spray head with a clean moistened cloth. Dry the area.
- 4. Rub a stainless-steel polish on the outside surfaces of the brewer cabinet as a protection for the metal.

## Cleaning the Non-Metal Brew Cone

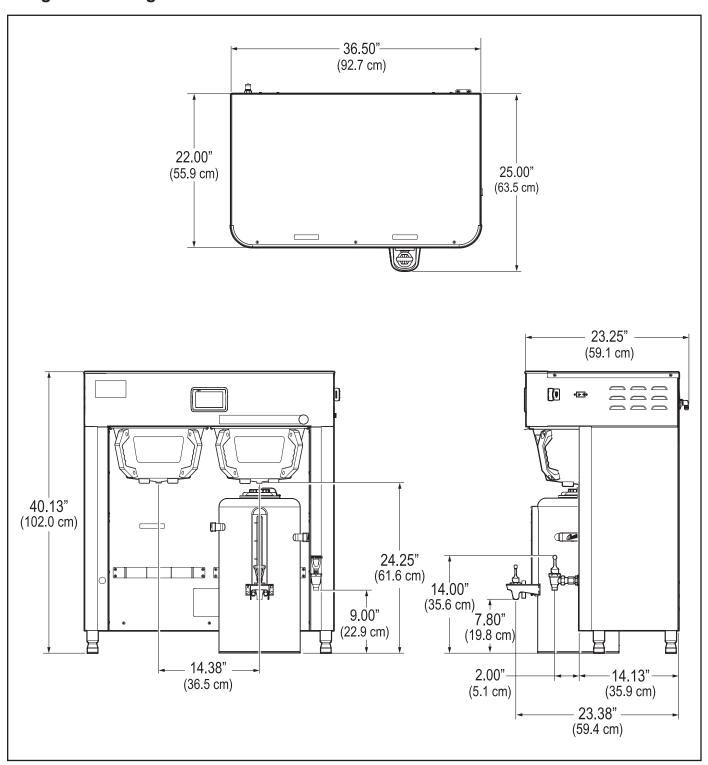
Once a week clean the brew cone and handle. Prepare a mild solution of dish washing detergent and warm water.

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.

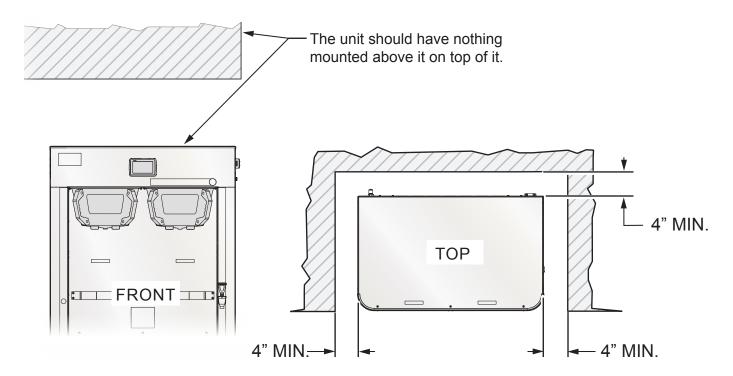
- Disassemble the two handles from the brew cone for cleaning.
  - a. Use a slotted screwdriver to remove the four slotted screws.
  - b. Take a nylon brush soaked in cleaning solution to brush out the hard to reach recessed, inside part of the handle. Pay special attention to the attachment channels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



## **Rough-In Drawing**



## **INSTALLATION REQUIREMENTS**



The unit must maintain a minimum wall distance of 4 inches (10.2 cm) on the left, right, and back side.

## **Product Warranty Information**

The 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 electrical components, fittings and tubing.

Additionally, the Wilbur Curtis Co., Inc. 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 Co., Inc., assumes no responsibility for substitute replacement parts installed on Curtis equipment that have not been purchased from Wilbur Curtis Co., Inc. The Wilbur Curtis Co., Inc. 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 Co., Inc. 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 Co., Inc. 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 16383 . 2/10/15 @ 14.3 . rev G



WILBUR CURTIS CO., INC.

6913 Acco St., Montebello, CA 90640-5403 USA Phone: 800/421-6150 Fax: 323-837-2410

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

Web Site: www.wilburcurtis.com

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