

# Installation, Operation, Cleaning, and Replacement Parts





# Craft Bar Series Glasswasher

601HTG High Temperature with built-in booster Fresh Water Final Rinse 601LTG Low Temperature Chemical Sanitization Wash Refresh Final Rinse

THE MODELS CONTAINED IN THIS MANUAL COMPLY WITH ANSI/ASSE 1001 & ANSI/ASSE 1004.

#### WARNING DO NOT STORE WET DISH RACKS ON TOP OF MACHINE.

Storing wet dish racks on top of the machine without a DRIPT TRAY KIT installed will void the warranty. Order Drip Tray Kit, P/N 0714208, (see page iii).

Manual P/N 0514361 rev. B

For machines beginning with S/N W180275428 and above



# www.moyerdiebel.com

3765 Champion Blvd., Winston-Salem, NC 27105 (336) 661-1556 Fax: (336) 661-1660 Toll-free: 1(800) 858-4477 2674 N. Service Road, Jordan Station Ontario, Canada LOR 1S0 (905) 562-4195 Fax: (905) 562-4618

Toll-free: 1(800) 263-5798

Issue Date: 9.27.22



For future reference, record your dishwasher information in the box below.

Model Number		Serial Number
Voltage	Hertz	Phase
Service Agent		Tel:
Parts Distributor		Tel:

#### National Service Department

In Canad	a:
Toll-free:	(800) 263-5798
Tel:	(905) 562-4195
Fax:	(905) 562-4618
email: se	ervice@moyerdiebellimited.com

In the USA: Toll-free: (800) 858-4477 Tel: (336) 661-1556 Fax: (336) 661-1660 email: service@championindustries.com

# ATTENTION:

The model no., serial no., voltage, Hz and phase are needed to identify your machine and to answer questions.

The machine data plate is located on the lower front panel.

Please have this information ready if you call for service assistance.



# **REGISTER YOUR PRODUCT to ACTIVATE YOUR WARRANTY.**





601HTG



# Three ways to register:

- Use your mobile device to scan the QR code located on the front panel your machine or enter http://www.moyerdw.us/601HTG and http://www.moyerdw.us/601LTG to visit the websites.
- Visit our website at: http://www.moyerdiebel.com/register
- Use the FAX FORM on the next page.



# PRODUCT REGISTRATION BY FAX

# **COMPLETE THIS FORM AND FAX TO:**

(336) 661-1660 in the USA

1-(800) 204-0109 in Canada

Model	Serial #		
Date of Installation:/ /			
Company Name:			
Address:			
Telephone #: (  )	(Street)	Province	Postal Code
Contact:			
Installation Company:			
Address:			
Telephone #:			
Contact:			
AILURE TO REGISTER Y	OUR PRODUCT MAY V		ARRANT
	ΓΑΝΤ ΙΜ		

# **Revision History**

Specifications are subject to change based on continual product improvement.

Revision Date	Revised Pages	Serial Number Effectivity	Revision Description
2.8.18 9.27.22	All	W180275428 All	Released first edition Updated Item 1, Display Bd. to P/N 0712106
	iii, 98-99	All	Added Drip Tray Kit, P/N 0714208

# LIMITED WARRANTY

Moyer Diebel. (herein referred to as The Company), 3765 Champion Blvd., Winston-Salem, North Carolina 27105, and 2674 N. Service Road, Jordan Station, Canada, LOR 1SO, warrants machines, and parts, as set out below.

Warranty of Machines: The Company warrants all new machines of its manufacture bearing the name "Moyer Diebel" and installed within the United States and Canada to be free from defects in material and workmanship for a period of one (1) year after the date of installation or fifteen (15) months after the date of shipment by The Company, whichever occurs first. [See below for special provisions relating to glasswashers.] Warranty registration must be submitted to Moyer Diebel within ten (10) days after installation either online on the Moyer Diebel website (http://www.moyerdiebel.com/service/) for the USA or http://www.championindustries.com/warranty-registration for Canada or by fax on the form provided in the front of this manual. If warranty registration is not returned to The Company within such period, the warranty will expire after one year from the date of shipment. The Company will not assume any responsibility for extra costs for installation in any area where there are jurisdictional problems with local trades or unions. If a defect in workmanship or material is found to exist within the warranty period, The Company, at its election, will either repair or replace the defective machine or accept return of the machine for full credit; provided; however, as to glasswashers, The Company's obligation with respect to labor associated with any repairs shall end (a) 120 days after shipment, or (b) 90 days after installation, whichever occurs first. In the event that Moyer Diebel elects to repair, the labor and work to be performed in connection with the warranty shall be done during regular working hours by The Company's authorized service technician. Defective parts become the property of The Company. Use of replacement parts not authorized by The Company will relieve The Company of all further liability in connection with its warranty. In no event will The Company's warranty obligation exceed The Company's charge for the machine. The following are not covered by The Company's warranty:

- a. Lighting of gas pilots or burners.
- b. Cleaning of gas lines.
- c. Replacement of fuses or resetting of overload breakers.
- d. Adjustment of thermostats.
- e. Adjustment of clutches.
- f. Opening or closing of utility supply valves or switching of electrical supply current.
- g. Cleaning of valves, strainers, screens, nozzles, or spray pipes.
- h. Performance of regular maintenance and cleaning as outlined in operator's guide.
- i. Damages resulting from water conditions, accidents, alterations, improper use, abuse,
  - tampering, improper installation, or failure to follow maintenance and operation procedures.
- j. Wear on Pulper cutter blocks, pulse vanes, and auger brush.

Examples of the defects not covered by warranty include, but are not limited to: (1) Damage to the exterior or interior finish as a result of the above, (2) Use with utility service other than that designated on the rating plate, (3) Improper connection to utility service, (4) Inadequate or excessive water pressure, (5) Corrosion from chemicals dispensed in excess of recommended concentrations, (6) Failure of electrical components due to connection of chemical dispensing equipment installed by others, (7) Leaks or damage resulting from such leaks caused by the installer, including those at machine table connections or by connection of chemical dispensing equipment installed by others, (8) Failure to comply with local building codes, (9) Damage caused by labor dispute.

**Warranty of Parts:** The Company warrants all new machine parts produced or authorized by The Company to be free from defects in material and workmanship for a period of 90 days from date of invoice. If any defect in material and workmanship is found to exist within the warranty period The Company will replace the defective part without charge.

DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITY. THE COMPANY'S WARRANTY IS ONLY TO THE EXTENT REFLECTED ABOVE. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED, TO ANY WARRANTY OF MERCHANTABILITY, OR FITNESS OF PURPOSE. MOYER DIEBEL SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSE-QUENTIAL DAMAGES. THE REMEDIES SET OUT ABOVE ARE THE EXCLUSIVE REMEDIES FOR ANY DEFECTS FOUND TO EXIST IN THE COMPANY'S DISHWASHING MACHINES AND THE COMPANY'S PARTS, AND ALL OTHER REMEDIES ARE EXCLUDED, INCLUDING ANY LIABILITY FOR INCIDENTALS OR CONSEQUENTIAL DAMAGES.

Moyer Diebel does not authorize any other person, including persons who deal in Moyer Diebel dishwashing machines to change this warranty or create any other obligation in connection with Moyer Diebel Dishwashing Machines.

#### 601HTG

#### **Fresh Water Final Rinse**

High temperature hot water sanitizing dishwasher with built-in 40°F/22°C rise booster heater or 70°F/39°C rise booster heater. Two built-in chemical dispensing pumps - Detergent, Rinse-aid Field convertible from single phase to three phase operation. 208-240VAC/60/1 and 3 phase

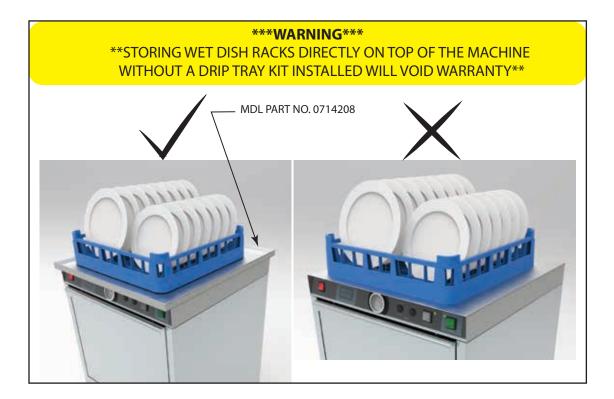
#### 601LTG

#### **Chemical Sanitizing Wash Refresh Final Rinse**

Low temperature chemical sanitizing dishwasher with three built-in chemical dispensing pumps - Detergent, Rinse-aid, sanitizer. 120VAC/60/1

#### **Optional Equipment** (consult factory)

Peg dish rack - P/N 101285 Flat-bottom dish rack - P/N 101273 70°F/39°C rise built-in booster heater (601 HTG only)



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# Receiving - 601HTG, 601LTG

### NOTE:

The installation of your dishwasher must be performed by qualified service personnel familiar with food service equipment and must comply with all local health codes. Problems due to improper installation are not covered by the Limited Warranty.

## NOTE:

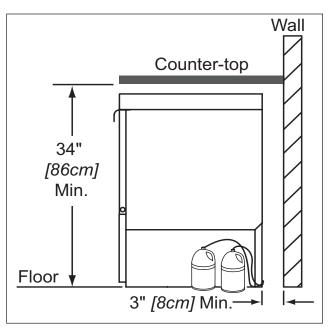
The installation of the dishwasher must comply with all local electrical, plumbing, health and safety codes or in the absence of local codes, installed in accordance with the applicable requirements in the National Electrical Code, NFPA 70, Canadian Electrical Code (CEC), Part 1, CSA C22.1; and the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96.

# Placement - 601HTG, 601LTG

# **CAUTION:**

Be careful when lifting and moving the dishwasher to prevent damage to the machine.

- 1. Inspect the outside of the dishwasher carton for signs of damage.
- 2. Remove the carton and inspect the dishwasher for damage.
- 3. Check for any options or accessories that may have shipped with your dishwasher.
- 4. Compare the installation site utility connections with the dishwasher utility connections and make sure they are the same.
- 5. The dishwasher can be installed as a free-standing unit or under a counter-top. The typical counter-top height in most locations is 34" [86cm].
- 6. It is highly recommended that the underside of the counter-top be clad in metal.
- 7. Under counter installations should provide storage space for the dishwasher chemical supply containers. Do not elevate the containers above the finished floor.
- 8. Chemical supply containers should be placed as close to the machine as possible and the chemical tubing taped to the back of the machine should be repositioned before permanently placing the machine.
- 9. Place the dishwasher in its permanent location.
- 10. The dishwasher has 4 adjustable feet for leveling.



11. Level the dishwasher front-to-back and side-to-side.

# Electrical Connections - 601HTG 1PH without Built-in Booster



WARNING:

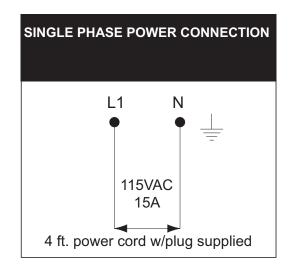
<u>Electrocution or serious injury</u> may result when working on an energized circuit.

Disconnect power at the main breaker or service disconnect switch before working on the circuit.

Lock-out and tag the breaker or service disconnect switch to indicate that work is being performed on the circuit.

Refer to the connection diagram below for single a phase machine without a built-in booster.

- 1. A three prong 4 foot power cord and plug is prewired with the machine for connection to a
  - 115VAC power source.



#### ! ATTENTION !

Models UH130 without a built-in booster are equipped with a 4 ft. power cord and plug. These models require a 115VAC,15A receptacle.

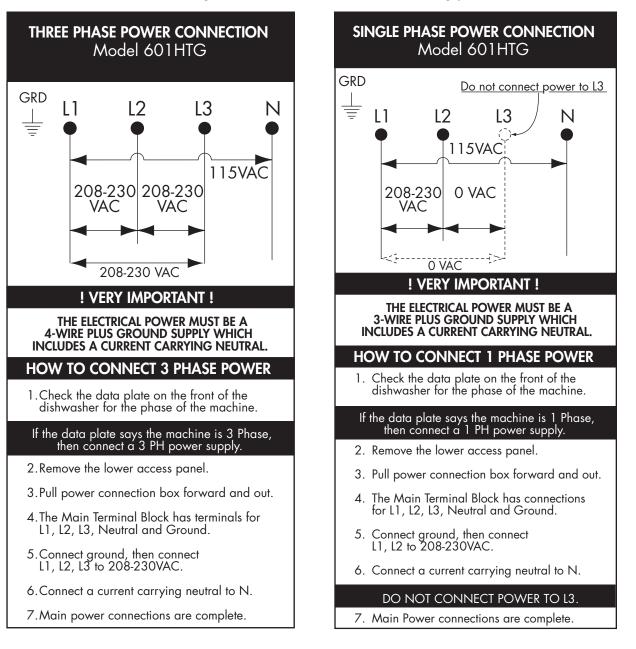
# ! ATTENTION !

A qualified electrician must connect the main incoming power to the dishwasher in accordance with all local codes and regulations or in the absence of local codes in accordance with the National Electrical Code or the Canadian Electrical Code.

# Electrical Connections - 601HTG with Built-in Booster 1PH and 3PH Wiring Diagrams

#### **! ATTENTION !** ALL DISHWASHERS ARE SHIPPED FROM THE FACTORY WIRED FOR SINGLE PHASE OPERATION UNLESS SPECIFIED AT THE TIME OF ORDER.

### IF YOU ARE CONVERTING A SINGLE PHASE MACHINE TO THREE PHASE BE SURE TO FOLLOW THE BOOSTER WIRING INSTRUCTIONS ON PAGES 7-8.



Refer to the connection diagrams below to connect main incoming power to the dishwasher.

# Connecting Incoming Power to the Main Terminal Block for 1PH and 3PH Machines with Boosters- 601HTG



WARNING:

<u>Electrocution or serious injury</u> may result when working on an energized circuit.

Disconnect power at the main breaker or service disconnect switch before working on the circuit.

Lock-out and tag the breaker or service disconnect switch to indicate that work is being performed on the circuit.

### **! VERY IMPORTANT !** PROVIDE A 3 FEET/1 METER SERVICE LOOP IN THE POWER SUPPLY CABLE TO SERVICE THE DISHWASHER.

# **! SINGLE PHASE POWER REQUIREMENT !**

# SINGLE PHASE 601HTG and 601LTG

The electrical power must be a 3-wire plus ground supply which includes a current carrying neutral.

# **! THREE PHASE POWER REQUIREMENT !**

# THREE PHASE 601HTG and 601LTG

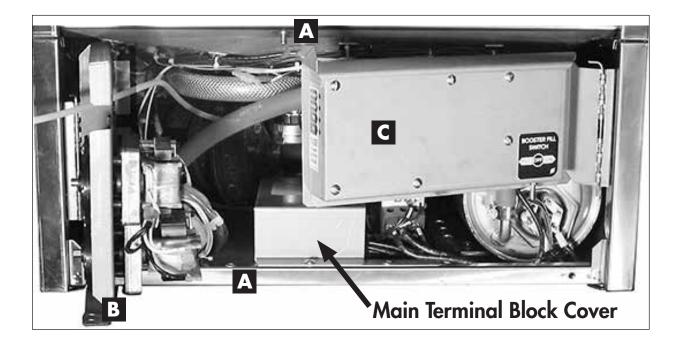
The electrical power must be a 4-wire plus ground supply which includes a current carrying neutral.

# Connecting Incoming Power to the Main Terminal Block for 1PH and 3PH Machines with Boosters- 601HTG

Refer to the photo below:

- 1. Remove the lower front dishwasher panel.
- 2. Remove the retaining fasteners (A) from the swing-out brackets and swing the chemical pump bracket (B) and the chemical circuit board bracket (C) out of the way as shown.

(continued on next page)

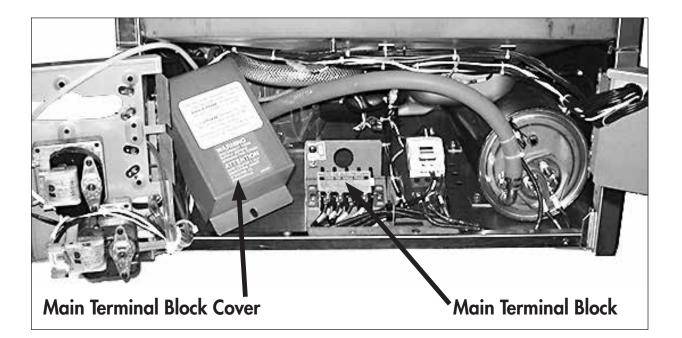


# Connecting Incoming Power to the Main Terminal Block for 1PH and 3PH Machines with Boosters

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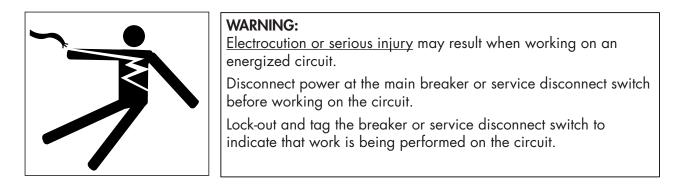
Refer to the photo below:

- 3. Provide a 3 foot/1 meter service loop in the power supply cable to service the machine
- 4. Route the power cable from the rear of the machine to the terminal block making sure the cable does not touch the booster tank.
- 5. Connect the power cable to the terminal block bracket using a suitable strain relief connector.
- 6. Connect the power wires according to the wiring diagrams on page 3 for either single phase or three phase operation.
- 7. Swing the chemical pump bracket and the chemical board back into position and secure with the existing fasteners.

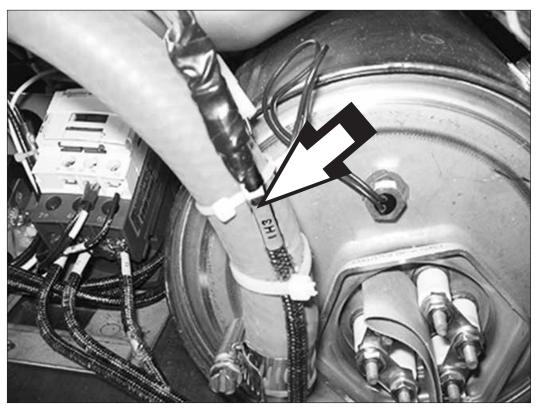


# Booster Heater Conversion from 1PH to 3 PH Operation

#### **! VERY IMPORTANT !** THE BOOSTER HEATER IS WIRED FOR 1PH OPERATION WHEN SHIPPED. FOLLOW THE INSTRUCTIONS BELOW TO WIRE THE BOOSTER FOR 3PH.



- 1. To convert the booster heater from single phase to three phase operation, locate the booster wire labeled 1H3 that is cable-tied to the booster hose.
- 2. Remove the shrink insulation from the terminal and connect to the booster heater element as shown in the wiring diagram on page 8.

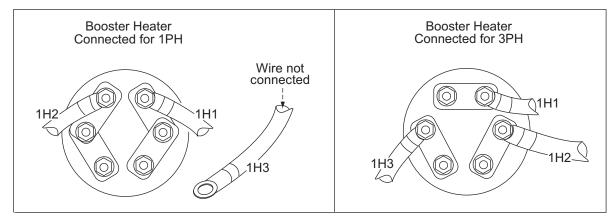


The three phase booster wire (1H3) is cable-tied to the hose adjacent to the booster tank.

# Booster Heater Conversion from 1PH to 3 PH Operation (continued)

#### **! VERY IMPORTANT !** THE BOOSTER HEATER IS WIRED FOR 1PH OPERATION WHEN SHIPPED. FOLLOW THE INSTRUCTIONS BELOW TO WIRE THE BOOSTER FOR 3PH.

- 3. Disconnect the existing booster heater wires and change the booster heater element jumpers as shown in the illustration below
- 4. Connect wires 1H1, 1H2, and 1H3 as shown below.



Wiring Diagram - Booster heater element connections shown for 1 phase and 3 phase operation.

- 5. A replacement 3PH data plate is stowed on the back of the lower front access panel.
- 6. Replace the existing 1PH data plate on the front of the panel with the new 3PH data plate. Discard the 1PH data plate.
- 7. Refer to the instructions on page 3 to connect the main incoming power to the machine.

# Completing the 1PH to 3PH Electrical Conversion

# ! ATTENTION !

### CHANGE THE DATA PLATE ON THE LOWER FRONT PANEL OF THE MACHINE

#### AFTER THE MACHINE IS WIRED FOR 3PH AND THE BOOSTER HEATER IS CONNECTED FOR 3PH.

- 1. The data plate on the dishwasher lower front panel must be changed after the machine is converted from single phase operation to three phase operation.
- 2. Locate the replacement data plate stowed on the back of the lower front panel.
- 3. Remove the paper backing from the label and carefully place it over the existing data plate label making sure it covers the label completely.
- 4 Re-install the lower front panel to complete the conversion.

50	
MODEL NO. VOLTAGE 3 Intertek JOPIRJI	22/24 SERIAL NO. 22/24 AMPERAGE 60 HERTZ 150 °F
PHASE WASH TEMPERATURE	180 oF 180 VSE CYCLE 25 SEC 144 V 144 V
RINSE WASH CYCLE: 90 SEC WASH CYCLE: 90 NET PRESSURE INLET WATER PRESSURE INLET WATER PRESSURE ADVENTENCIA: DESCONCETE IN SURVICE ADVENTENCIA: DESCONCETE IN OCH	

A three phase data plate is located on the back of the lower front panel.

# Water Connections - 601HTG

# ! VERY IMPORTANT !

Make sure the flexible water supply and drain hoses are not kinked. Plumbing connections must allow the machine to be pulled out for service and cleaning.

Plumbing connections must comply with national, provincial local plumbing and sanitary codes. Only qualified service personnel familiar with food service equipment should install the machine.

The installing plumber must thoroughly flush the water supply line to remove all debris <u>BEFORE</u> connecting the water supply line to the machine.

- 1. All models have a 6 ft. flexible hot water fill hose with a 3/4" female garden hose connector.
- 2. A 1/2" or larger main incoming supply line must be installed to the dishwasher.
- 3. A 1/2" or larger shut-off valve should be installed in the main water supply, as close to the dishwasher as possible for servicing.
- FOR <u>601HTG</u>: The hot water supply must provide a minimum of 140°F/60°C, measured at the dishwasher for 40°F/22°C rise booster or 110°F/43°C for 70°F/39°C rise booster.
   A pressure regulating valve, PRV, (supplied), must be installed after the shut-off service valve if the incoming flow pressure exceeds 20-22 psi.
- 5. A water hardness of 3 grains/gal (US) [5.3 mg/L] or less is recommended. Excessively hard water will negatively impact wash results.

# Drain Connections - 601HTG

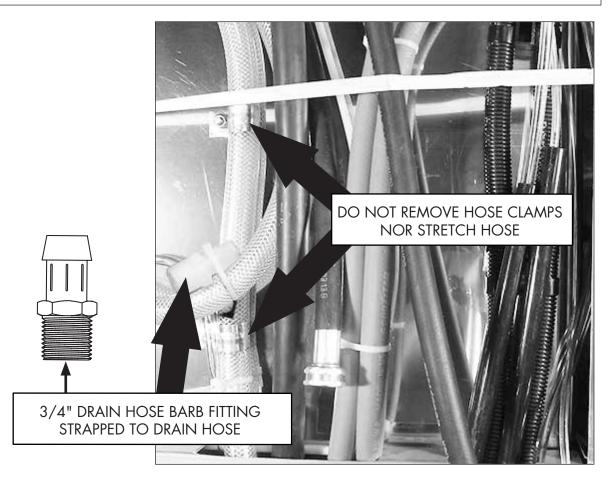
#### ! VERY IMPORTANT !

Do not connect the drain hose to a disposer. The dishwasher will not drain correctly.

Refer to the photo below.

- 1. All models are equipped with a 6 ft.. 5/8" I.D. drain hose. The maximum drain height connection must not exceed 3 ft.[1 m] and must be vented to prevent the wash tank from siphoning.
- 2. The drain hose is located at the rear of the dishwasher, and is secured to the rear of the machine by two clamps to maintain an anti-siphoning loop in the drain hose.
- 3. A 3/4" hose barb fitting is strapped to the drain hose prior to shipment. The service part number for the hose barb is P/N 0512321.
- 4. Additional plumbing parts must be supplied by the plumbing installer.
- 5. The maximum drain flow is 15 US gpm/12.4 imp gpm/60 lpm.

#### ! ATTENTION ! FAILURE TO FOLLOW THE DRAIN CONNECTION INSTRUCTIONS MAY VOID THE WARRANTY.



# Drain Connection - 601HTG (continued)

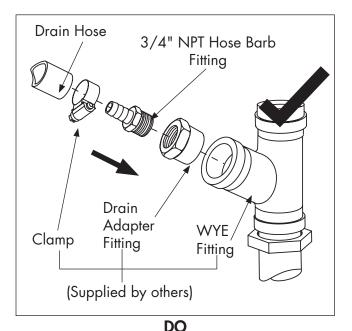
NOTE

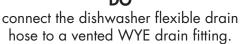
Plumbing connections must comply with national, provincial local plumbing and sanitary codes.

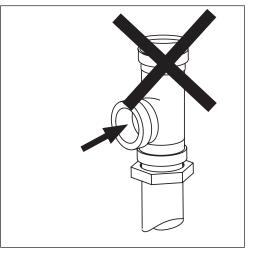
DO NOT REMOVE THE CLAMPS HOLDING THE DRAIN HOSE TO THE BACK OF THE DISHWASHER. DO NOT CONNECT THE DRAIN HOSE TO A DISPOSER. DO NOT REDUCE THE SIZE OF THE DRAIN HOSE CONNECTION NOR USE A DOMESTIC DRAIN FITTING. DO NOT ADD ADDITIONAL LENGTH TO THE DRAIN HOSE. DO NOT ALLOW THE DRAIN HOSE TO KINK.

# For a Direct Drain Connection:

- 1. Install the drain hose to an 1-1/2" or larger vented "WYE" drain fitting.
- 2. <u>CONNECTION TO A "TEE" FITTING WILL PREVENT THE DISHWASHER FROM</u> <u>DRAINING COMPLETELY.</u>





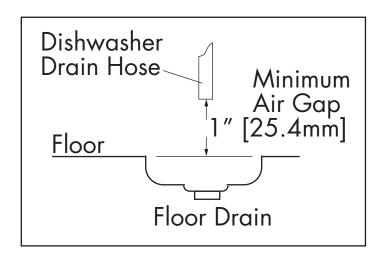


**DO NOT** connect the dishwasher flexible drain hose to a TEE drain fitting.

# Drain Connection 601HTG

# For an Indirect Drain Connection:

1. A 1" [25.4mm] minimum air gap must be provided between the outlet of the dishwasher drain hose and the flood-level rim of the floor drain, floor sink or any other locally approved drain receptacle. (See illustration below.)



#### **! VERY IMPORTANT !** IMPROPER INSTALLATION OF MACHINE DRAIN HOSE.

Machine drain problems are often the result of improper installation and may not be covered by the limited warranty.

# Booster Fill Switch - (Filling the booster tank for the first time) 601HTG

#### ! CAUTION ! AVOID PERMANENT DAMAGE TO THE BOOSTER HEATER

#### DO NOT TURN THE DISHWASHER POWER SWITCH ON WHEN FILLING THE BOOSTER FOR THE FIRST TIME.

### THE BUILT-IN BOOSTER TANK WAS DRAINED BEFORE SHIPMENT AND MUST BE REFILLED BEFORE OPERATING THE DISHWASHER.

THE BOOSTER FILL SWITCH IS LOCATED BEHIND THE LOWER FRONT PANEL ON THE RIGHT SIDE OF THE MACHINE.

# To refill the booster for the first time:

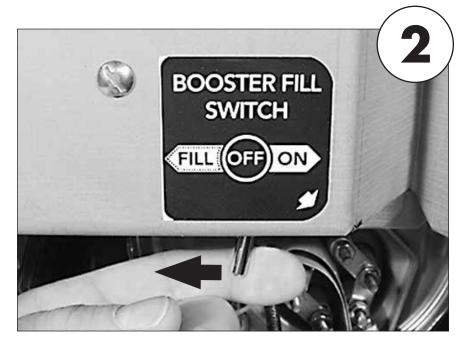
- 1. Turn the main breaker or disconnect switch to the dishwasher ON.
- 2. DO NOT PUSH THE DISHWASHER ON-OFF/DRAIN POWER SWITCH TO THE ON POSITION.
- 3. Locate the booster fill switch and note the switch is in the OFF position.

[continued on next page]

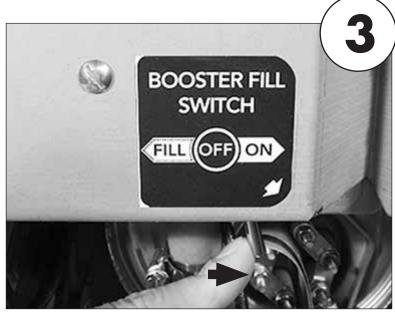


# Booster Fill Switch - (Filling the booster tank for the first time)

- 4. PUSH AND HOLD the booster fill switch in the FILL position until water starts filling inside the wash compartment.
- 5. Release the FILL switch.



- 6. PUSH the booster fill switch to the ON position and release.
- 7. The booster fill operation is complete.
- 8. Replace the lower front panel on the machine.



# Chemical Connections 601HTG

### **! VERY IMPORTANT !**

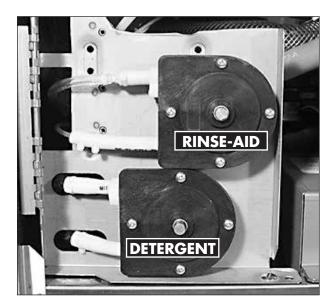
#### ALWAYS USE A COMMERCIAL-GRADE NON-CHLORINATED DETERGENT. PLACE THE CHEMICAL SUPPLY CONTAINERS AS CLOSE TO THE MACHINE AS POSSIBLE. DO NOT ELEVATE THE CHEMICAL CONTAINERS ABOVE THE FINISHED FLOOR.

#### **! VERY IMPORTANT !**

Contact a chemical supplier for detergent and rinse-aid chemicals. The chemical supplier must adjust the chemical dispensing pumps for water hardness and food soil types.

# Chemical Dispensing Pumps

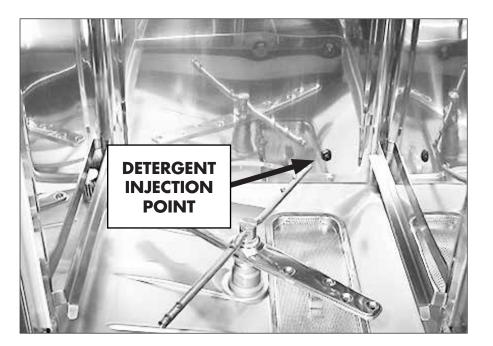
- 1. The detergent and rinse-aid pumps are located on the lower left-side of the machine behind the lower-front access panel.
- 2. Each pump is equipped with 6 feet [1.8 m] of pick-up tubes consisting of supply tubing, stiffener tubes, and strainers.
- 3. The pick-up tubes are stowed on the back of the machine for shipping.
- 4. A red label marked DETERGENT and a blue label marked RINSE-AID identify the chemical lines.



The 601HTG pumps are located on the left-side behind the lower front panel of the dishwasher.

# Pumps and Injection Points - Detergent and Rinse-aid Dispensing Pumps 601HTG

- 1. ALWAYS USE A COMMERCIAL-GRADE NON-CHLORINATED DETERGENT. PLACE THE CHEMICAL SUPPLY CONTAINERS AS CLOSE TO THE MACHINE AS POSSIBLE. DO NOT ELEVATE THE CHEMICAL CONTAINERS ABOVE THE FINISHED FLOOR.
- 2. For 601HTG, the detergent enters the wash tank compartment through a fitting on the back right corner of the wash compartment. Rinse-aid enters the final rinse piping through a fitting near the vacuum breaker.



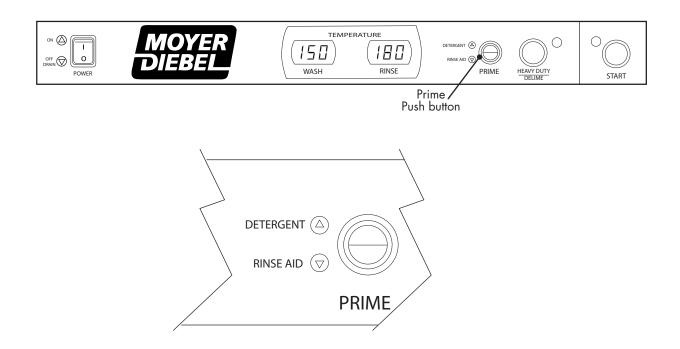


# Pumps and Injection Points - Detergent and Rinse-aid Dispensing Pumps 601HTG

# Priming the Dispensing Pumps

# ! VERY IMPORTANT !

The chemical dispensing pumps must be primed before operating the dishwasher and whenever the chemical container is changed.



- 1. The chemical dispensing pump supply lines must be primed before they will pump the chemicals properly.
- 2. Make sure the chemical containers are full and the correct pick-up tubes are in their containers.
- 3. Turn the dishwasher power switch ON. The switch will illuminate and the dishwasher will fill with water.
- 4. Open the dishwasher door, then push and hold the prime push button UP to the DETERGENT position until detergent is observed entering the wash tank compartment through the fitting located on the back right corner of the tank. Release the push button.
- 5. Push and hold the prime push button DOWN to the Rinse-aid position until you see air bubbles moving through the rinse-aid tubing coming out of the chemical container. Release the push button.
- 6. Close the door to complete the priming operation.

# Detergent and Rinse-aid Dispensing Pumps - Pump and Fill Adjustments 601HTG

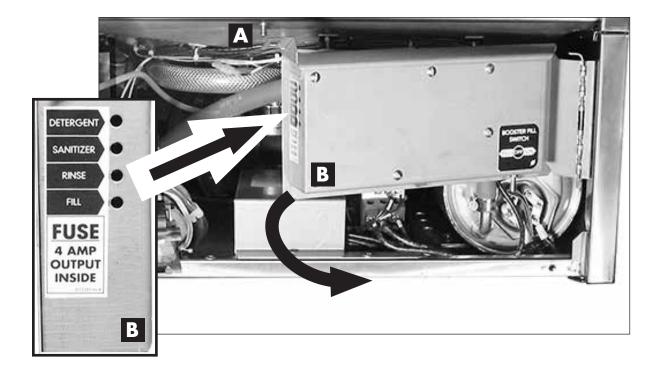
# ! ATTENTION !

The amount of dispensed chemical is determined by the run time of the dispensing pump.

Refer to the photo below:

- 1. The chemical dispensing pump run and the tank fill adjustment screws are located on the end of the chemical circuit board swing-out bracket.
- 2. It is not necessary to swing the bracket out to make adjustments, but if desired, remove the mounting nut (A) and swing the bracket (B) out and to the right.
- 3. Refer to the next page for adjustment instructions.

### ! VERY IMPORTANT ! INSPECT & REPLACE THE CHEMICAL DISPENSING PUMP SQUEEZE TUBES EVERY SIX MONTHS.



# **! VERY IMPORTANT !**

Contact a chemical supplier for detergent and rinse-aid chemicals. The chemical supplier must adjust the chemical dispensing pumps for water hardness and food soil types.

#### Model 601HTG - Installation

# Detergent and Rinse-aid Dispensing Pumps - Pump and Fill Adjustments 601HTG

Refer to the photo below:

To adjust the amount of chemicals dispensed by the pumps:

- 1. Make sure the chemical containers are full and the pick-up tubes are in their proper containers.
- Turn the dishwasher power switch ON. The switch will illuminate and the dishwasher will fill with water.
- 4. Run a normal dishwasher cycle and test detergent and rinse-aid concentrations according to the chemical supplier's instructions.

#### CAUTION:

Excessive pressure to the potentiometers when adjusting can result in bent or broken adjusting screws.

5. Each dispensing pump has a clearly marked adjustment screw. Turn the screw CW to increase the run time of the dispensing pump and CCW to reduce the run time.



# **Operation - 601HTG**

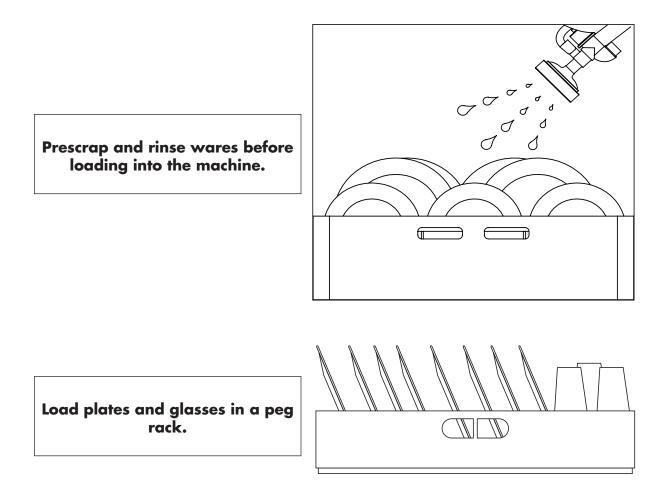
# Loading Dish Racks

#### **! VERY IMPORTANT !** DO NOT OVERLOAD THE DISH RACK. LOAD ONE DISH RACK INTO THE MACHINE AT A TIME.

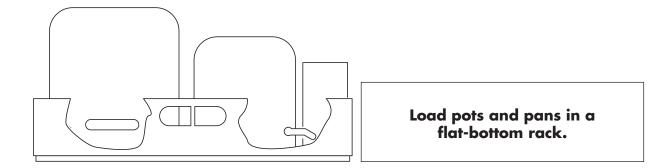
- 1. Prescrap and rinse the wares before loading to remove large food particles.
- 2. Load soiled wares into the dish rack. Place plates and glasses in a peg rack. Place cups and bowls in a flat bottom rack. Place utensils in a single layer in a flat-bottom rack. Place pots and pans in a flat-bottom rack.

#### Do not overload the dish rack. Wash one dish rack at a time.

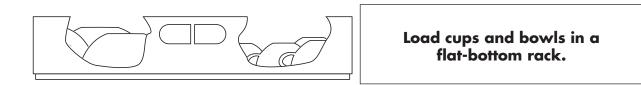
3. Slide one dish rack into the wash compartment making sure that wares do not interfere with the rotating spray arms. Do not wash more than one dish rack at a time.

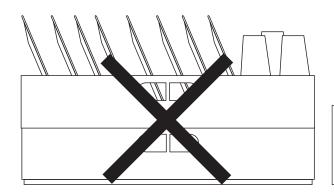


# Loading Dish Racks continued



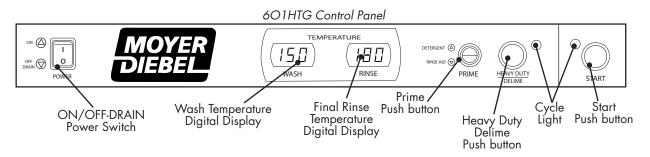






<u>NEVER</u> stack dish racks. Wash one dish rack at a time.

# Normal Wash Mode



### **! VERY IMPORTANT !** Turn the power off to the dishwasher overnight and if it is unattended for an extended period of time.

- 1. Close the door.
- 2. Push the dishwasher Power Switch UP to turn the power ON.
- 3. The power switch will illuminate and the machine will fill with water.
- 4. Check the pressure gauge as the machine fills and make sure the incoming water pressure is between 20-22 PSI.
- 5. Wait until the wash temperature gauge indicates a minimum of 150°F/66°C.

#### PLACE AN EMPTY DISHRACK IN THE MACHINE AND RUN THE FIRST CYCLE EMPTY TO HEAT THE WASH TANK INTERIOR.

- 6. Load the dish rack into the machine. Wash one dish rack at a time.
- 7. Close the door, then press the START BUTTON for 1 second. The green in-cycle light will illuminate and the wash cycle will begin. The total cycle is approximately 90 seconds.
- 8. Opening the door during a cycle will stop the dishwasher. If the door is open more than 5 seconds the cycle will restart from the beginning, if open less than 5 seconds the cycle will resume where it left off when the dishwasher door is closed.
- 9. The final rinse cycle begins at the end of the wash cycle. The machine drains and retains a portion of the final rinse water for the next wash cycle.
- 10. Check the rinse temperature gauge during the final rinse. It must indicate a minimum of 180-195°F/82-91°C. The final rinse water is retained for the next wash cycle.
- 11. During the final rinse, check the pressure gauge, located at the bottom left corner of the front panel, to ensure the gauge reads 20-22 PSI.
- 12. When the green cycle light goes out, open the door and remove the rack of clean wares.

# 601HTG Rinse Sentry Mode

#### ! ATTENTION ! DOOR LEFT OPEN DURING WASH CYCLE

If the dishwasher door is left open for more than 5 seconds during the normal wash mode, then the dishwasher cycle will reset to the beginning of the normal wash cycle.

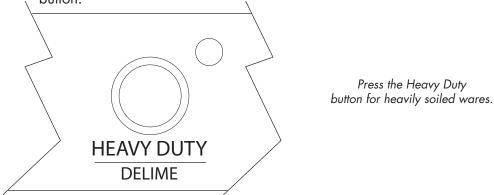
#### ! ATTENTION ! RINSE SENTRY MODE WILL EXTEND WASH CYCLE TIME

In the event that the final rinse temperature has not reached 180-195°F/82-91°C after the wash cycle, the rinse sentry will extend the wash cycle time until the booster reaches 180-195°F/82-91°C. If the proper temperature is not reached within 5 minutes, the machine will leave the rinse sentry mode and complete the cycle.

# Heavy Duty Wash Mode Model 601HTG Only

This mode is used to wash heavily soiled items such as pots, pans and other wares that require more washing time than the standard 90 second Normal Wash Mode. The dishwasher will remain in the Heavy Duty Mode until the operator exits the mode or a maximum of 15 minutes, whichever occurs first.

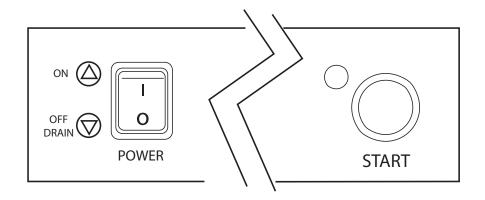
- 1. Load a dish rack into the dishwasher, close the door and press the START button.
- 2. The green in-cycle light will illuminate and the dishwasher will begin a normal wash cycle.
- 3. Wait 10 seconds for the detergent to enter the wash compartment before pressing the v button.



- 4. Press the button to place the dishwasher in the Heavy Duty Wash Mode.
- 5. The green light will illuminate indicating that the machine is in the Heavy Duty Mode.
- 6. The dishwasher will continue to wash for a maximum of 15 minutes unless the operator presses the button again.
- 7. Press the Heavy Duty button. The green light will go out indicating the dishwasher has returned to the Normal Wash Mode.
- 8. The dishwasher will finish the wash cycle and perform a final rinse of the wares.

### **Drain Mode**

The dishwasher will enter the drain mode whenever the Power Switch is pushed down to the OFF/DRAIN position.

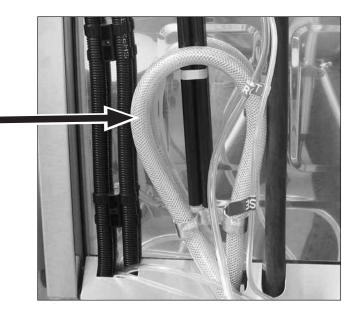


- 1. Push the illuminated power switch down to the OFF DRAIN position. The power switch light will go out.
- 2. The cycle light will illuminate and the machine will drain.
- 3. The machine, will flush, perform 3 short drain cycles and then drain completely.
- 4. The cycle light will go out indicating that the drain cycle is complete. Do not open the door until the light goes out.

### ! VERY IMPORTANT ! Draining Problems Related To Improper Installation.

Problems with draining are often the result of improper installation. The drain hose is looped and clamped as shown in the photo below and must not be changed.

The drain hose is looped and clamped and must not be changed. Altering the drain hose routing may result in the machine's inability to drain or may cause the machine to siphon the water out of the machine.



# Cleaning - 601HTG

#### **VERY IMPORTANT !** DRAIN AND CLEAN THE DISHWASHER EVERY 2 HOURS OF CONTINUOUS OPERATION, AFTER EACH MEAL PERIOD, AND AT THE END OF THE DAY.

### **All Models**

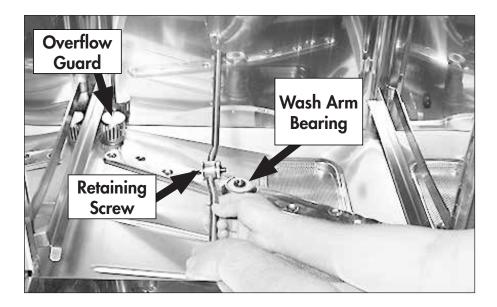
#### Cleaning the wash tank:

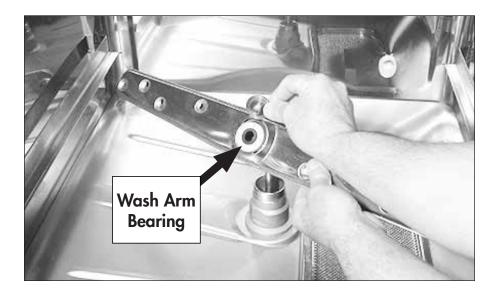
- 1. Remove the upper and lower spray arms and flush clean in a sink.
- 2. Remove the scrap screen taking care that debris does not fall off the screen and into the wash tank or sump. Flush the screen clean in a sink. Be sure to back-flush the screen.
- 3. <u>DO NOT</u> strike the scrap screen on solid surfaces.
- 4. Check the sump for foreign material.
- 5. Clean the pump intake strainer in the bottom of the sump.
- 6. <u>DO NOT</u> scrub the interior with metal scrub pads.
- 7. Check the sump heating element for lime deposits and gently remove with a scouring pad. <u>DO NOT USE METALLIC SCRUB PADS.</u>
- 8. Wipe the exterior of the dishwasher with a soft clean cloth and a mild detergent.
- 9. Leave the door open to aid in overnight drying.

#### **! ATTENTION !** DO NOT USE METALLIC SCRUB PADS TO CLEAN THE MACHINE. DO NOT SPRAY THE EXTERIOR OF THE MACHINE WITH WATER.

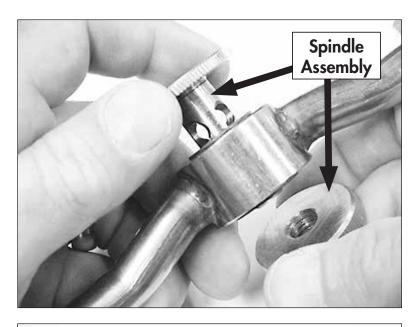
### Cleaning - 601HTG

- 1. Unscrew the retaining screw from the upper and lower rinse arms. The rinse arms are interchangeable.
- 2. Remove the upper and lower wash arms and flush clean in a sink.
- 3. Flush the wash arm bearings clean.

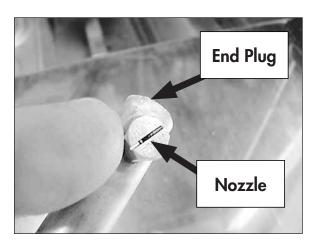




### Cleaning - 601HTG







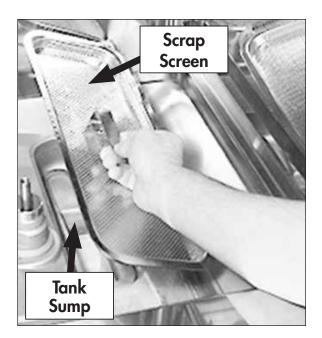
601HTG Rinse Arms

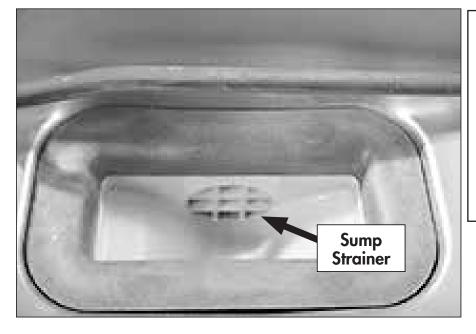
- 1. There are two rinse arms in the 601HTG They are interchangeable.
- 2. Remove the spindle assembly and end plugs in each pipe and flush the rinse pipes.
- Inspect the rinse arm bearings for wear and replace as necessary.
- Clean the rinse arm nozzles with a small paper clip.
- 5. Reassemble the rinse arm assemblies.

### 601HTG - Cleaning

### 601HTG Scrap Screen and Sump Strainer

- 1. Lift the scrap screen straight up and out of the machine to prevent food particles from falling into the tank sump.
- 2. Flush the scrap screen in a remote sink making sure to back-flush both side of the screen.
- 3. Wipe the tank sump of water and debris.
- 4. Carefully inspect the pump intake strainer. This strainer is not removeable but must be thoroughly cleaned before reinstalling the scrap screen.





### **! ATTENTION !**

A CLOGGED OR RESTRICTED SUMP STRAINER WILL PREVENT THE PROPER WASHING, RINSING AND DRAINING OF THE MACHINE.

### WIPE THE EXTERIOR OF THE MACHINE WITH A SOFT CLOTH AND MILD DETERGENT. DO NOT SPRAY THE EXTERIOR WITH WATER OR BLEACH. LEAVE THE DOOR OPEN TO AID IN OVERNIGHT DRYING.

### **! TURN THE POWER OFF OVERNIGHT !**

# **Deliming Cautions and Warnings**

A deliming agent must be used in accordance with your chemical supplier's instructions.

### DANGER:

Death or serious injury may result when deliming solution is mixed with sodium hypochlorite sanitizing agent. Mixing may cause hazardous gases to form. Deliming solution and other acids must never be mixed with chlorine, iodine, bromine, or fluorine.

### **CAUTION:**

Skin contact with deliming solutions can cause severe irritation and possible chemical burns. Always wear eye protection, rubber gloves and protective clothing when handling chemicals.

### **601HTG Deliming Procedure**

### Follow the procedures below to delime the 601HTG dishwasher.

- 1. Open the dishwasher door and remove any dish racks.
- 2. Turn the power switch on the dishwasher to the ON position.
- 3. Remove the detergent and rinse-aid chemical supply tubing from their chemical supply containers.
- 4. Place the tubing in a container of hot water.
- 5. Press and hold the prime switch UP in the DETERGENT position to flush the detergent from the supply tubing. Release the switch.
- 6. Press and hold the prime switch DOWN in the RINSE AID position to flush the rinse-aid from the supply tubing. Release the switch.
- 7. Turn the dishwasher power switch to OFF/DRAIN to drain the wash tank. The green cycle light will go out in about 2 minutes.
- 8. <u>Always wear eye protection, rubber gloves and protective clothing when handling</u> <u>chemicals.</u> Open the door and carefully add the deliming chemical to the wash tank in accordance with your chemical supplier's instructions. Be careful to avoid splashing.
- 9. Close the door and press the Heavy Duty/Delime switch three times. The delime light will illuminate and the machine will run for 23 minutes.
- 10. Check the deliming results and if scale is still present repeat steps 7-9.
- 11. Push the power switch ON to refill the machine.
- 12. Return chemical supply tubing to their containers and prime the chemical lines.

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### Maintenance - Model 601HTG

### 601HTG - Maintenance

Follow the maintenance schedules below to keep the dishwasher operating most efficiently.

### **Daily Maintenance**

- 1. Make sure the water supply is on and that the drain is not clogged.
- 2. Check the temperature gauges and/or displays to ensure they are operating.
- 3. Make sure the dish racks are in good condition.
- 4. Check the chemical containers and refill as required.
- 5. Follow the cleaning procedures provided in the *Cleaning Section*.

### Weekly Maintenance

- 1. Perform Steps 1-5 in the Daily Maintenance.
- 2. Inspect water lines for leaks.
- 3. Check for water leaks underneath the dishwasher.
- 4. Make sure the flexible water fill and drain hoses are not kinked.
- 5. Make sure that the dishwasher is level.
- 6. Clean accumulated lime deposits from the wash tank heating element.
- 7. Inspect the scrap screen and replace it if damaged.
- 8. Check the spray arms and replace or repair if damaged.

### Monthly Maintenance

- 1. Perform the Daily and Weekly Maintenance listed above.
- 2. Clean the chemical dispenser pick-up tubing for the chemical dispensing pumps.

### To clean the pick-up tubing:

- 1. Remove the pick-up tubes from their containers.
- 2. Place each tube in a separate container of hot water.
- 3. Press and hold the PRIME buttons UP and DOWN until water flows into the wash tank compartment.
- 4. Return the pick-up tubes to their containers.
- 5. Run 3 empty dishwasher cycles to flush any chemicals from the dishwasher wash compartment.
- 6. Return the pick-up tubes to their containers and prime the chemical lines.

### NOTE: There are no lubrication points on the dishwasher.

# Model 601LTG Low Temperature Chemical Sanitizing Undercounter Dishwasher

### (Single Phase) Electrical Connections - 601LTG



WARNING:

<u>Electrocution or serious injury</u> may result when working on an energized circuit.

Disconnect power at the main breaker or service disconnect switch before working on the circuit.

Lock-out and tag the breaker or service disconnect switch to indicate that work is being performed on the circuit.

### ! ATTENTION !

A qualified electrician must connect the main incoming power to the dishwasher in accordance with all local codes and regulations or in the absence of local codes in accordance with the National Electrical Code or the Canadian Electrical Code.

Refer to the connection diagram below for single a phase machine without a built-in booster.

1. A three prong 4 foot power cord and plug is prewired with the machine for connection to a 115VAC power source.

SINGLE PHASE POWER CONNECTION Model 601LTG					
L	.1 N	-i			
4 ft. power	115VAC 15A cord w/plu	ug supplied			

### **! ATTENTION !** Model 601LTG is equipped with a 4 ft. power cord and plug. These models require a 115VAC, 15A receptacle.

### Water Connection - 601LTG

### ! VERY IMPORTANT !

Make sure that the flexible water supply and drain hoses are not kinked. Plumbing connections must allow the machine to be pulled out for service and cleaning.

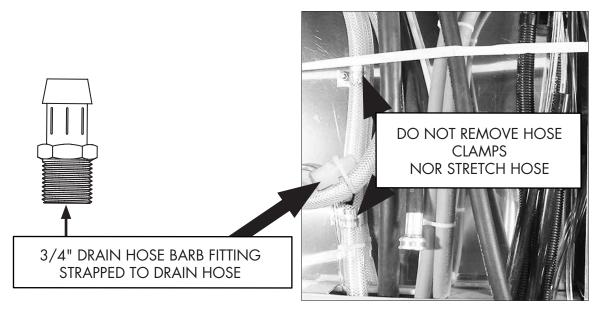
Plumbing connections must comply with national, provincial local plumbing and sanitary codes. Only qualified service personnel familiar with food service equipment should install the machine.

The installing plumber must thoroughly flush the water supply line to remove all debris <u>BEFORE</u> connecting the water supply line to the machine.

- 1. All models have a 6 ft. flexible hot water fill hose with a 3/4" female garden hose connector.
- 2. A 1/2" or larger main incoming supply line should be installed to the dishwasher.
- 3. We recommend that a 1/2" or larger shut-off valve be installed in the main water supply, as close to the dishwasher as possible for servicing.
- 4. The UL130 has a built-in flow control which requires that the incoming hot water supply pressure must be between 25-95 psi.
- 5. The hot water supply must provide a minimum of 120°F/49°C, measured at the dishwasher; however, 140°F/60°C is recommended.
- 6. A water hardness of 3 grains/gal (US) [51.3 mg/L] or less is recommended. Hard water can adversely affect wash results.

### **Drain Connection - 601LTG**

- 1. All models have a 6 ft. 5/8" I.D. drain hose. The maximum drain height connection must not exceed 3 ft.[0.9 m].
- 2. A 3/4" hose barb fitting is strapped to the drain hose to connect the drain hose to a wye drain fitting. The service part number for the hose barb is P/N 0512321.
- 3. The maximum drain flow is 15 US gpm/12.4 imp gpm/60 lpm.



### Drain Connection - 601LTG (continued)

NOTE

Plumbing connections must comply with national, provincial local plumbing and sanitary codes.

DO NOT REMOVE THE CLAMPS HOLDING THE DRAIN HOSE TO THE BACK OF THE DISHWASHER.

DO NOT CONNECT THE DRAIN HOSE TO A DISPOSER.

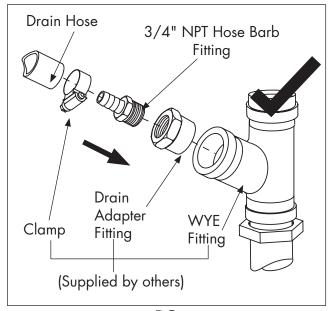
DO NOT REDUCE THE SIZE OF THE DRAIN HOSE CONNECTION NOR USE A DOMESTIC DRAIN FITTING.

DO NOT ADD ADDITIONAL LENGTH TO THE DRAIN HOSE.

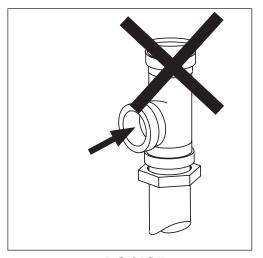
DO NOT ALLOW THE DRAIN HOSE TO KINK.

### For a Direct Drain Connection:

- 1. Install the drain hose to an 1-1/2" or larger "WYE" vented drain fitting.
- 2. <u>CONNECTION TO A "TEE" FITTING WILL PREVENT THE DISHWASHER FROM</u> <u>DRAINING COMPLETELY.</u>



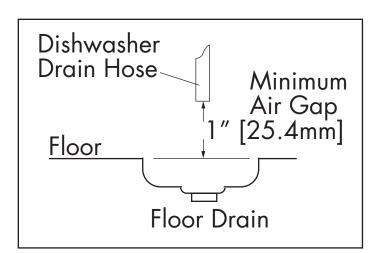




**DO NOT** connect the dishwasher flexible drain hose to a TEE drain fitting.

### For an Indirect Drain Connection:

1. A 1" [25.4mm] minimum air gap must be provided between the outlet of the dishwasher drain hose outlet and the flood-level rim of the floor drain, floor sink or any other locally approved drain receptacle. (See illustration below.)



### ! VERY IMPORTANT ! IMPROPER INSTALLATION OF MACHINE DRAIN HOSE.

Machine drain problems are often the result of improper installation and may not be covered by the limited warranty.

### Pumps and Injection Points - Detergent, Rinse-aid and Sanitizer Dispensing Pumps - 601LTG

### ! VERY IMPORTANT !

<u>ALWAYS USE A COMMERCIAL-GRADE NON-CHLORINATED DETERGENT.</u> <u>PLACE THE CHEMICAL SUPPLY CONTAINERS AS CLOSE TO THE MACHINE AS POSSIBLE.</u>

### DO NOT ELEVATE THE CHEMICAL CONTAINERS ABOVE THE FINISHED FLOOR.

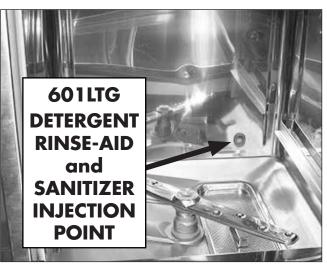
### ! VERY IMPORTANT !

Contact a chemical supplier for detergent and rinse-aid chemicals. The chemical supplier must adjust the chemical dispensing pumps for water hardness and food soil types.

- 1. The chemical dispensing pumps are located on a center bracket behind the lower-front access panel.
- 2. Each pump is equipped with 6 feet [1.8 m] of supply tubing, stiffener tubes, and strainers.
- 3. A RED label marked DETERGENT, a BLUE label marked RINSE-AID and a WHITE Label marked SANITIZER identify the chemical lines.
- 4. The chemicals enter the wash tank compartment through a fitting located on the rear righthand side of the wash compartment.



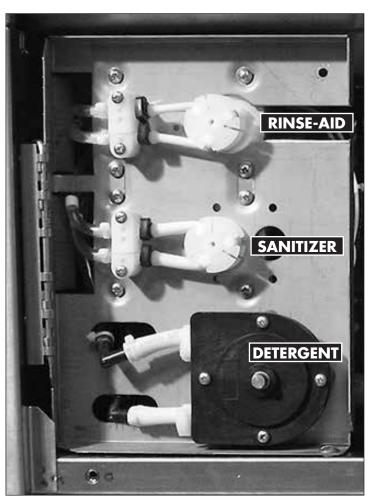
The chemical dispensing pick-up tubes are stowed at the rear of the dishwasher.



On the 601LTG, chemicals enter the wash tank through a fitting on the rear wall of the tank.

Model 601LTG - Installation

Pumps and Injection Points - Detergent, Rinse-aid and Sanitizer Dispensing Pumps - 601LTG



! VERY IMPORTANT ! CHEMICAL SQUEEZE TUBES SHOULD BE INSPECTED AND REPLACED EVERY 6 MONTHS

The chemical dispensing pumps are located on the bracket behind the lower-front access panel.

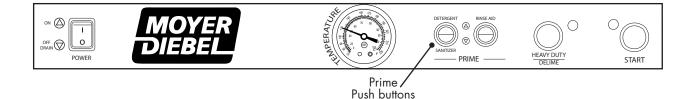
### **! VERY IMPORTANT !**

5.25% sodium hypochlorite (chlorine beach) must be used as a sanitizing agent to provide a minimum concentration of 50 ppm in the final rinse for the USA and 100 ppm in Ontario, Canada. The 50 ppm or 100 ppm concentration must be checked using chlorine test strips to make sure that the proper concentration is maintained.

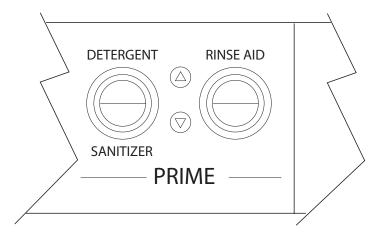
### Pump Priming - Detergent, Rinse-aid and Sanitizer Dispensing Pumps

### **! VERY IMPORTANT !**

The chemical dispensing pumps must be primed before operating the dishwasher and whenever the chemical container is changed.



- 1. Make sure the chemical containers are full and the correct pick-up tubes are in their containers.
- 2. Turn the dishwasher power switch ON. The switch will illuminate and the dishwasher will fill with water.
- 3. Refer to the illustration below and note the two momentary push buttons provided to prime the detergent, sanitizer and rinse aid pumps.
- 4. Open the dishwasher door and observe the inlet chute on the rear right-hand side of the wash tank.
- 5. Push and hold the prime push button UP to the DETERGENT position until detergent is observed entering the wash tank compartment. Release the push button.
- 6. Push and hold the same push button DOWN until sanitizer is observed entering the wash tank compartment. Release the push button.
- 7. Push and hold the other push button UP to the RINSE AID position until rinse-aid is observed entering the wash tank compartment. Release the push button.
- 8. Priming is complete.



### Pump and Tank Fill Adjustments

### ! ATTENTION !

The amount of dispensed chemical is determined by the run time of the dispensing pump.



- Adjustment screws are provided for the dispensing pumps and for the wash tank fill. They are located on the right-hand side of the dishwasher behind the lower front access panel.
- 2. Make sure the chemical containers are full and the pick-up tubes are in their proper containers.
- Turn the dishwasher power switch ON. The switch will illuminate and the dishwasher will fill with water.
- 4. Run a normal dishwasher cycle and test chmical concentrations according to the chemical supplier's instructions.

### CAUTION:

Excessive pressure to the potentiometers when adjusting can result in bent or broken adjusting screws.

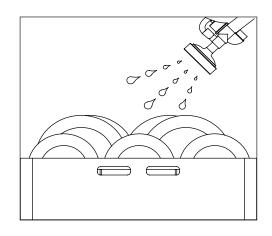
- 5. Each dispensing pump has a clearly marked adjustment screw. Turn the screw CW to increase the run time of the dispensing pump and CCW to reduce the run time of the dispensing pump.
- 6. The Fill adjustment screw will provide a small change in the tank water level. If a large adjustment is needed, check the incoming water pressure and make sure the fill hose is not kinked. If the above items are okay then the size of the incoming water supply should be checked. The incoming water supply line must be a minimum of 1/2" or larger.

**Operation - Model 601LTG** 

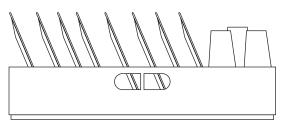
Loading Dish Racks

### ! VERY IMPORTANT !

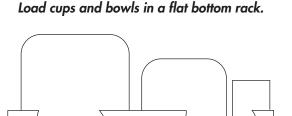
Prescrap and rinse wares before loading into the machine.

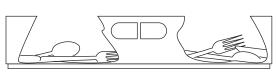


### **! VERY IMPORTANT !** DO NOT OVERLOAD THE DISH RACK. LOAD ONE DISH RACK INTO THE MACHINE AT A TIME.



Load plates and glasses in a peg rack.





Load utensils in a single layer in a flat bottom rack.

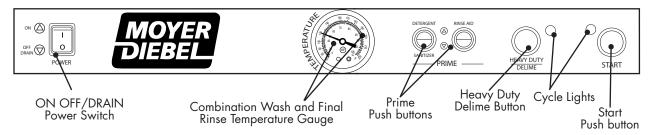
Load pots and pans in a flat bottom rack.

- 1. Prescrap and rinse the wares before loading to remove large food particles.
- 2. Load soiled wares into the dish rack. Place plates and glasses in a peg rack. Place cups and bowls in a flat bottom rack. Place utensils in a single layer in a flat-bottom rack. Place pots and pans in a flat-bottom rack.

### Do not overload the dish rack. Wash one dish rack at a time.

3. Slide one dish rack into the wash compartment making sure that wares do not interfere with the rotating spray arms. Do not wash more than one dish rack at a time.

### Normal Wash Mode



### ! VERY IMPORTANT ! Turn the power off to the dishwasher overnight and if it is unattended for an extended period of time.

- 1. Close the dishwasher front door.
- 2. Push the dishwasher Power Switch UP to turn the power ON.
- 3. The power switch will illuminate and the machine will fill with water.
- 4. Wait until the wash temperature gauge indicates a minimum of 120°F/49°C.

### RUN THE FIRST CYCLE WITH AN EMPTY DISH RACK TO HEAT THE WASH TANK INTERIOR.

- 5. Load the dish rack into the machine. Wash one dish rack at a time.
- 6. Close the door, then press the START BUTTON for 1 second. The green in-cycle light will illuminate and the wash cycle will begin. The total cycle is approximately 141 seconds.
- 7. Opening the door during a cycle will stop the dishwasher. If the door is open more than 5 seconds the cycle will restart from the beginning, if open less than 5 seconds the cycle will resume where it left off when the dishwasher door is closed.
- 8. The final rinse cycle begins at the end of the wash cycle. The machine drains and then refills with fresh water hot water. Check the rinse temperature gauge during the final rinse. It must indicate a minimum of 120°F/49°C. The final rinse water is retained for the next wash cycle.
- 9. When the green cycle light goes out, open the door and remove the rack of clean wares.

### **! VERY IMPORTANT !**

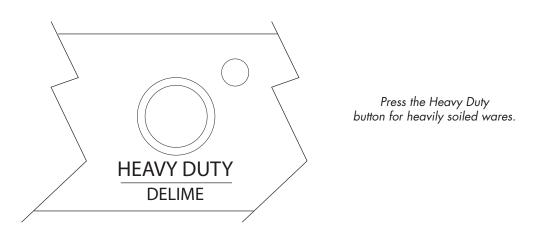
5.25% sodium hypochlorite (chlorine beach) must be used as a sanitizing agent to provide a minimum concentration of 50 ppm in the final rinse for the USA and 100 ppm in Ontario, Canada. The 50 ppm or 100 ppm concentration must be checked using chlorine test strips to make sure that the concentration is maintained.

### **Operation - Model 601LTG**

### Heavy Duty Mode - 601LTG

This mode is used to wash heavily soiled items such as pots, pans and other wares that require more washing time than the standard 90 second Normal Wash Mode. The dishwasher will remain in the Heavy Duty Mode until the operator exits the mode or a maximum of 15 minutes, whichever occurs first.

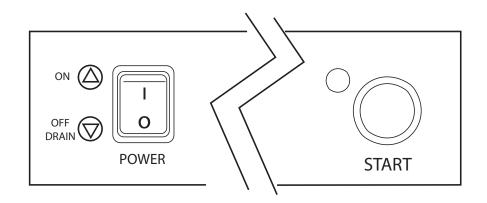
- 1. Load a dish rack into the dishwasher, close the door and press the START button.
- 2. The green in-cycle light will illuminate and the dishwasher will begin a normal wash cycle.
- 3. Wait 10 seconds for the detergent to enter the wash compartment before pressing the button.



- 4. Press the button to place the dishwasher in the Heavy Duty Wash Mode.
- 5. The green light will illuminate indicating that the machine is in the Heavy Duty Mode.
- 6. The dishwasher will continue to wash for a maximum of 15 minutes unless the operator presses the button again.
- 7. Press the Heavy Duty button. The green light will go out indicating the dishwasher has returned to the Normal Wash Mode.
- 8. The dishwasher will finish the wash cycle and perform a final rinse of the wares.

### **Drain Mode**

The dishwasher will enter the drain mode whenever the Power Switch is pushed down to the OFF/DRAIN position.

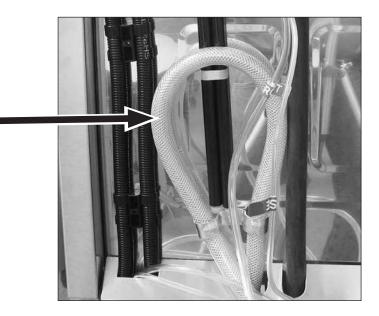


- 1. Push the illuminated power switch down to the OFF DRAIN position. The power switch light will go out.
- 2. The cycle light will illuminate and the machine will drain.
- 3. The machine, will flush, perform 3 short drain cycles and then drain completely.
- 4. The cycle light will go out indicating that the drain cycle is complete. Do not open the door until the light goes out.

### ! VERY IMPORTANT ! Draining Problems Related To Improper Installation.

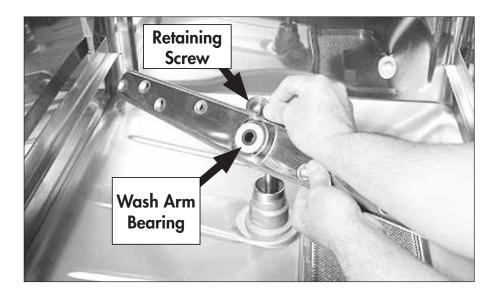
Problems with draining are often the result of improper installation. The drain hose is looped and clamped as shown in the photo below and must not be changed.

The drain hose is looped and clamped and must not be changed. Altering the drain hose routing may result in the machine's inability to drain or may cause the machine to siphon the water out of the machine.



### Cleaning - Model 601LTG

### Cleaning - Model 601LTG



### **! VERY IMPORTANT !** DRAIN AND CLEAN THE DISHWASHER EVERY 2 HOURS OF CONTINUOUS OPERATION, AFTER EACH MEAL PERIOD, AND AT THE END OF THE DAY.

### Cleaning the wash tank:

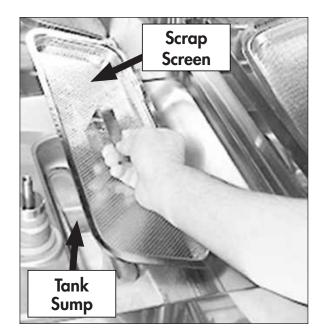
- 1. Remove the upper and lower spray arms and flush clean in a sink.
- 2. Remove the scrap screen taking care that debris does not fall off the screen and into the wash tank or sump. Flush the screen clean in a sink. Be sure to back-flush the screen.
- 3. <u>DO NOT</u> strike the scrap screen on solid surfaces.
- 4. Check the sump for foreign material.
- 5. Clean the wash pump strainer in the bottom of the sump.
- 6. <u>DO NOT</u> scrub the interior with metallic scrub pads.
- 7. Check the sump heating element for lime deposits and gently remove with a scouring pad. <u>DO NOT USE METALLIC PADS.</u>
- 8. Wipe the exterior of the dishwasher with a soft clean cloth and a mild detergent. DO NOT USE BLEACH.
- 9. Leave the door open to aid in overnight drying.

### Cleaning the wash arms:

- 1. There are two combination wash/rinse arms in the wash tank. They are interchangeable.
- 2. The wash arms are should be removed and thoroughly flushed clean in a sink.
- 3. Special attention should be paid to the cleaning and inspection of the wash arm bearings making sure they are clean and free of excessive wear.
- 4. If the bearings are damaged, contact an authorized service agent for replacement.

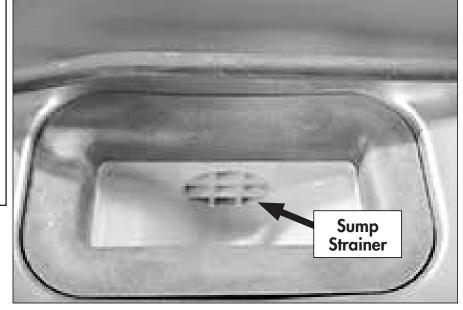
- 1. Lift the scrap screen straight up and out of the machine to prevent food particles from falling into the tank sump.
- 2. Flush the scrap screen in a remote sink making sure to back-flush both side of the screen.
- 3. Wipe the tank sump of water and debris.
- 4. Carefully inspect the sump strainer. This strainer is not removable but must be thoroughly cleaned before reinstalling the scrap screen.

### Scrap Screen and Sump Strainer



### ! ATTENTION !

A CLOGGED SUMP STRAINER WILL PREVENT THE PROPER WASHING, RINSING AND DRAINING OF THE MACHINE.



# WIPE THE EXTERIOR OF THE MACHINE WITH A SOFT CLOTH AND MILD DETERGENT. DO NOT SPRAY THE EXTERIOR WITH WATER.

LEAVE THE DOOR OPEN TO AID IN OVERNIGHT DRYING.

**! TURN POWER OFF OVERNIGHT !** 

Deliming - 601LTG

### Deliming - Model 601LTG

### **DANGER:**

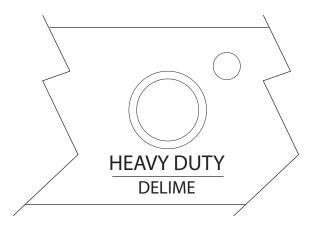
Death or serious injury may result when deliming solution is mixed with sodium hypochlorite sanitizing agent. Mixing may cause hazardous gases to form. Deliming solution and other acids must never be mixed with chlorine, iodine, bromine, or fluorine.

### **CAUTION:**

Skin contact with deliming solutions can cause severe irritation and possible chemical burns. Always wear eye protection, rubber gloves and protective clothing when handling chemicals.

### Delime Mode - Model 601LTG

The Heavy Duty/Delime switch is used to the delime the machine.



Model 601LTG Extended Wash/Delime Push button

### Model 601LTG Deliming

Follow the steps below to delime the 601LTG:

- 1. Open the dishwasher door and remove any dish racks.
- 2. Turn the power switch on the dishwasher to the ON position.
- 3. Remove the detergent and rinse-aid, and sanitizer chemical supply tubing from their chemical supply containers.
- 4. Place the tubing in a container of hot water.
- 5. Press and hold the prime switch UP in the DETERGENT position to flush the detergent from the supply tubing. Release the switch.
- 6. Press and hold the prime switch DOWN in the SANITIZER position to flush the sanitizer from the supply tubing. Release the switch.
- 7. Press and hold the rinse-aid prime switch UP in the RINSE AID position to flush the rinse-aid from the supply tubing. Release the switch.
- 8. Turn the dishwasher power switch to OFF/DRAIN to drain the wash tank. The green cycle light will go out in about 2 minutes.
- 9. <u>Always wear eye protection, rubber gloves and protective clothing when handling</u> <u>chemicals.</u> Open the door and carefully add the deliming chemical to the wash tank in accordance with your chemical supplier's instructions. Be careful to avoid splashing.
- 10. Close the door and press the Heavy Duty/Delime push button three times.
- 11. The Heavy Duty/Delime green indicator light will illuminate and the machine will run for 23 minutes.
- 12. Check the deliming results and if scale is still present repeat steps 9-11.
- 13. Push the power switch ON to refill the machine.
- 14. Return chemical supply tubing to their containers and prime the chemical lines.

### Maintenance - Model 601LTG

Follow the maintenance schedules below to keep the dishwasher operating most efficiently.

### **Daily Maintenance**

- 1. Make sure the water supply is on and that the drain is not clogged.
- 2. Check the temperature gauges and/or displays to ensure they are operating.
- 3. Make sure the dish racks are in good condition.
- 4. Check the chemical containers and refill as required.
- 5. Follow the cleaning procedures provided in the 601LTG Cleaning Section.

### Weekly Maintenance

- 1. Perform Steps 1-5 in the Daily Maintenance.
- 2. Inspect water lines for leaks.
- 3. Check for water leaks underneath the dishwasher.
- 4. Make sure the flexible water fill and drain hoses are not kinked.
- 5. Make sure that the dishwasher is level.
- 6. Clean accumulated lime deposits from the wash tank heating element.
- 7. Inspect the scrap screen and replace it if damaged.
- 8. Check the spray arms and replace or repair if damaged.

### Monthly Maintenance

- 1. Perform the Daily and Weekly Maintenance listed above.
- 2. Clean the chemical dispenser pick-up tubing for the chemical dispensing pumps.

### To clean the pick-up tubing:

- 1. Remove the pick-up tubes from their containers.
- 2. Place each tube in a separate container of hot water.
- 3. Press and hold the PRIME buttons UP and DOWN until water flows into the wash tank compartment.
- 4. Return the pick-up tubes to their containers.
- 5. Run 3 empty dishwasher cycles to flush any chemicals from the dishwasher wash compartment.
- 6. Return the pick-up tubes to their containers and prime the chemical lines.

NOTE: There are no lubrication points on the dishwasher.

# Troubleshooting

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### Troubleshooting

### Troubleshooting

Condition	Cause	Solution			
Dishwasher will not run.	Door not closed. Main power OFF. Dishwasher OFF. Circuit board fuse blown.	Close door completely. Check breaker on panel. Turn dishwasher power switch ON. Contact service agent.			
Low or no water.	Main water supply off. Fill hose kinked. Low incoming water pressure Solenoid valve defective. Solenoid strainer clogged.	Open supply valve. Straighten fill hose. Set flowing water pressure to 25-95 PSI. Install repair kit or replace. Clean strainer.			
Chemicals won't feed into dishwasher.	Chemical supply low. Supply tubing damaged. Supply tubing kinked. Pick-up tube clogged Chemical circuit board fuse blown. Pump squeeze tube defective.	Refill chemical container. Replace tubing. Straighten tubing. Clean/replace tube. Contact service agent. Replace squeeze tube.			
Low water pressure pumped from wash spray arms.	Clogged scrap screen. Clogged spray arms. Clogged pump intake.	Clean scrap screen. Clean spray arms. Inspect sump and clean pump intake.			
Poor wash results.	Excessively hard water. Thermistor defective. (See chemicals won't feed above.) (See low or no water above.) Detergent injector defective. Chemical circuit board fuse blown. Wares incorrectly loaded. in dishrack. Booster high limit tripped. Wash tank high limit tripped. Rinse arm nozzles clogged.	Contact chemical supplier. Replace thermistor. (See chemicals won't feed above.) (See low or no water above.) Replace squeeze tube. Replace injector motor. Clean tubing and pick-up. Contact service agent. Reposition wares or reduce amount of wares in dish racks. Reset or replace high limit. Reset or replace high limit. Clean nozzles with small paper clip.			
Water has drained out of the wash tank while the dishwasher was idle.	Anti-siphoning loop in drain hose has been removed. Drain hose was extended. Drain hose clamp is not holding the drain hose in proper position. Building plumbing does not provide correct air vent to prevent siphoning.	Re-route drain hose. DO NOT STRETCH HOSE Replace/adjust hose clamp making sure goose-neck is maintained. Contact service Agent and/or plumber.			
Dishwasher stays in wash cycle.	Rinse Sentry extends wash mode for a maximum time of 5-minutes to allow final rinse water booster temperature to reach 180°F/82°C.	Contact service agent.			

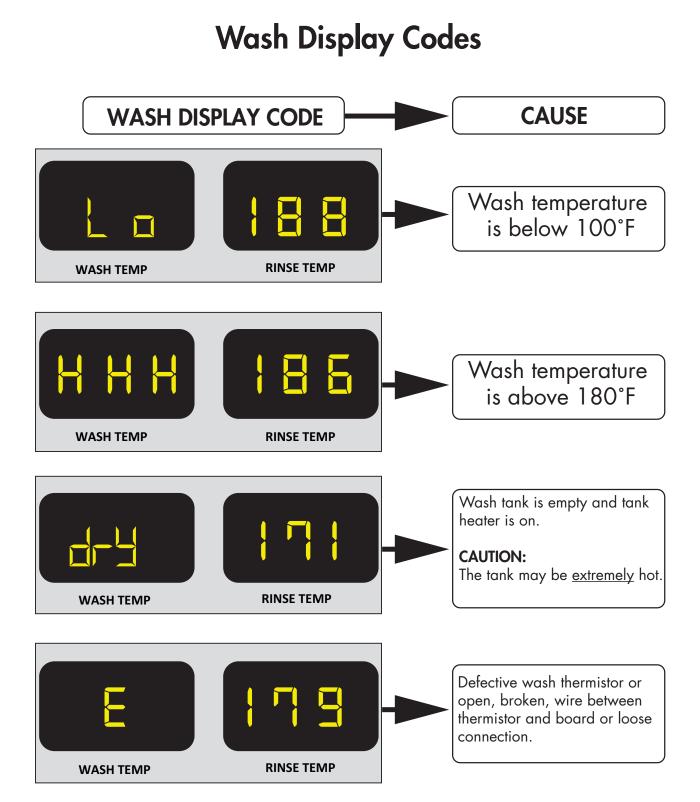
### **Timer Board Diagnostics**

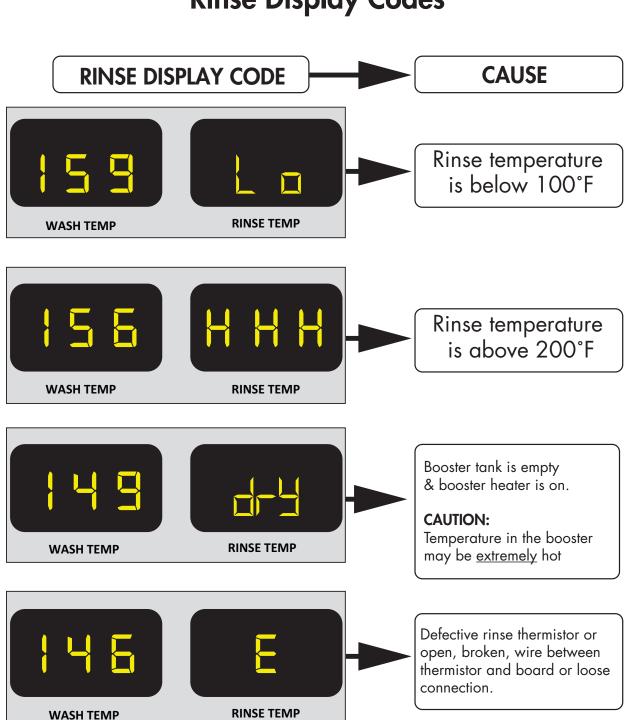
Follow the instructions below to quickly check the status of many machine components.

			$\overline{\mathbb{S}}$	$\bigcirc$	$\bigcirc$	000	$\overline{\otimes}$	66	POSSIBLE CASUE / SOLUTION
	vitch to "OFF" and allow	OPERATIONAL	drain valve	door switch, cycle light	start button	fill valve detergent pump rinse-aid pump	drain-valve	wash pump drain pump / sanitizer	Check the component that did not run Check the 6 amp fuse on the timer board Check the pump motor/ See troubleshooting guide Check neutral wire/See troubleshooting guide
jnostic Test	RED ON/OFF switch <u>must be</u> in "OFF" position. If not, switch to "OFF" and allow machine to drain (90 sec.)	REACTION OBSERVED	drain valve opens and closes 5 times.	green cycle light blinks	green cycle light blinks	fill valve opens detergent pump runs rinse-aid pump runs	drain valve opens drain valve closes	wash pump runs drain pump / sanilizer runs	t run
Timer Board Self-Diagnostic Test	RED ON/OFF switch <u>must</u> machine to drain (90 sec.)	PERFORM ACTION	With the Power Switch in the OFF/DRAIN position, press the START button 2 times.	open door	<b>3</b> press and release START switch	close door and press start switch 3 times. Components on the right will run	consecutively for a few seconds.		If one or more components do not run, see below: <ul> <li>One of the components in step 3 does not run</li> <li>One of the components in step 3 does not run</li> <li>The wash pump is the only component that runs</li> <li>The wash pump is the only component that will not run and the 6 amp fuse is good</li> <li>None of the components run in step 3</li> </ul>
6A 250V FUSE									

### **Digital Temperature Display Codes**

Display codes that appear in the display windows indicate the operating condition of the machine. Refer to the illustrations below for the meaning of the codes.

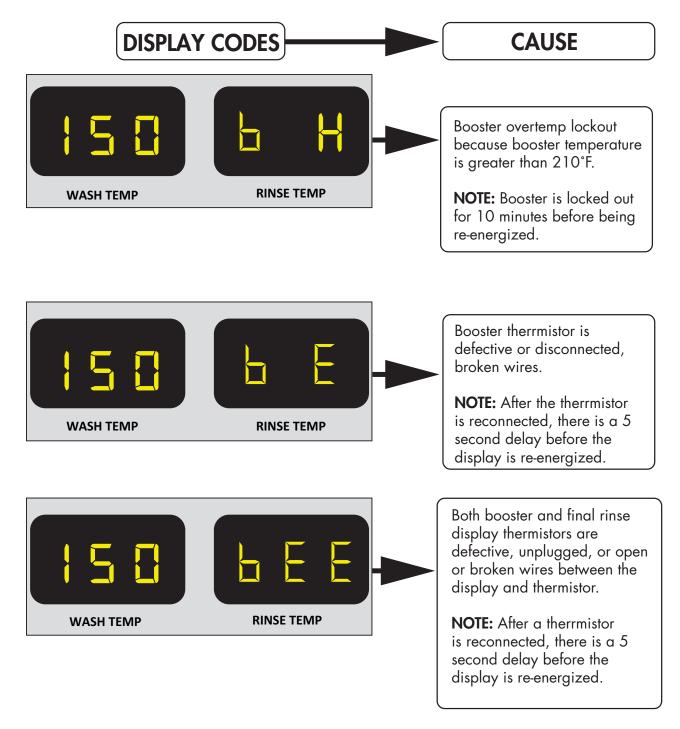


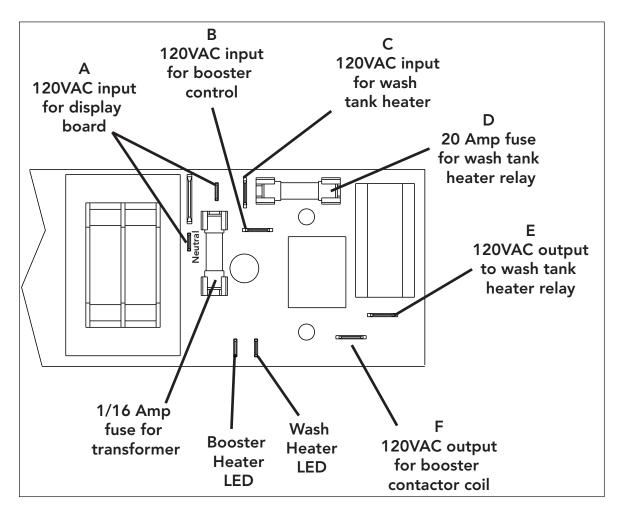


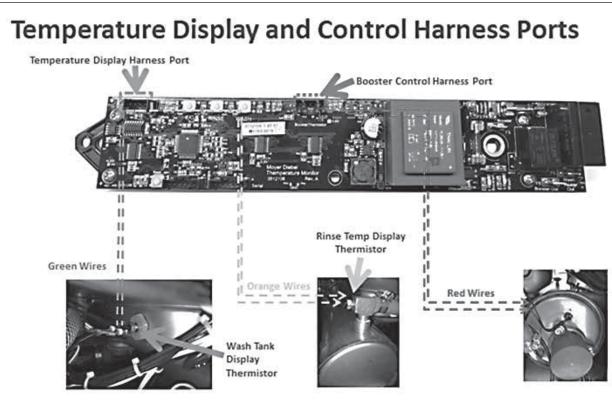
# **Rinse Display Codes**

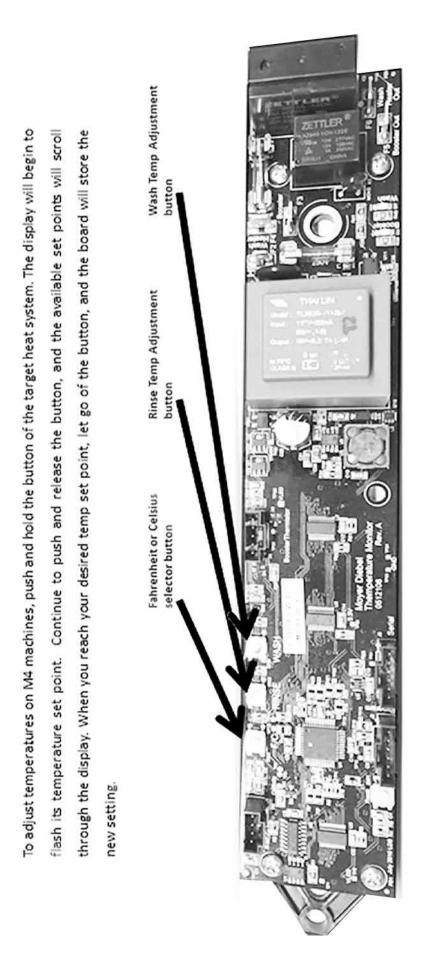
# **Booster Display Codes**

## Error Codes for Booster and Final Rinse Thermistors Only.





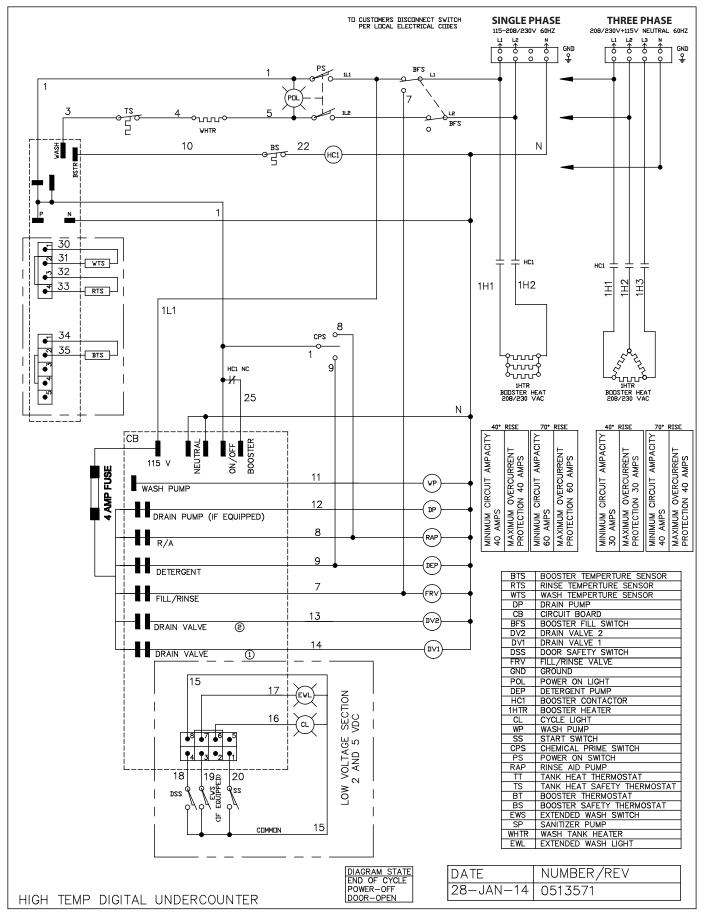


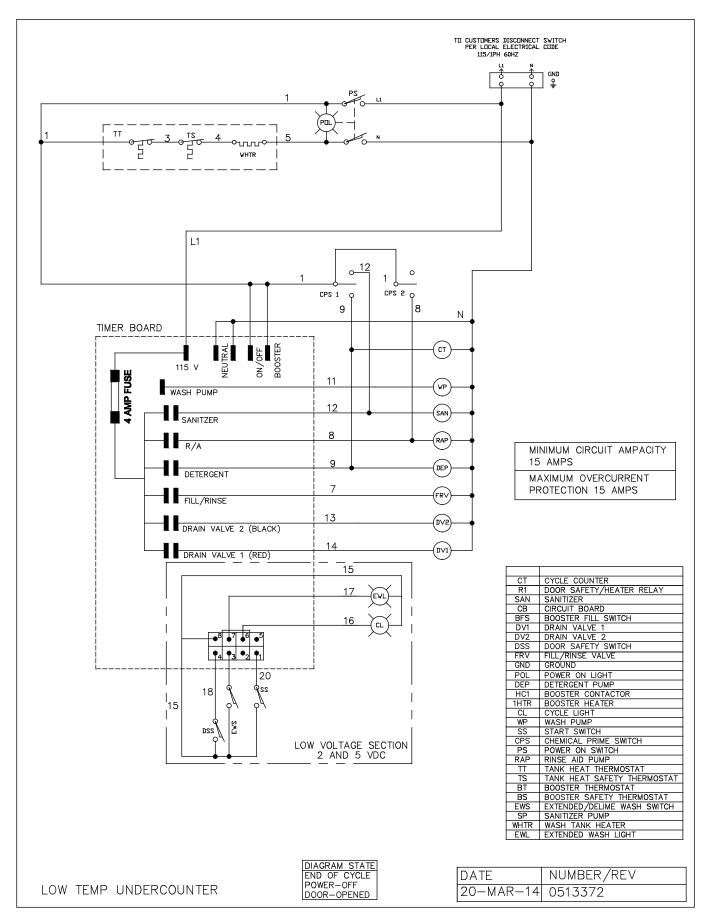


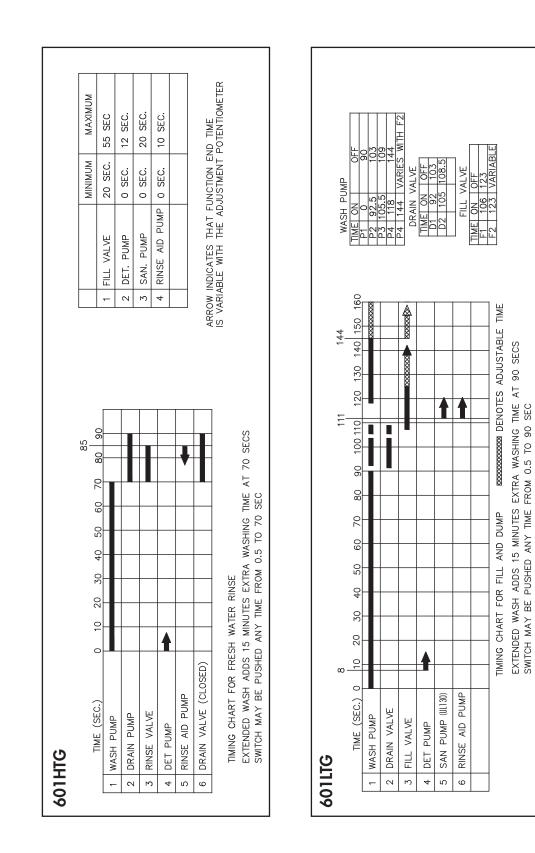
# M4 Temperature Control Board Operation Explained

58

### **601HTG Electrical Schematic**







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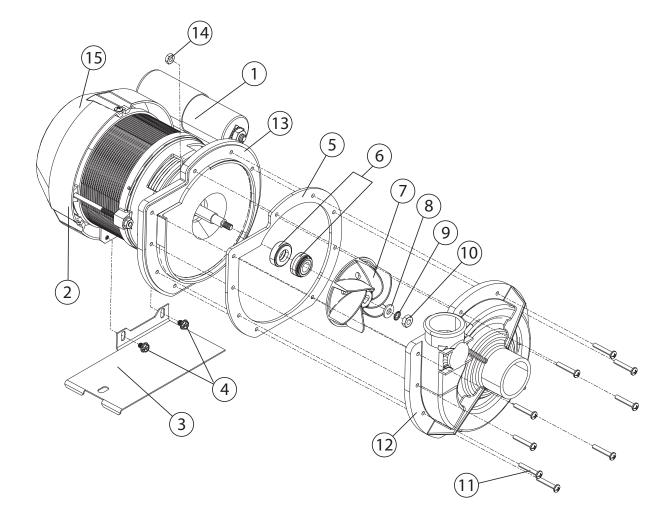
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# Service Replacement Parts

## Illustrations

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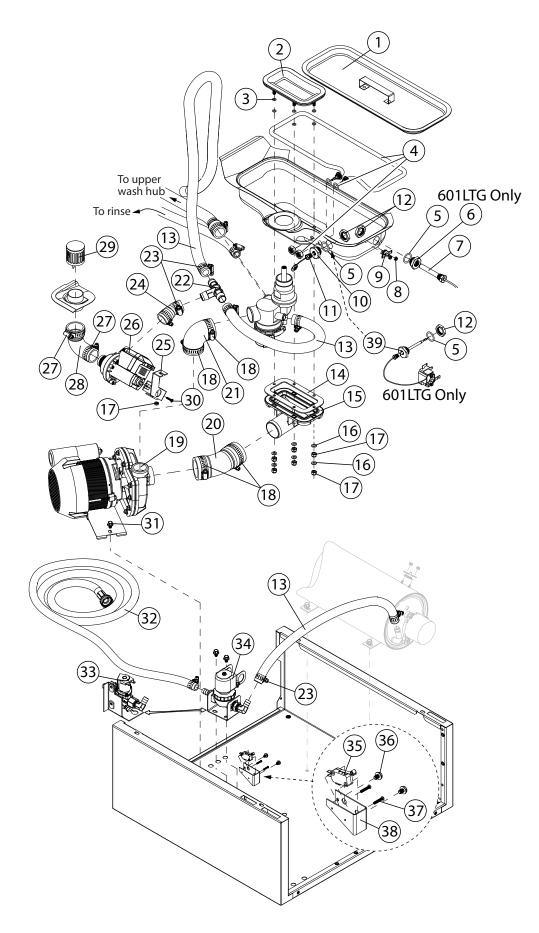
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# All Models - Wash Pump/Motor Assembly

ltem No.	Part No.	Description	Qty.
1	0512347	CAPACITOR $40\mu F$	1
2	0512101	PUMP/MOTOR ASSEMBLY COMPLETE	1
3	0313394	BRACKET, WASH PUMP	1
4	0512185	Bolt, Hex flange 1/4-20 X 3/8" SST	2
5	110285	GASKET	1
6	114139	SEAL	1
7	0512345	IMPELLER	1
8	0501478	WASHER, PLAIN, 17/64"	1
9	106482	WASHER, LOCK, 1/4"	1
10	114144	NUT, M6	1
11	0512340	SCREW, M4, PHIL, PAN HD.	9
12	0512341	VOLUTE, PUMP	1
13	114137	BACKPLATE, PUMP	1
14	107337	NUT, M4	9
15	0513131	COVER, REAR MOTOR FAN	1

NOTE: The pump motor is not sold separately.



## All Models - Base Assembly

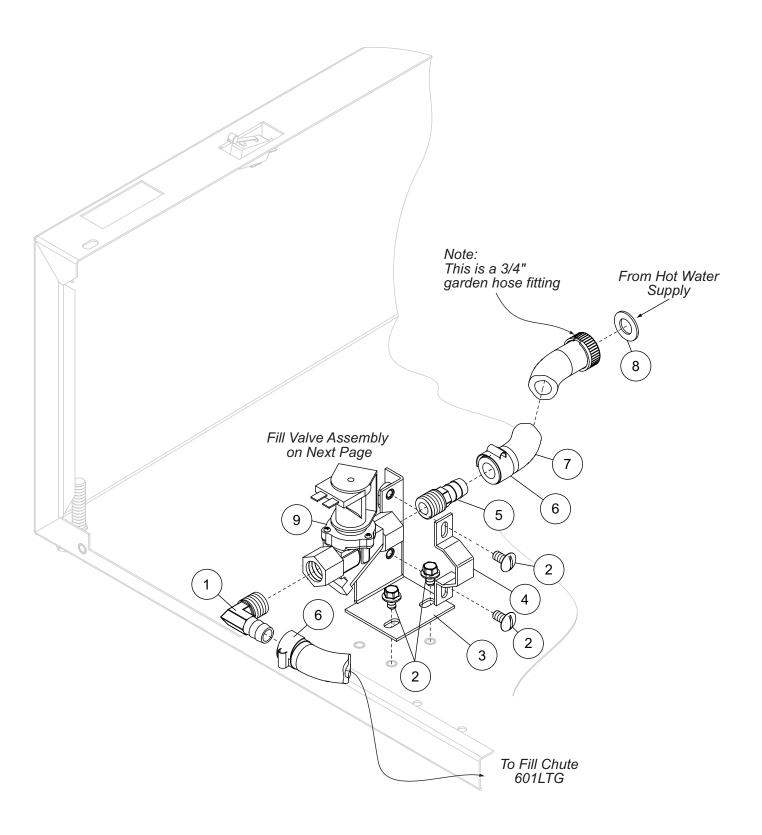
ltem No.	Part No.	Description	Qty.
1	0512136	SCREEN, SCRAP ASSY.	1
2	0513324	FLANGE, PUMP SUCTION	1
3	0513677	O-RING	A/R
4	0512169 0512426	HEATER, 120VAC 750W (601LTG) HEATER, 240VAC 2000W (All except 601HTG)	1 1
5	0512099	O-RING	1
6	0508872	ADAPTOR, THERMOMETER (601LTG)	1
7	0512107	THERMOMETER, WASH TANK (601LTG)	1
8	108954	NUT, GRIP 6-32 WITH NYLON INSERT SST	2
9	113604	THERMOSTAT, HI-LIMIT BI-METAL SNAP, 212°F	1
10	0512299	ADAPTOR, THERMISTOR	1
11	112612	THERMISTOR, 10 K $\Omega$ , 2 WIRE ASSY, WASH TANK (All except 601LTG)	1
12	201029-1	NUT, LOCK 1/2 INCH NI PLATED	A/R
13	0509302	HOSE, 5/8" ID X 1" OD	A/R
14	0513329	GASKET, PUMP SUCTION	1
15	0513325	ELBOW, PUMP SUCTION	1
16	0501476	WASHER	6
17	107967	NUT, 1/4-20 W/NYLON INSERT SST	6
18	0502571	CLAMP, HOSE 1-1/16" - 2"	2
19	0512101	PUMP/MOTOR COMPLETE 115/60/1	1
20	0513328	HOSE, PUMP SUCTION	1
21	0512119	HOSE, PUMP DISCHARGE	1
22	0512134	TEE, 3/4", POLY.	1
23	0508808	CLAMP, SS GEAR	2
24	0313171	HOSE, MOULDED 2-1/2"	1
25	0312145	BRACKET, DRAIN PUMP (601HTG)	1

#### All Models - Base Assembly

ltem No.	Part No.	Description	Qty.
26	0512227	PUMP, DRAIN 115VAC (601HTG)	1
27	0512322	CLAMP, HOSE	2
28	0513339	HOSE, OVERFLOW (601HTG)	1
29	0712236	TUBE, OVERFLOW GUARD (601HTG)	1
30	109835	SCREW #8 X 1/2" SELF-TAPPING SST	1
31	0512185	Bolt, Hex Flange 1/4-20 X 3/8" SST	1
32	0509526	HOSE, 1/2" X 7 FT. FEM. GARD. ADAPT.	1
33	0504952	VALVE, FILL 5.0 GPM (601LTG)	1
34	109886	VALVE, SOLENOID, 1/2" NPT (601HTG)	1
35	0501379	SWITCH, 15A	1
36	0512792	SCREW, 10-32 X 1/4" RD. HD. PHILL. SST	2
37	0508752	SCREW, 4-40 X 5/8" RH. HD. PHILL. SST	2
38	0313432	BRACKET, DOOR SWITCH	1
39	0507323	Thermostat, WASH (601LTG)	1

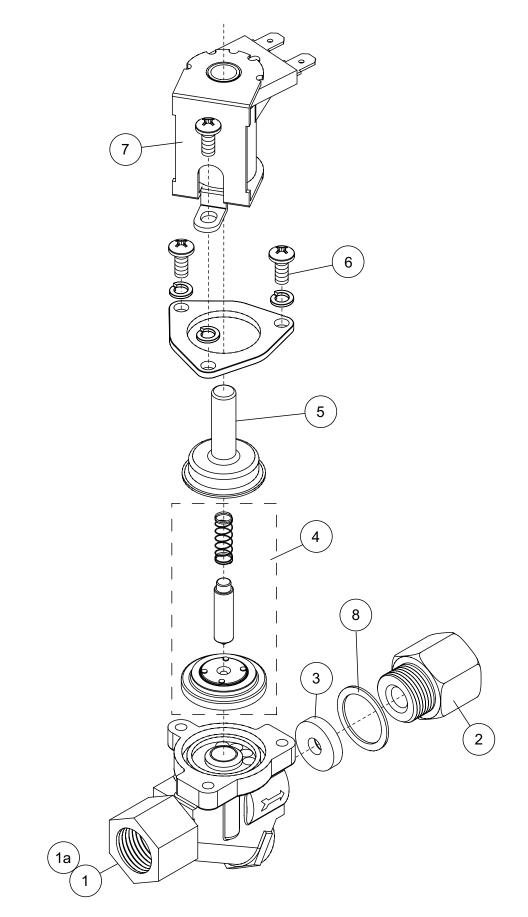
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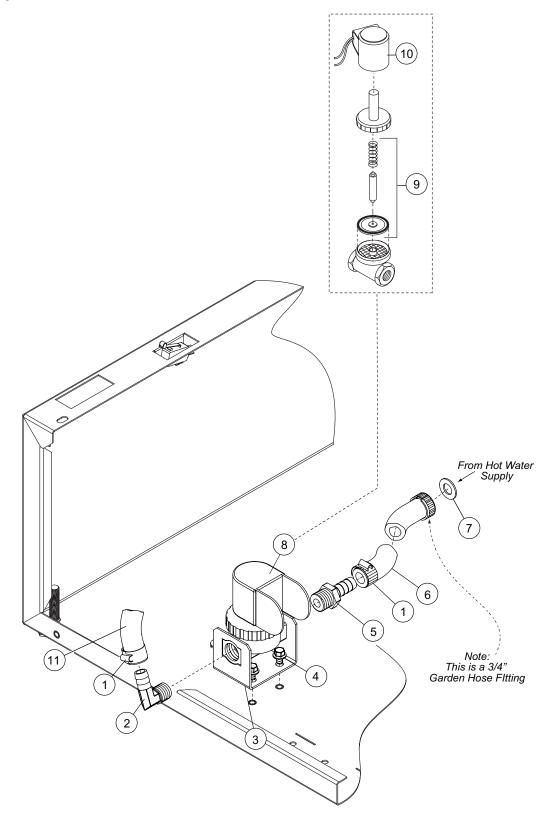


# 601LTG - Fill Piping Assembly

ltem No.	Part No.	Description	Qty.
1	0502653	ELBOW, 90° 3/8" MPT X 1/2" HOSE	1
2	0512185	Bolt, Hex Flange 1/4-20 X 3/8" SST	4
3	0300065	SUPPORT, VALVE	1
4	0300203	CLAMP, VALVE	1
5	0502618	HOSE BARB, 1/2" X 3/8" MPT	1
6	0512985	CLAMP, HOSE	1
7	0509526	HOSE, 1/2" X 7 FT. FEM. GARD. ADAPT.	1
8	0505320	WASHER, 1" OD GARDEN HOSE	1
9	0504952	VALVE, FILL, 5.0 GPM	1

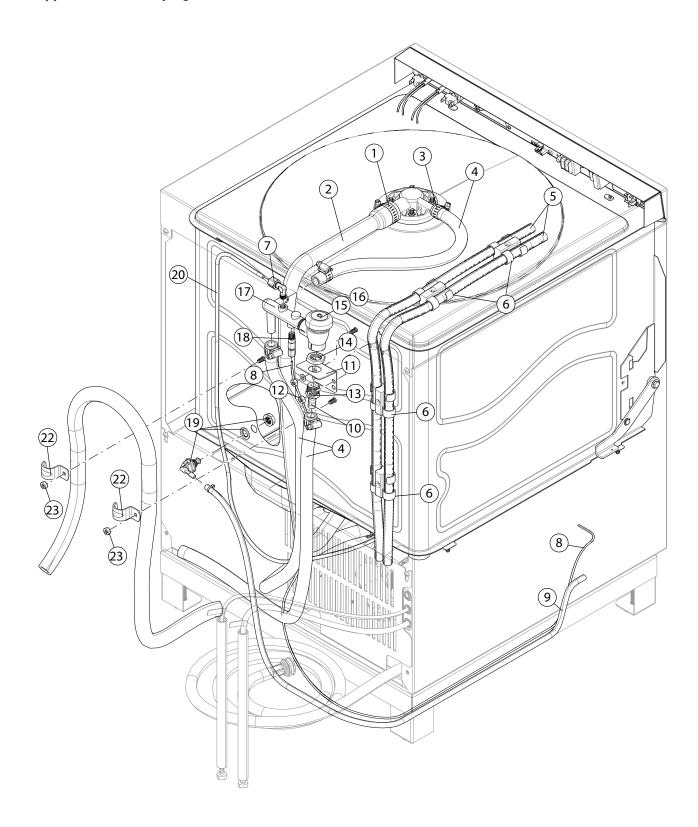


ltem No.	Part No.	Description	Qty.
1	0504952	VALVE, FILL 5.0 GPM	1
1a	0513557	VALVE, FILL 1.0 GPM	1
3	0502804	GASKET, CAP	1
4	0504958	WASHER, FLOW 5.0 GPM	1
5	0502811	KIT, REBUILD	1
6	0505229	GUIDE	1
7	0501406	SCREW, SLOT SS RH 8-32 X 1/2"	3
8	0505235	COIL, 115V 60HZ 10W	1
9	0502807	GASKET, OUTLET (COPPER)	1

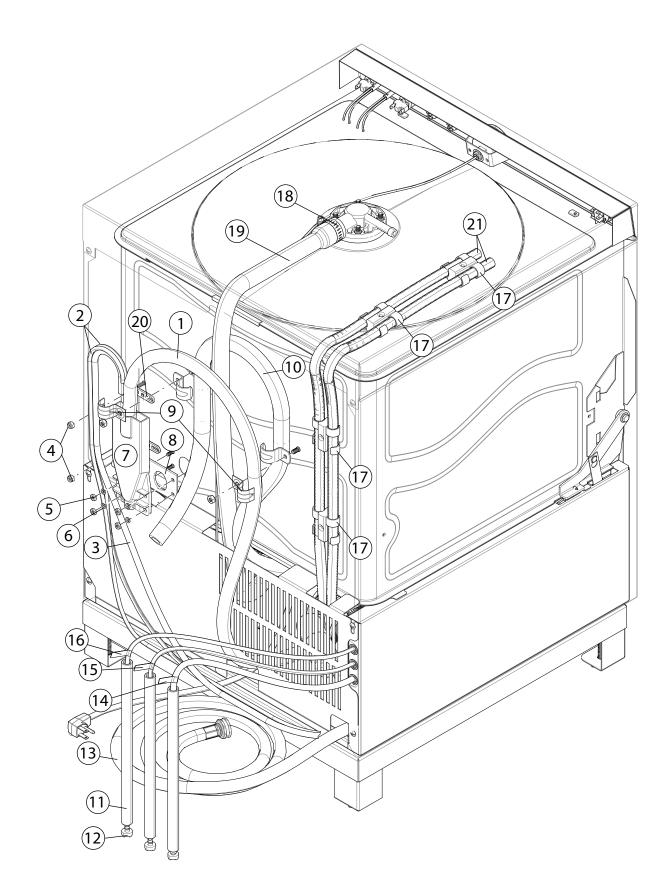


# 601HTG - Fill Piping Assembly

ltem No.	Part No.	Description	Qty.
1	0512985	CLAMP, HOSE	2
2	0508782	ELBOW, 90° 1/2" MPT X 1/2" HOSE	1
3	0312146	BRACKET, 1/2" SOLENOID VALVE (601HTG)	1
4	0512185	Bolt, hex flange 1/4-20 x 3/8" ss	2
5	0502618	BARB, HOSE 1/2" X 3/8" MPT	1
6	0509526	HOSE, 1/2" X 7 FT. FEM. GARD. ADAPT.	1
7	0505320	WASHER, 1" OD GARDEN HOSE	1
8	109886	VALVE, SOLENOID, 1/2" NPT 120VAC	1
9	109902	KIT, REPAIR, 1/2" SOLENOID VALVE	1
10	108516	KIT, REPAIR, COIL, 120VAC	1
11	107417	HOSE, RUBBER 1/2" ID X .84" OD	A/R



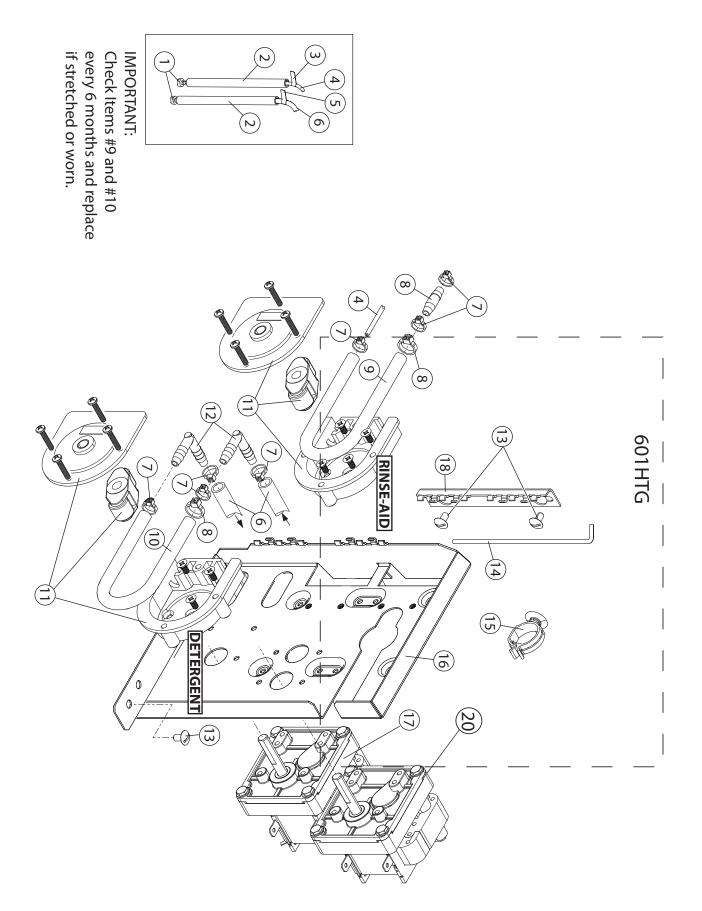
ltem No.	Part No.	Description	Qty.
1	0502571	CLAMP, HOSE	1
2	0512120	HOSE, UPPER WASH	1
3	0512985	CLAMP, HOSE	A/R
4	107417	HOSE, RUBBER 1/2" ID X .84" OD	A/R
5	0512757 0512758	Conduit, 1/2" Conduit, 3/8"	A/R A/R
6	0512369	CLAMP, CONDUIT	4
7	112728	ELBOW, 1/8" MPT X 1/4" COMP PP	1
8	112883-1	TUBING, 1/8" OD X 1/16" ID (RINSE-AID)	A/R
9	0502667	TUBING, 1/4" ID X 3/8" OD (DETERGENT)	A/R
10	0502651	COUPLER 1/2" MPT X 1/2" HOSE	1
11	0312190	BRACKET, VACUUM BREAKER	1
12	100003	NUT, HEX SST 1/4-20	2
13	106482	WASHER, SPLIT LOCK 1/4" SST	2
14	201029-1	NUT, LOCK 1/2" NICKEL PLATED	1
15	100500	VACUUM BREAKER, 1/2" NPT, BRONZE	1
16	900836	REPAIR KIT, VACUUM BREAKER 1/2"	1
16	0508817	PLUG, 1/8" HEX COUNTERSUNK	A/R
17	0513110	MANIFOLD, RINSE	1
18	112763	FITTING, INJECTOR RINSE-AID (601HTG)	1
19 	0713656 110750 0513672	KIT, DETERGENT FITTING GASKET NUT, NP 1/4' NPS PP BLACK	1 1 1
20	107928	TUBING, 1/4" NATURAL	AR
21	0509302	HOSE, 5/8" ID X 1" OD	A/R
22	107239	CLAMP, EMT	2
23	107967	NUT, 1/4-20 W/NYLON INSERT SST	1



## 601LTG - Fill Chute Assembly

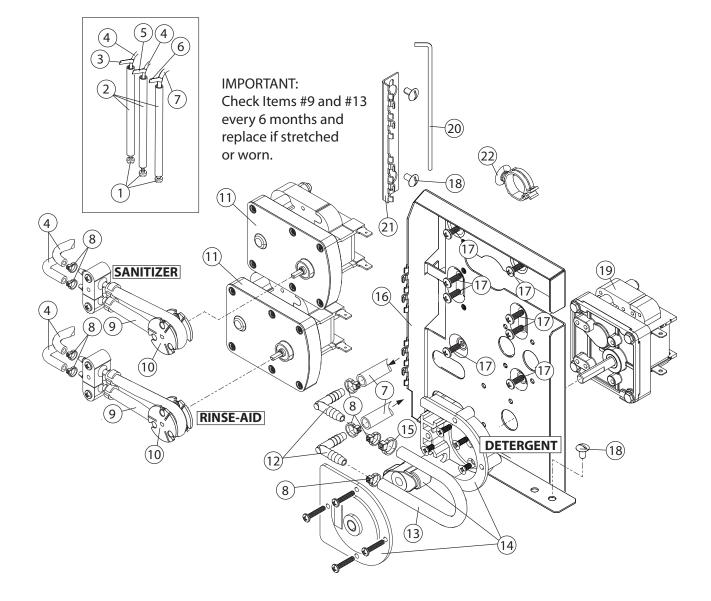
ltem No.	Part No.	Description	Qty.
1	107417	HOSE, RUBBER 1/2" ID X .84" OD	A/R
2	0502666	HOSE, 1/8" ID X 1/4" OD PVC	A/R
3	0502667	HOSE, 1/4" ID X 3/8" OD PVC	A/R
4	100194	NUT, GRIP 10-32 W/NYLON INSERT	2
5	0503722	NUT, HEX 10-32 SST	4
6	0507709	WASHER, FLAT #10 SST	4
7	0508867	CHUTE, INLET	1
8	0509048	GASKET, INLET CHUTE	1
9	0308822	CLAMP, EMT 1/2"	1
10	0509302	HOSE, 5/8" ID X 1" OD PVC BRAIDED	A/R
11	0306363	TUBE, STIFFENER	A/R
12	0501869	STRAINER	A/R
13	0509526	HOSE, FILL 1/2" X 7 FT. FEM. GARD. ADAPT.	1
14	0503695	LABEL, DETERGENT HOSE	1
15	0505483	LABEL, RINSE-AID HOSE	1
16	0503694	LABEL, SANITIZER HOSE (601LTG)	1
17	0512369	CLAMP, CONDUIT	4
18	0502571	CLAMP, HOSE GEAR	A/R
19	0512120	HOSE, WASH	1
20 —	106090 0501518	TIE PLATE TIE, NYLON 5-1/2"	2 2
21	0512757 0512758	Conduit, 1/2" Conduit, 3/8"	A/R A/R

## Chemical Dispensing Pumps - 601HTG



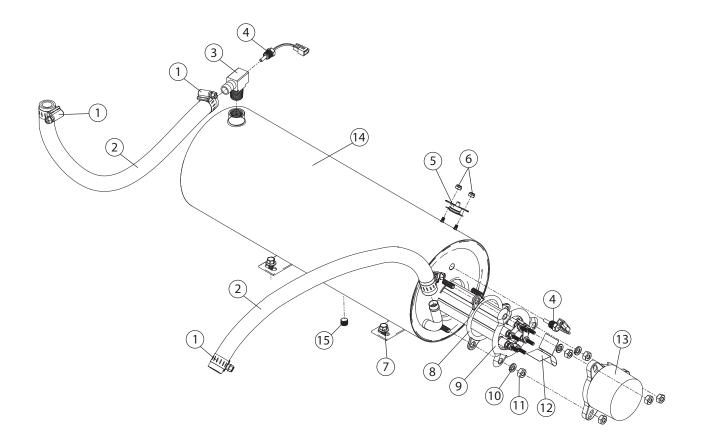
# 601HTG - Chemical Dispensing Pumps

ltem No.	Part No.	Description	Qty.
1	0501869	STRAINER	2
2	0306363	TUBE, 3/8" ID X 12" LG. STIFFENER	1
3	0505483	LABEL, RINSE-AID HOSE	1
4	112883-1	TUBING, 1/8" OD X 1/16" ID	A/R
5	0503695	LABEL, DETERGENT HOSE	A/R
6	0502667	HOSE, 1/4" ID X 3/8" OD PVC	A/R
7	0501519	TIE, NYLON 4"	9
8	0512369	CLAMP, HOSE	2
9	112759	TUBE, PUMP 1/8" ID X 9" LG.	1
10	114202	TUBE, PUMP 3/16" ID X 3/8" OD X 9" LG.	1
11	114203	PUMP HD KIT, PERISTALIC	2
12	0502644	ELBOW, 1/4" HOSE BARB	2
13	100007	SCREW, 10-32 X 3/8" TRUSS SST	3
14	0313644	PIN, HINGE	1
15	0513645	HOLDER, CABLE	4
16	0313393	BRACKET, CHEMICAL PUMP	1
17	0510870-1	GEARMOTOR, 115/60/1, DETERGENT PUMP	1
18	0313431	BRACKET, HINGED PANELS	1
19	0502666	HOSE, 1/8" ID X 1/4" OD PVC	A/R
20	0510872-1	GEARMOTOR, 115/60/1, RINSE-AID PUMP	1

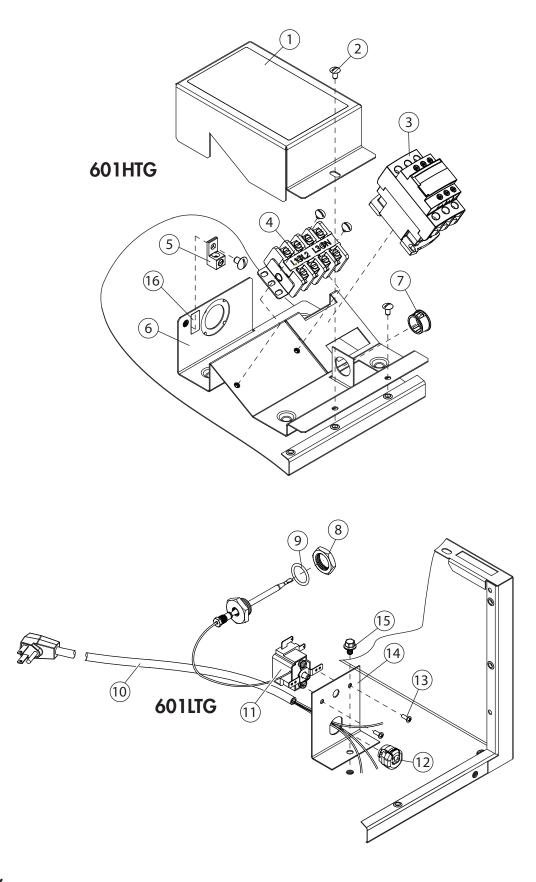


## 601LTG - Chemical Dispensing Pumps

ltem No.	Part No.	Description	Qty.
1	0501869	STRAINER	2
2	0306363	TUBE, 3/8" ID X 12" LG. STIFFENER	1
3	0505483	LABEL, RINSE-AID HOSE	1
4	0502666	HOSE, 1/8" ID X 1/4" OD PVC	A/R
5	0503694	LABEL, SANITIZER HOSE	A/R
6	0503695	LABEL, DETERGENT HOSE	A/R
7	0502667	HOSE, 1/4" ID X 3/8" OD PVC	A/R
8	0501519	TIE, NYLON 4"	7
9	0706635	TUBE, ELEMENT ASSEMBLY 45CC	1
10	0707142	ROTOR	1
11	0503756	MOTOR, INJECTOR PUMP	1
12	0502644	ELBOW, 1/4" HOSE BARB	2
13	114202	TUBE, 3/16" ID X 3/8" OD X 9" LG.	1
14	114203	PUMP HD KIT, PERISTALIC	1
15	0512369	CLAMP, HOSE	1
16	0313393	BRACKET, CHEMICAL PUMP	1
17	0504822	SCREW, 8-32 X 1/2" PAN HD. SST	4
18	100007	SCREW, 10-32 X 3/8" TRUSS SST	3
19	0510870-1	GEARMOTOR, 115/60/1	1
20	0313644	PIN, HINGE	1
21	0313431	BRACKET, HINGED PANELS	1
22	0513645	HOLDER, CABLE	4
	WS1	FLOAT TUBE SENSOR, CHEMICAL ALARM (N	Not Shown) 1

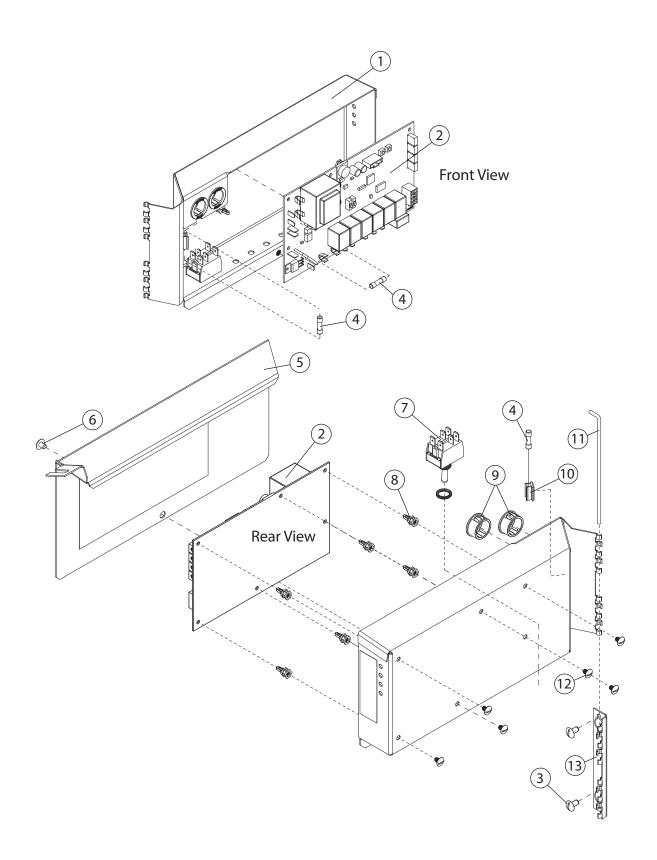


ltem No.	Part No.	Description	Qty.
1	0512985	CLAMP, SS GEAR-MIN. 1/2"	4
2	107417	HOSE, RUBBER 1/2" ID X .84" OD	A/R
3	0513314	TEE, RINSE	1
4	0513310	THERMISTOR 10 k $\Omega$ , 2-WIRE	2
5	110562	THERMOSTAT, HIGH LIMIT 240°F	1
6	108954	NUT, GRIP 6-32 W/NYLON INSERT SST	2
7	0512185	BOLT, HEX FLANGE, 1/4-20 X 3/8" SST	2
8	109985	SEAL, BOOSTER ELEMENT	1
9	111235-1 111233	BOOSTER, ELEMENT 5 KW, 40°F RISE BOOSTER, ELEMENT 9 KW, 70°F RISE	1 1
10	106482	WASHER, LOCK 1/4" SPLIT SST	3
11	100003	NUT, PLAIN 1/4-20 SST	6
12	111885	INSULATOR	1
13	107908	COVER, ELEMENT	1
14	0713333	TANK, BOOSTER SST	1
15	0508817	PLUG, 1/8"	1
	0513538	HARNESS, BOOSTER CONTROL (Not Shown)	1



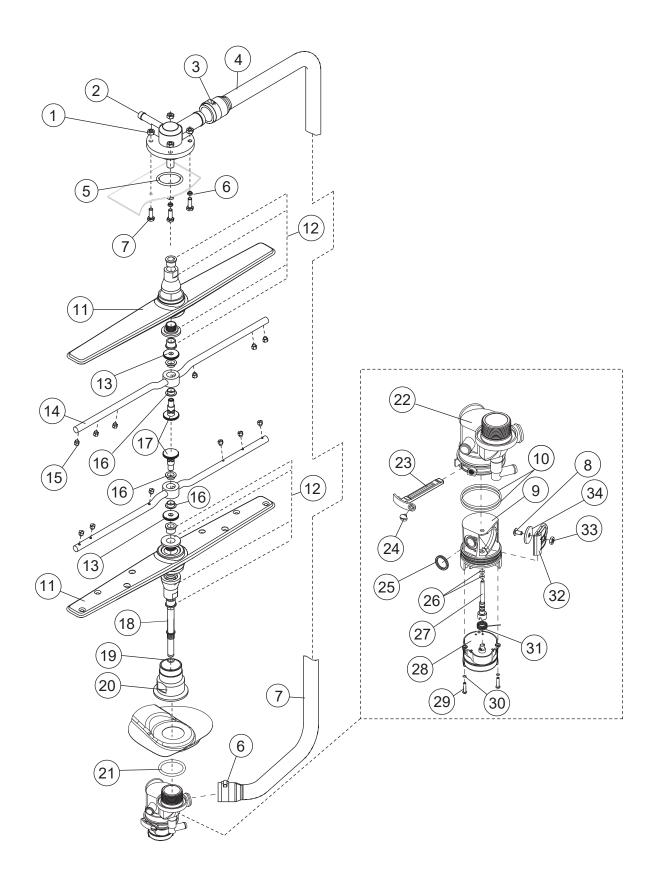
# All Models - Power Input Block and Cord Assemblies

ltem No.	Part No.	Description	Qty.
1	0313396	COVER, BOX WIRING	1
2	0501411	SCREW, 10-32 X 1/4", TRUSS HD.	2
3	0512432	CONTACTOR, 3-POLE 120VAC COIL	1
4	0509527	BLOCK, TERMINAL, 4-POLE (All except 601LTG)	1
5	103310	LUG, GROUND	1
6	0313395	BOX, WIRING	1
7	107964	BUSHING, STRAIN RELIEF, SMALL	A/R
8	201029-1	NUT, LOCK 1/2 INCH NI PLATED	A/R
9	0512099	O-RING	1
10	0513312	CORD AND PLUG, 115VAC (601LTG)	1
11	0507323	THERMOSTAT, WASH (601LTG)	1
12	0503647	RELIEF, STRAIN	1
13	0501450	SCREW, 6-32 X 3/16" NIBS, RH PHIL. SST	2
14	0313410	BRACKET, POWER CORD	1
15	0512185	BOLT, HEX FLANGE, 1/4-20 X 3/8" SST	1
16	0503592	label, ground	1



## 601HTG- Timer Control Board Assembly

ltem No.	Part No.	Description	Qty.
1	0313397	BOX, CONTROL BOARD	1
2	0712105	TIMER CKT. BD.	1
3	0501464	SCREW, 10-24 X 3/8; TRUSS HD. SST	2
4	0512373	FUSE, 4A 250V	1
5	0313398	COVER, BOX	1
6	0501411	SCREW, 10-32 X 1/4" SST	1
7	0501373	SWITCH, BOOSTER FILL (601HTG Only)	1
8	0512973	STANDOFF	6
9	107964	BUSHING, STRAIN RELIEF	2
10	0512781	HOLDER, FUSE	1
11	0313644	PIN, HINGE	1
12	0501408	SCREW, 8-32 X 1/4" TRUSS HD. PHIL. SST	6
13	0313431	BRACKET, HINGED PANELS	1

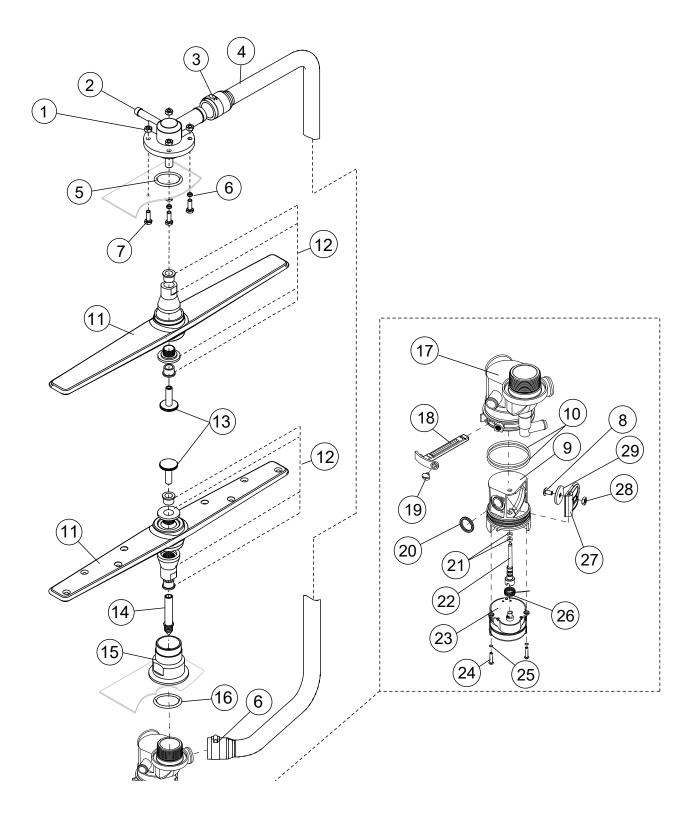


ltem No.	Part No.	Description	Qty.
1	107967	NUT, HEX 1/40-20 NYLON INSERT SST	4
2	0314251	HUB, UPPER SPRAY ARMS	1
3	0502571	CLAMP, HOSE GEAR 1-1/2" SST	2
4	0512120	HOSE, UPPER WASH ARM	1
5	0512133	O-RING, 2-1/8" OD X 1-3/4" ID X 3/16"	1
6	0501481	WASHER, NYLITE	4
7	100738	BOLT, 1/4-20 X 1" SST	4
8	100007	SCREW, FLAPPER SEAL 10-32 X 3/8" RD.HD. SST	1
9	0513441	BODY, CARTRIDGE DRAIN VALVE	1
10	0513444	O-RING, CARTRIDGE BODY	2
11	H420548	WASH ARM ASSEMBLY (Includes Item 12)	2
12*	0712749	BEARING ASSEMBLY	2
13	H34998	NUT, SPACER	2
14	H36211	RINSE ARM ASSEMBLY (Includes Items 13, 16, and 17)	2
15	H37149	NOZZLE, RINSE ARM	12
16	H190663	BEARING, RINSE ARM	4
17	H36275	SPINDLE, RINSE ARM	2
18	0512124	SHAFT, LOWER	1
19	0512239	O-RING	1
20	0512066	HUB, LOWER WASH ARM	1
21	0512133	O-RING, 2-1/8" OD X 1-3/4" ID X 3/16"	1
22	0513439	HOUSING, MANIFOLD FWR	1
23	0513443	PIN, RETENTION	1
24	0509439	SCREW, RETENTION PIN 10-32 X 5/16" SST	1
25	0513446	O-RING, QUAD	1
26	0513445	O-RING, PIVOT SHAFT	2
27	0513447	SHAFT, FLAPPER	1
28	0712123	MOTOR, DRAIN VALVE	1
	0509257	PIN, MOTOR (COMES WITH MOTOR)	1
29	104883	SCREW, MOTOR 6-32 X 3/8" SST	2
30	0501497	WASHER, SPLIT LOCK #8	2
31	0512126	SPRING, TORSION	1
32	0513442	FLAPPER	1
33	100194	NUT, FLAPPER SEAL 10-32 SST	1
34	0512127	GASKET, FLAPPER	1

 0713667	CARTRIDGE ASSEMBLY, DRAIN VALVE COMPLETE
	INCLUDES ITEMS 23-34, 8-10

\* Note: The bearing assembly, P/N 0712749 includes 2 bearings, 1 locknut, and 1 wash arm hub. The bearings, locknut and hub are not available as separate service replacement parts.

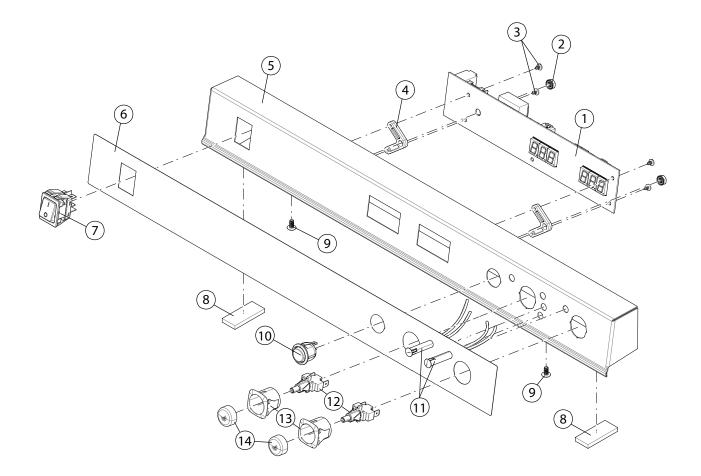
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ltem No.	Part No.	Description	Qty.
1	107967	NUT, HEX SST 1/4-20 NYLON INSERT	4
2	0514251-1	HUB, UPPER WASH ARM, M3/M4 FWR	1
3	0502571	CLAMP, HOSE GEAR HOSE 1-1/2" SST	2
4	0512120	HOSE, UPPER WASH ARM	1
5	0512133	O-RING, 2-1/8" OD X 1-3/4" ID X 3/16	1
6	100738	BOLT, 1/4-20 X 1" HEX. HD. SST	4
7	0501481	WASHER, NYLTITE	4
8	0501412	SCREW, FLAPPER SEAL 10-32 X 3/8"	1
9	0513441	BODY, CARTRIDGE DRAIN VALVE	1
10	0513444	O-RING, CARTRIDGE BODY	
11	H420548	WASH ARM ASSEMBLY (Includes Item 12)	2
12*	0712749	BEARING ASSEMBLY	2
13	0512129	NUT, WASH ARM	2
14	0512125	SHAFT, LOWER	1
15	0512066	HUB, LOWER WASH ARM	1
16	0512133	O-RING, 2-1/8" OD X 1-3/4" ID X 3/16	1
17	0513439	HOUSING, MANIFOLD	1
18	0513443	PIN, RETENTION	1
19	0509439	SCREW, RETENTION PIN 10-32 X 5/16" SST	1
20	0513446	O-RING, QUAD	1
21	0513445	O-RING, PIVOT SHAFT	2
22	0513447	SHAFT, FLAPPER	1
23	0712123	MOTOR, DRAIN VALVE	1
	0509257	PIN, MOTOR (COMES WITH MOTOR)	1
24	104883	SCREW, MOTOR 6-32 X 3/8" SST	2
25	0501497	WASHER, SPLIT LOCK #8	2
26	0512126	SPRING, TORSION	1
27	0513442	FLAPPER	1
28	100194	NUT, FLAPPER SEAL	1
29	0512127	GASKET, FLAPPER	1
8	0501412	SCREW, FLAPPER SEAL 10-32 X 3/8"	1
9	0513441	BODY, CARTRIDGE DRAIN VALVE	1
10	0513444	O-RING, CARTRIDGE BODY	2
	0713667	CARTRIDGE ASSEMBLY, COMPLETE	1
* Nata:		INCLUDES ITEMS 18-29 and 8-10	

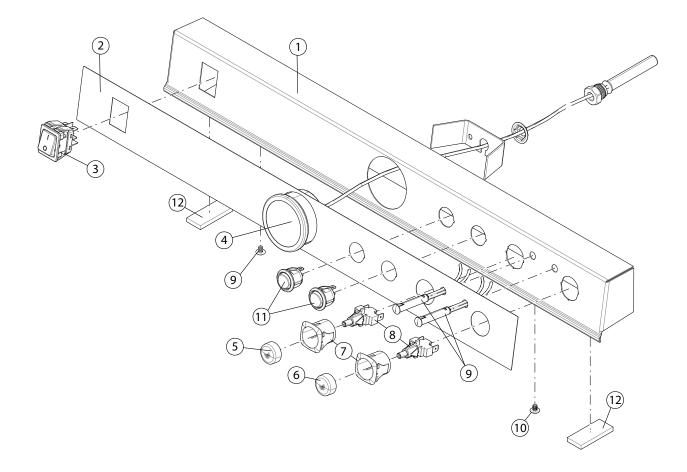
\* Note:

The bearing assembly, P/N 0712749 includes 2 bearings, 1 locknut, and 1 wash arm hub. The bearings, locknut and hub are not available as separate service replacement parts.



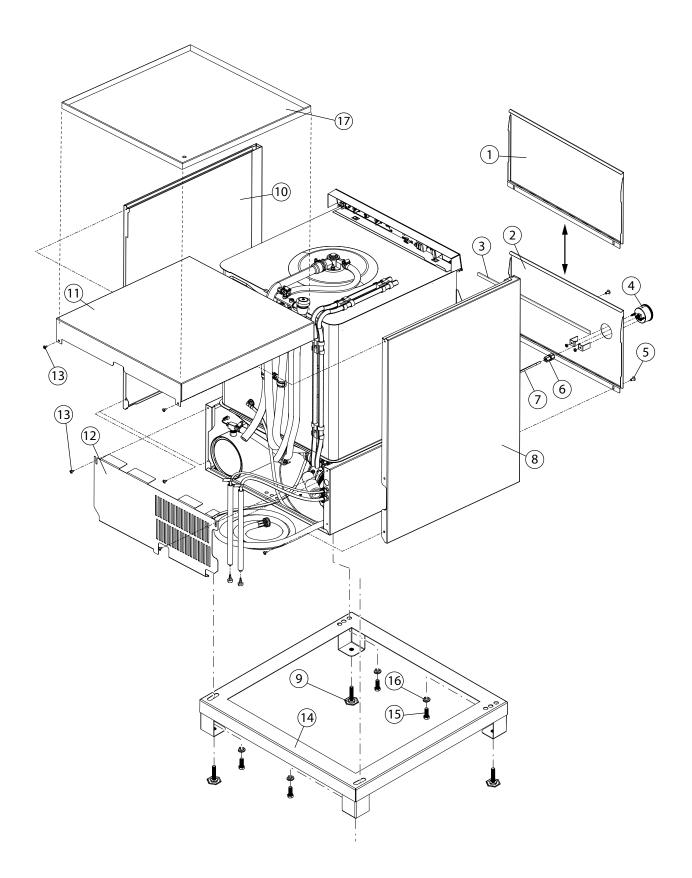
### 601HTG - Control Panel

ltem No.	Part No.	Description	Qty.
1	0712106	TEMPERATURE INDICATOR BD., DIGITAL	1
2	0503580	NUT, 10-32	2
3	0512978	SCREW, 6-19 X 1/4" PAN HEAD PHIL SST	4
4	0512357	STANDOFF, LED DISPLAY BOARD	2
5	0314355	PANEL, FACIA	1
6	0514352	LABEL, FACIA 601HTG	1
7	0512221	SWITCH, ROCKER DPST 250V NEON	1
8	0512320	GASKET, STEAM	2
9	0501408	SCREW, TRUSS PHIL. SST 8-32 X 1/4"	2
10	0512226	SWITCH, ROCKER RND SPDT MOMENTARY	1
11	0512232	LIGHT, INDICATOR, GREEN	2
12	0512216	CONTACT, MOMENTARY, N.O.	2
13	0512217-1	HOUSING, SWITCH, ROUND	2
14	0512218-1	BUTTON, SWITCH GREEN, ROUND	2



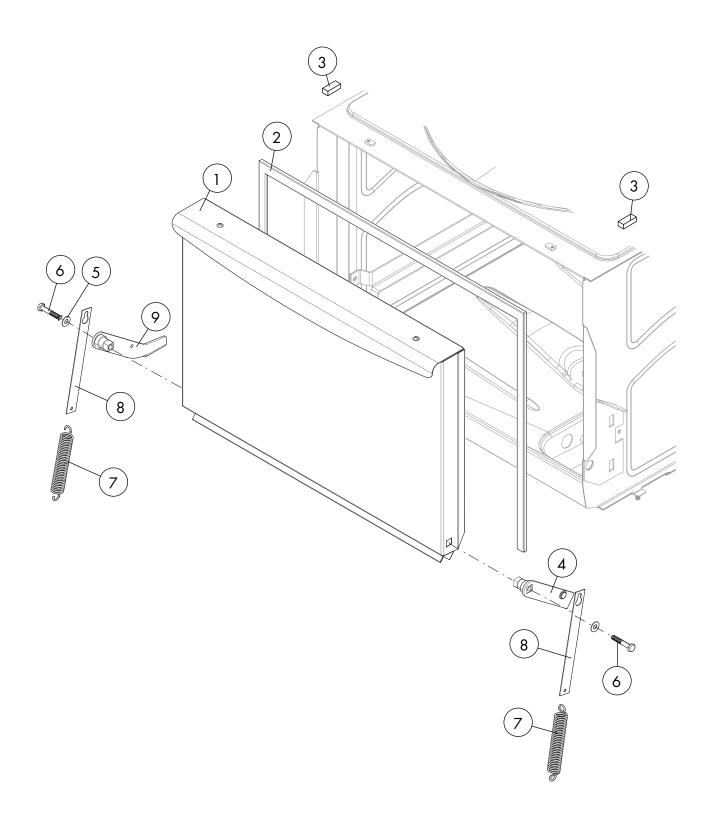
### 601LTG - Control Panel

ltem No.	Part No.	Description	Qty.
	001/05/		
I	0314354	PANEL, FACIA	1
2	0514349	LABEL, FACIA 601LTG	1
3	0512220	SWITCH, ROCKER DPST 125V NEON	1
4	0512107	THERMOMETER, 2" DIAL, 7" CAPILLARY	1
5	0512219-1	BUTTON, SWITCH BLACK, ROUND	1
6	0512218-1	BUTTON, SWITCH GREEN, ROUND	1
7	0512217-1	HOUSING, SWITCH, ROUND	2
8	0512216	CONTACT, MOMENTARY, N.O.	2
9	0512232	LIGHT, INDICATOR, GREEN	2
10	0501408	SCREW, TRUSS PHIL. SST 8-32 X 1/4"	2
11	0512226	SWITCH, ROCKER RND SPDT MOMENTARY	2
12	0512320	GASKET, STEAM	2

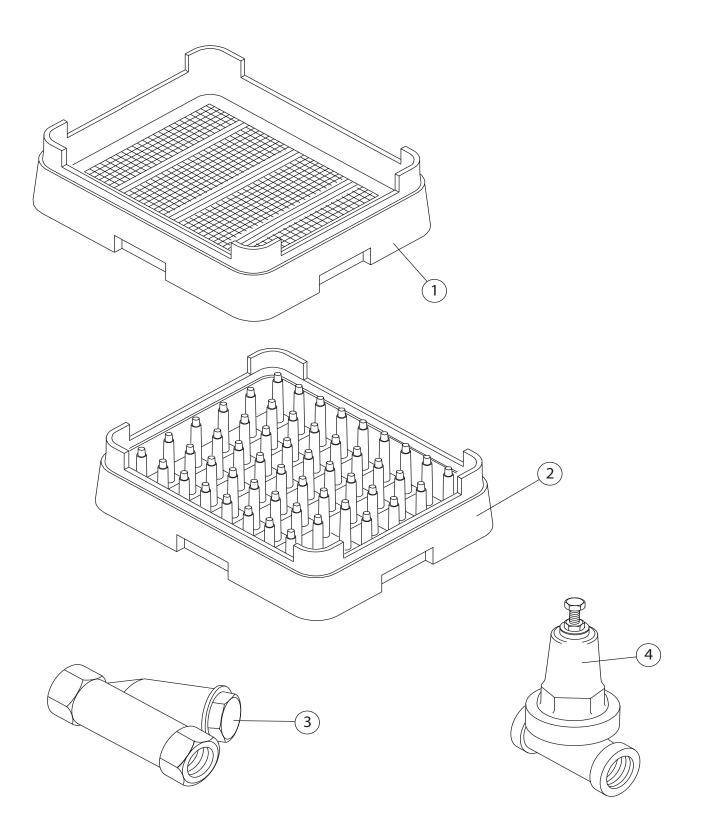


### All Models - Panels

ltem No.	Part No.	Description	Qty.
1	0313406	PANEL, FRONT WITHOUT GAUGE HOLE	1
2	0313407	PANEL, FRONT WITH GAUGE HOLE	1
3	0512319	GASKET, 1/8" x 5/8" x 21-1/2"	1
4	109812	GAUGE, PRESSURE 0-60 PSI	1
5	100779	SCREW 1/4-20 X 5/8" TRUSS SS PHIL	A/R
6	0513659	FITTING, 1/4" TUBE X 1/8" FNPT PP	1
7	107928	TUBING, 1/4" NATURAL	A/R
8	0314232	PANEL, LH SIDE	1
9	0503718	foot, adjusting	4
10	0314231	PANEL, RH SIDE	1
11	0313401	PANEL, TOP	1
12	0313404	PANEL, REAR	1
13	100007	SCREW, TRUSS SLOT SST 10-32 X 3/8"	A/R
14	0712393	STAND	1
15	100153	BOLT, 3/8-16 X 1" HEX HEAD SST	4
16	106407	WASHER, LOCK 3/8" SPLIT SST	4
17	0714208	KIT, DRIP TRAY	A/R



ltem No.	Part No.	Description	Qty.
	071.40.45		
I	0714245	DOOR ASSEMBLY	I
2	0513794	GASKET, DOOR TOP	1
3	0512320	GASKET, STEAM (601LTG)	2
4	0713428	HINGE, RH ASSY	1
5	0501476	WASHER, 9/32" X 5/8" OD SS	1
6	0501422	BOLT, HEX SS 1/4-20 X 1-1/2"	1
7	0513332	SPRING, DOOR	2
8	0313430	ARM, DOOR SPRING	2
9	0713429	HINGE, LH ASSY	1



ltem No.	Part No.	Description	Qty.
1	101273	DISH RACK, FLAT-BOTTOM	AR
2	101285	DISH RACK, PEG	AR
3	104421	STRAINER, LINE 1/2" BRONZE (601HTG)	1
4	108265	Valve, pressure regulating (prv) (601htg)	1

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