

Installation/Operation Manual with Service Replacement Parts



Craft Bar Series Glasswasher

601HRG

Heat Recovery
High Temperature
with built-in booster
Fresh Water Final Rinse



Issue Date: 2.8.18

Manual P/N 0514362 rev. A For machines beginning with S/N W180225428 and above

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 the USA:

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

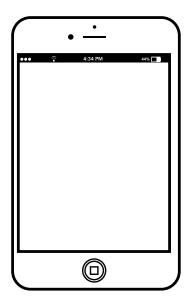
ATTENTION:

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.





Three ways to register:

- Use your mobile device to scan the QR code located on the front panel of your machine or enter our URL http://moyerdw.us/601HRG
- 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

PRODUCT REGISTRATION CARD

| Model | Serial # | | |
|-------------------------|----------|--------------|-------------|
| Date of Installation:// | | | |
| Company Name: | | | |
| Address: | (Street) | Province | Postal Code |
| Telephone #: () | | Frovince | Postal Code |
| Contact: | | | |
| Installation Company: | | | |
| Address: | | | |
| Telephone #: | | | |
| Contact: | | | |

FAILURE TO REGISTER YOUR PRODUCT MAY VOID YOUR WARRANTY

IMPORTANT IMPORTANT

Revision History

A revision might be a part number change, a new instruction, or other information that was not available at print time. We reserve the right to make changes to these instructions without notice and without incurring any liability by making the changes. Equipment owners may request a revised manual, at no charge, by calling 1 (800) 858-4477 in the USA.

| Revision | Revised | Serial Number | Revision |
|----------|---------|---------------|------------------------|
| Date | Pages | Effectivity | Description |
| 2.8.18 | All | W180275428 | Released First Edition |

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 CONSEQUENTIAL 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.

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Model Description

601HRG

Heat Recovery/Condensate Removal with Dry Assist Fresh Water Pumped Final Rinse

High temperature hot water sanitizing dishwasher with built-in electric booster. 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

Optional Equipment (consult factory)

Peg dish rack - P/N 101285 Flat-bottom dish rack - P/N 101273 17" Stand 6" Stand

Receiving

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.

Turn to the front of this manual and follow the instructions to register your product online or by fax.

Placement

CAUTION:

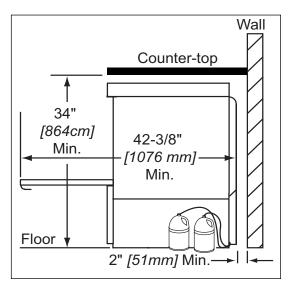
Be careful when lifting and moving the dishwasher to prevent damage to the machine.

NOTE:

The installation of the dishwasher must comply with local health codes.

NOTE:

The dishwasher front-to-back dimension with the door open is 42-3/8" [1076 mm]. The clearance to the back wall is 2" [51mm].



- 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" [864 mm]. It is highly recommended that the underside of the counter-top be clad in metal.
- 6. Under counter installations should provide storage space for the dishwasher chemical supply containers. Do not elevate the containers above the finished floor.
- 7. 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.
- 8. The dishwasher has 4 adjustable feet for leveling.
- 9. Place the dishwasher in its permanent location. and level it front-to-back and side-to-side.

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

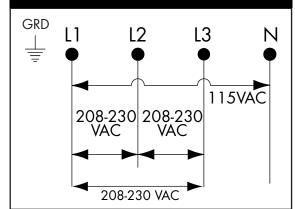
! ATTENTION !

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

BE SURE TO FOLLOW THE BOOSTER WIRING INSTRUCTIONS.

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

THREE PHASE POWER CONNECTION Models 601HRG



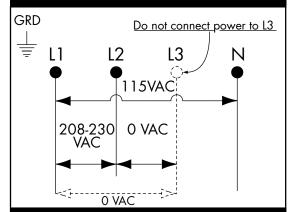
! VERY IMPORTANT!

THE ELECTRICAL POWER MUST BE A 4-WIRE PLUS GROUND SUPPLY WHICH INCLUDES A CURRENT CARRYING NEUTRAL.

HOW TO CONNECT 3 PHASE POWER

- Check the data plate on the front of the dishwasher for the phase of the machine.
- If the data plate says the machine is 3 Phase, then connect a 3 PH power supply.
- 2. Remove the lower access panel.
- 3. Pull power connection box forward and out.
- 4. The Main Terminal Block has terminals for L1, L2, L3, Neutral and Ground.
- 5.Connect ground, then connect L1, L2, L3 to 208-230VAC.
- 6. Connect a current carrying neutral to N.
- 7. Main power connections are complete.

SINGLE PHASE POWER CONNECTION Models 601 HRG



! VERY IMPORTANT!

THE ELECTRICAL POWER MUST BE A 3-WIRE PLUS GROUND SUPPLY WHICH INCLUDES A CURRENT CARRYING NEUTRAL.

HOW TO CONNECT 1 PHASE POWER

 Check the data plate on the front of the dishwasher for the phase of the machine.

If the data plate says the machine is 1 Phase, then connect a 1 PH power supply.

- 2. Remove the lower access panel.
- 3. Pull power connection box forward and out.
- 4. The Main Terminal Block has connections for L1, L2, L3, Neutral and Ground.
- 5. Connect ground, then connect L1, L2 to 208-230VAC.
- 6. Connect a current carrying neutral to N.

DO NOT CONNECT POWER TO L3.

7. Main Power connections are complete.

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



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 601HRG

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

! THREE PHASE POWER REQUIREMENT!

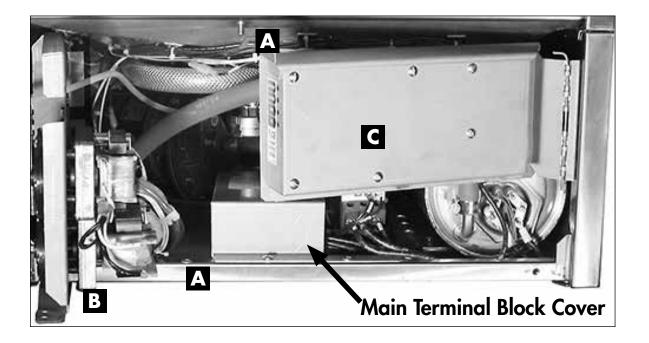
THREE PHASE 601HRG

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

Refer to the photo below:

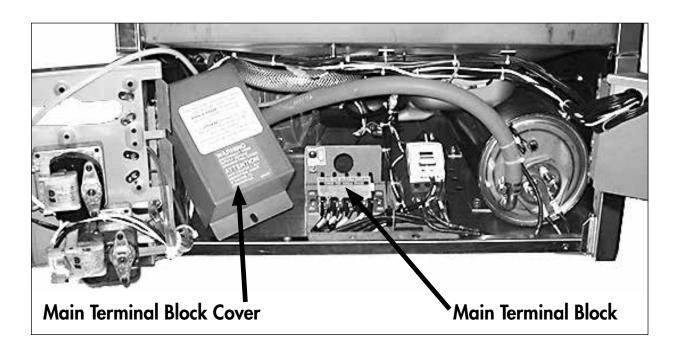
- 1. Remove the lower front dishwasher panel.
- 2. Remove the retaining fasteners (A) from the swing-out brackets and swing the chemical pump bracket (B) and the chemical circuit board bracket (C) out of the way as shown.
- 3. Remove the screw holding the main terminal block cover and set the cover aside.



Connecting Incoming Power to the Main Terminal Block for 1PH and 3PH

Refer to the photo below:

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



Booster Heater Conversion from 1PH to 3PH Operation

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



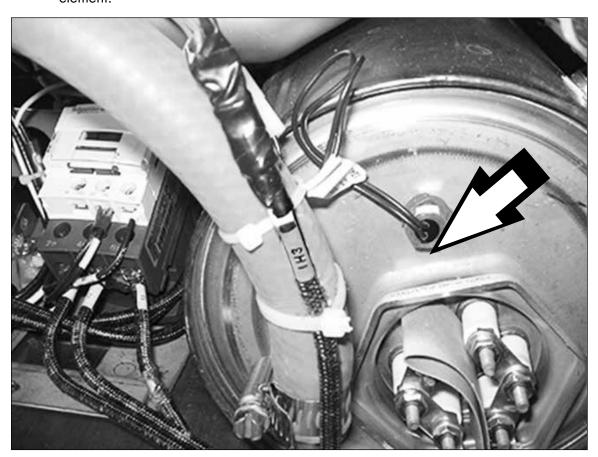
WARNING:

<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.

- 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.

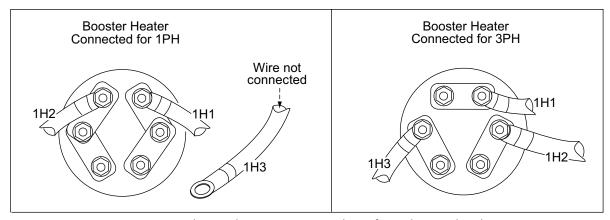


The three phase booster wire (1H3) is cable-tied to the hose adjacent to the booster tank.

Booster Heater Conversion from 1PH to 3PH 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 the next page 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 THREE PHASE WIRING IS COMPLETED.

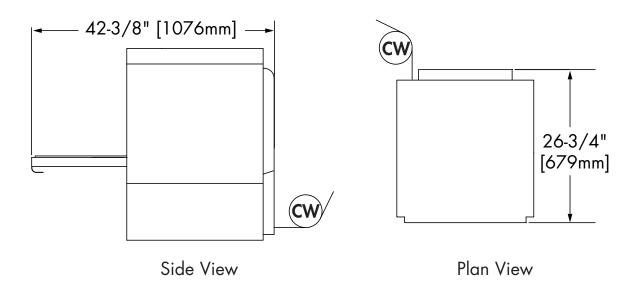
- 1. The data plate on the dishwasher lower front panel must be changed after the machine is converted from single phase operation to three phase operation.
- 2. Locate the replacement data plate stowed on the back of the lower front panel.
- 3. Remove the paper backing from the label and carefully place 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.



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

! ATTENTION ! THE MODEL 601HRG REQUIRES A SINGLE 1/2" INCOMING COLD WATER SUPPLY LINE

- 1. Equipped with a 6 ft. flexible cold 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. 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 601HRG has a built-in flow control. The flowing incoming cold water supply pressure must be between 25-95 psi.
- 5. A water hardness of 3 grains/gal (US) [51.3 mg/L] or less is recommended.



CW = 1/2" Cold Water Supply 55-80°F/12-26°C

Drain Connection

! 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.

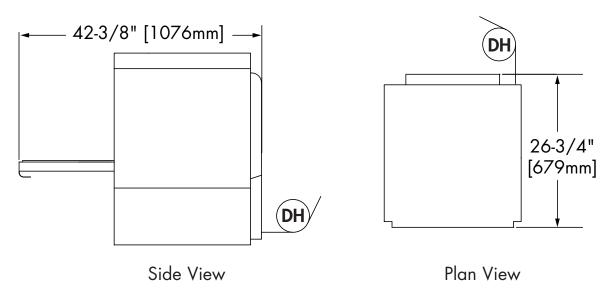
! VERY IMPORTANT!

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

! IMPORTANT!

Make sure that the flexible water supply and drain hoses are not kinked.

- 1. The 601HRG is a pumped drain and is equipped with a 6 ft.. 5/8" I.D. drain hose. The maximum drain height connection must not exceed 3 ft.[1 m].
- 2. The drain hose is located at the rear of the dishwasher, and is secured to the rear of the machine provide 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.



DH = Drain Hose 5/8" I.D., 6 ft [1829 mm] Long

Drain Connection (continued)

NOTE

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

DO NOT CONNECT THE DRAIN HOSE TO A DISPOSER.

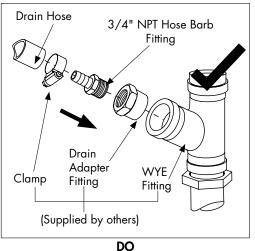
DO NOT REDUCE THE SIZE OF THE DRAIN HOSE CONNECTION.

DO NOT ADD ADDITIONAL LENGTH TO THE DRAIN HOSE.

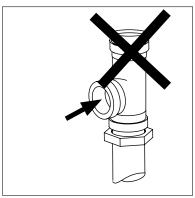
DO NOT ALLOW THE DRAIN HOSE TO KINK.

For a Direct Drain Connection:

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



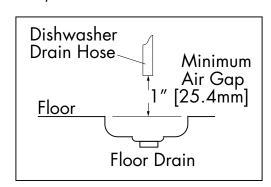
connect the dishwasher flexible drain hose to a WYE drain fitting.



DO NOTconnect 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.)



Chemical Connections

! VERY IMPORTANT!

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

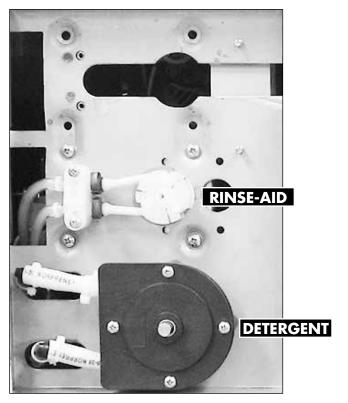
DO NOT ELEVATE THE CHEMICAL CONTAINERS ABOVE THE FINISHED FLOOR.

! 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.
- 5. The chemical squeeze tubes should be inspected and replaced every six months.



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



The chemical dispensing pick-up tubes are stowed on the back of the dishwasher.

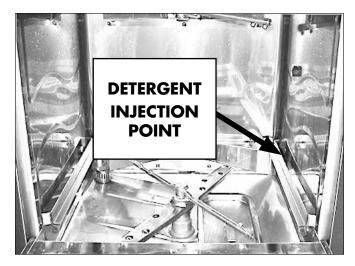
Chemical Connections (continued)

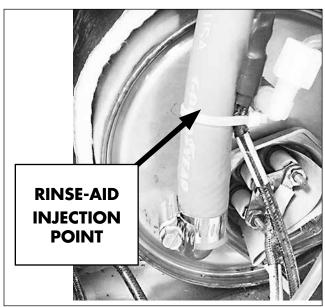
! VERY IMPORTANT!

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.

Chemical Injection Points

- 1. The detergent enters the wash tank compartment through a fitting at the right rear of the wash compartment.
- 2. Rinse-aid enters the final rinse through a fitting in the front of the booster tank.



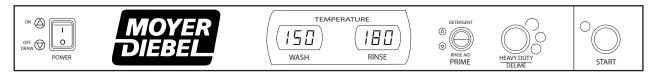


Chemical Connections

Priming the Dispensing Pumps

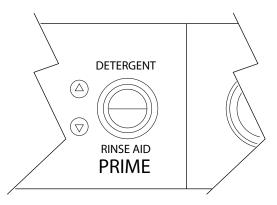
! VERY IMPORTANT!

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



601HRG Control Panel

- 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.
- 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. 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, then continue to hold the prime push button for approximately 1 minute and then release.
- 6. Close the door to complete the priming operation.

Detergent and Rinse-aid Dispensing Pump Adjustments

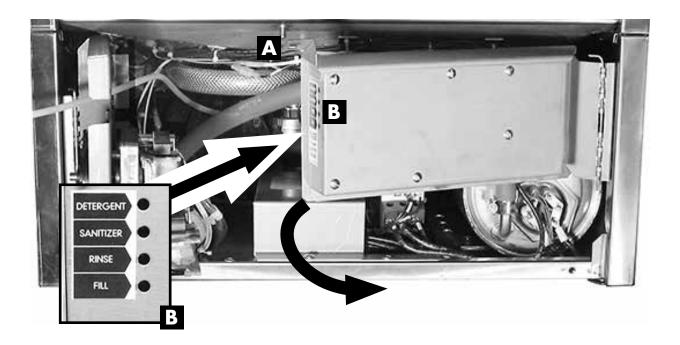
Chemical Dispensing Pump Adjustments

! ATTENTION!

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

Refer to the photo below:

- 1. The chemical dispensing pump run 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!

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.

Detergent and Rinse-aid Dispensing Pump Adjustments

Chemical Dispensing Pump Adjustments (continued)

! ATTENTION ! THE FILL AND SANITIZER ADJUSTMENT SCREWS ARE NOT USED ON THE 601HRG MACHINE.

Refer to the photo below:

To adjust the amount of chemicals dispensed by the pumps:

- Make sure the chemical containers are full and the pick-up tubes are in their proper containers.
- 3. Turn the dishwasher power switch ON.
 The switch will illuminate and the dishwasher will fill with water.
- 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.

 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.



Loading Dish Racks

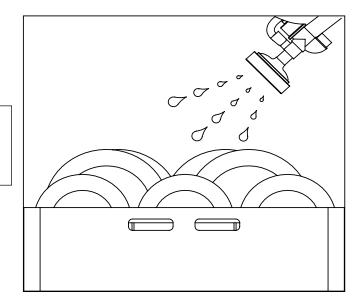
! VERY IMPORTANT! DO NOT OVERLOAD THE DISH RACK. LOAD ONE DISH RACK INTO THE MACHINE AT A TIME.

- 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.

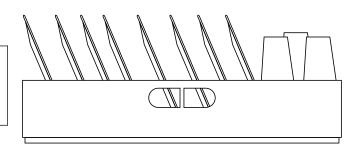
Do not overload the dish rack. Wash one dish rack at a time.

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.

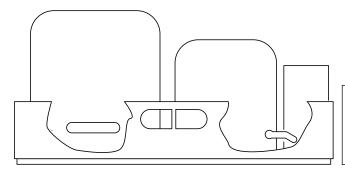
Prescrap and rinse wares before loading into the machine.



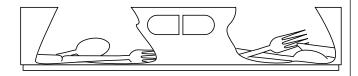
Load plates and glasses in a peg rack.



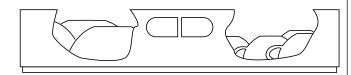
Loading Dish Racks (continued)



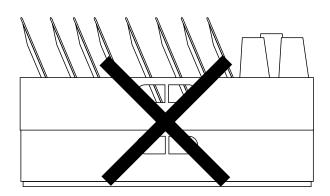
Load pots and pans in a flat-bottom rack.



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



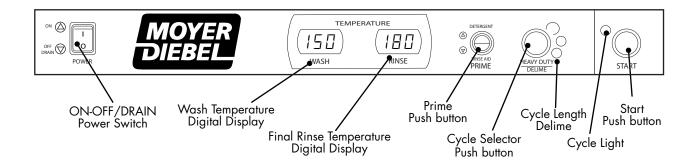
Load cups and bowls in a flat-bottom rack.



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

601HRG Control Panel

The illustration below shows the operator controls and temperature displays for the 601HRG.

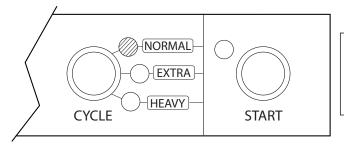


Wash Mode

! VERY IMPORTANT!

Turn the power off to the dishwasher if it will be left unattended for an extended period of time.

- 1. Close the door.
- 2. Push the dishwasher ON OFF/DRAIN switch UP to turn the power ON.
- 3. The power switch will illuminate and the cycle light will begin flashing. This begins the heating and fill cycleand will take approximately 15-20 minutes.
- 4. Wait until the wash temperature gauge indicates a minimum of 160°F/71°C.
- 5. Scrap the wares to remove large food particles.
- 6. Load the dish rack into the machine. Wash one dish rack at a time.



Push the Cycle button once for Short Cycle. Push twice for Long Cycle.

Push the Cycle button three times to cancel the selection and return to Normal Cycle.

7. The NORMAL cycle setting is the default cycle and does not have a green indicator light. The normal cycle is approximately 2-1/2 minutes long.

Wash Mode (continued)

- 8. The SHORT cycle is selected by pushing the cycle button once. The SHORT green indicator light will flash for 15 seconds. Pressing the START button before the flashing SHORT ind-icator stops flashing starts an SHORT wash cycle of approximately 2 minutes. The SHORT green indicator light will come on. and the green indicator light above the start switch will illuminate indicating the machine is in the wash mode.
- 9. The LONG cycle is selected by pushing the cycle button twice. The LONG green indicator light will flash for 15 seconds. Pressing the START button before the flashing LONG indicator light stops flashing starts the long wash cycle of approximately 4-1/2 minutes long. The LONG green indicator light will come on and the green indicator light above the start switch will illuminate indicating the machine is in the wash mode.
- 10. Opening the door during a cycle will stop the dishwasher. The cycle will resume automatically if the dishwasher door is closed within 5 seconds. If the door is open for more than 5 seconds the cycle will start from the beginning of the cycle.
- 11. 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.
- 12. 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.
- 13. When the green cycle light goes out, open the door and remove the rack of clean wares.

! ATTENTION ! DOOR LEFT OPEN DURING WASH CYCLE

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

Rinse Sentry Mode

! ATTENTION ! RINSE SENTRY MODE WILL EXTEND WASH CYCLE TIME

In the event that the final rinse temperature inside the booster tank 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.

! VERY IMPORTANT!

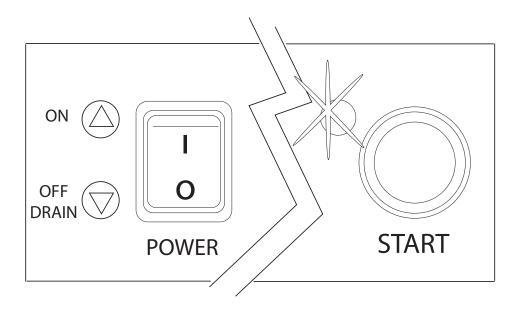
Draining Problems Related To Improper Installation.

Problems with machine draining are often the result of improper installation. **NEVER EXTEND OR ADD LENGTH TO THE DRAIN HOSE.**

Drain Mode

The dishwasher will enter the drain mode whenever the ON-OFF/DRAIN power switch is pushed down to the OFF/DRAIN position. The switch is located on the left side of the control panel.

IF THE ON OFF/DRAIN SWITCH IS PLACED IN THE OFF/DRAIN POSITION FOR MORE THAN 3 SECONDS, THE DISHWASHER WILL CONTINUE TO DRAIN EVEN IF THE SWITCH IS PUSHED BACK TO THE ON POSITION.



- 1. Remove any dish rack that may be inside the machine.
- 2. Push the illuminated power switch down to the OFF/DRAIN position. The power switch light will go out.
- 3. The cycle light will illuminate and the machine will drain.
- 4. The cycle light will go out indicating that the drain cycle is complete. DO NOT OPEN THE DOOR UNTIL THE LIGHT GOES OUT.

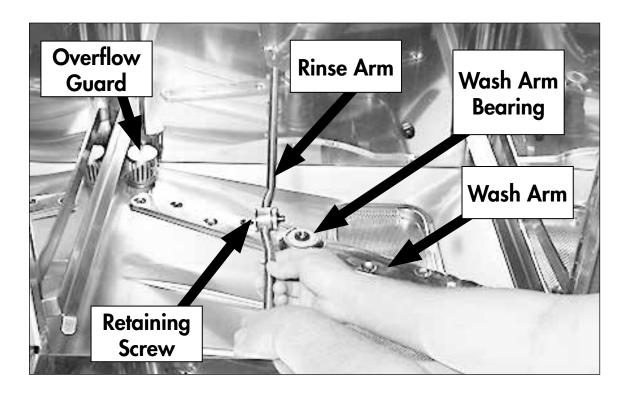
Cleaning

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

! ATTENTION ! DO NOT USE STEEL WOOL SCRUB PADS TO CLEAN THE MACHINE. DO NOT SPRAY THE EXTERIOR OF THE MACHINE WITH WATER.

To clean your machine:

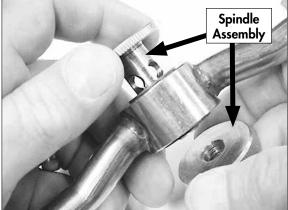
- 1. Open the door and remove any dish rack inside the machine.
- 2. Drain the machine according to the instructions on the previous page.
- 3. Refer to the photo below. Remove the upper and lower wash and rinse arms.
- 4. Clean the overflow guard by hand with it installed in the machine.



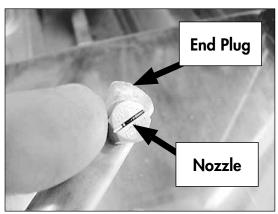
Cleaning

Rinse Arms

- 1. There are two rinse arms. They are interchangeable.
- 2. Remove the spindle assembly and end plugs in each pipe and flush the rinse pipes.
- 3. 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.







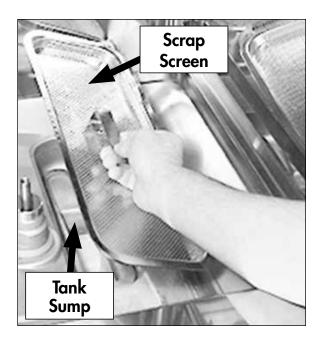
Wash Arms

- 1. There are two interchangeable wash arms.
- 2. Flush the wash arms thoroughly in a sink.
- 3. Inspect the wash arm bearings for wear and replace as necessary.

Cleaning

Scrap Screen and Sump Strainer

- 1. Lift the scrap screen straight up and out of the machine to prevent debris from falling into the tank sump.
- Flush the scrap screen in a remote sink making sure to back-flush both sides of the screen.
- 3. Wipe the tank sump of water and debris.
- Carefully inspect the sump 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.

! ATTENTION!

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.

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.

Follow the procedures below to de-lime the 601HRG 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. Always wear eye protection, rubber gloves and protective clothing when handling chemicals. 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 CYCLE push button three times. The green cycle indicator light will illuminate and the machine will run for 23 minutes.
- 10. Check the deliming results and if scale is still present repeat steps 8-9.
- 11. Turn the power switch ON to refill the dishwasher and to return the dishwasher to normal operation.
- 12. Return chemical supply tubing to their containers and prime the chemical lines.

Maintenance

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

Daily Maintenance

- 1. Make sure the water supply is on and that the drain is not clogged.
- 2. Check the temperature 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.

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 and prime the chemical lines.
- 5. Drain and refill the dishwasher.

NOTE:

There are no lubrication points on the dishwasher.

Troubleshooting

| <u>Illustrations</u> | <u>Page</u> |
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| Wash Codes Temperature Display Board | 32 |
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| Booster Codes Temperature Display Board | 34 |
| Timer Board Connection Diagram | 35 |
| Temperature Display Board Power Terminal Connections | 36 |
| Temperature Display Board M3-M4 Selector Slide Switch | 37 |
| Booster/Wash Tank Heater Interlock Circuit Operation | 38 |

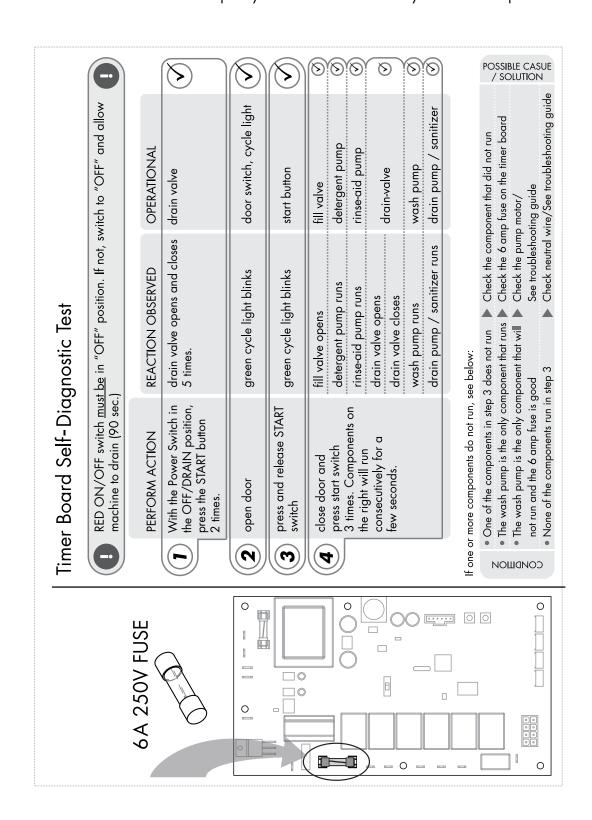
Troubleshooting

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

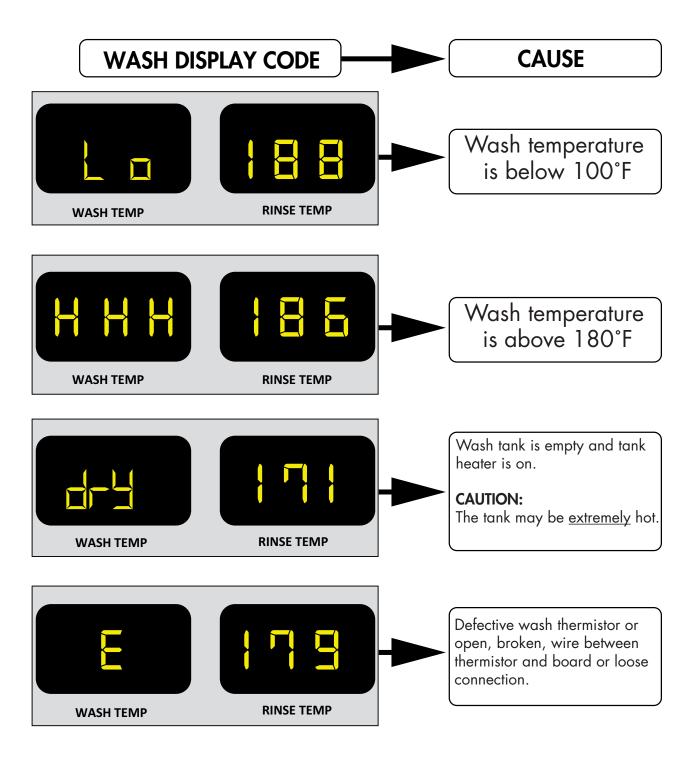
Follow the instructions below to quickly check the status of many machine components.



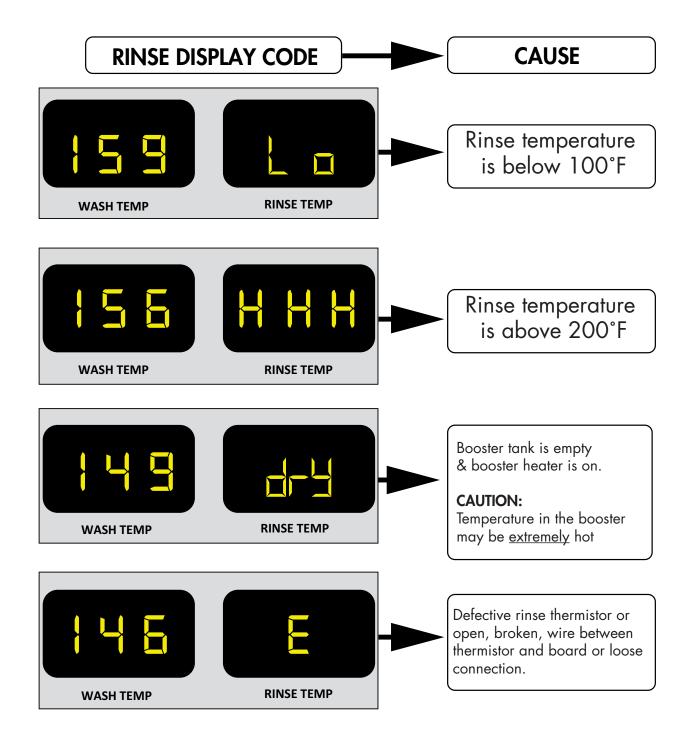
Digital Temperature Display Codes

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.

Wash Display Codes

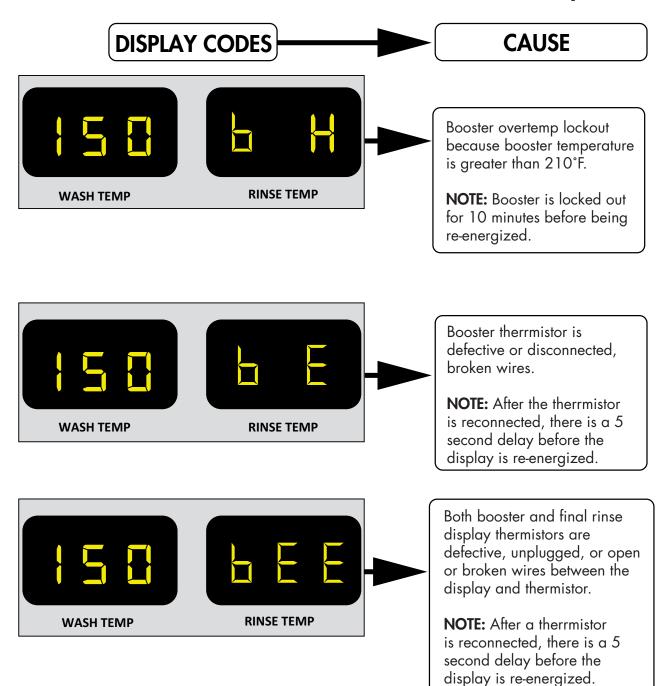


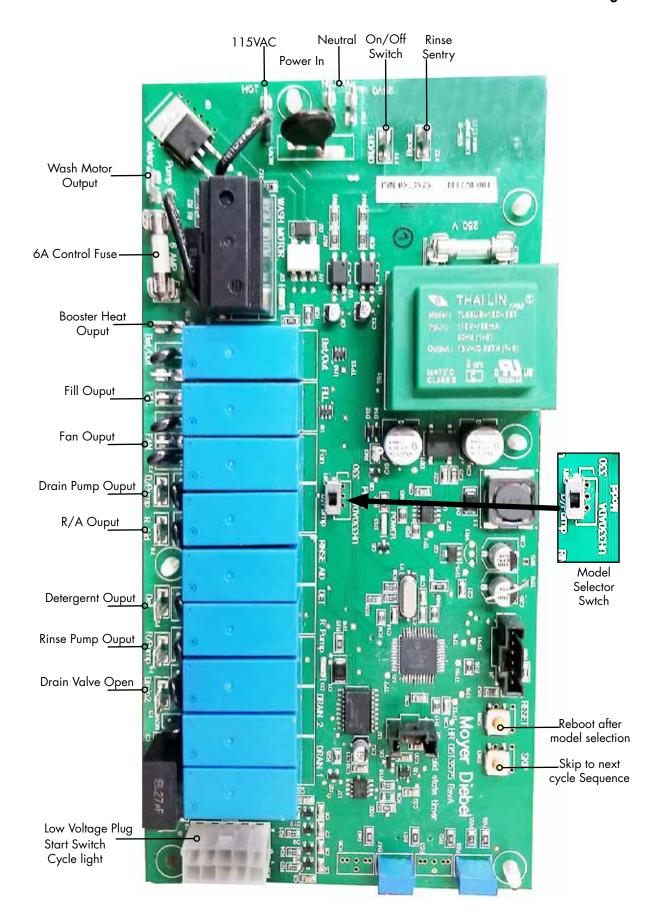
Rinse Display Codes

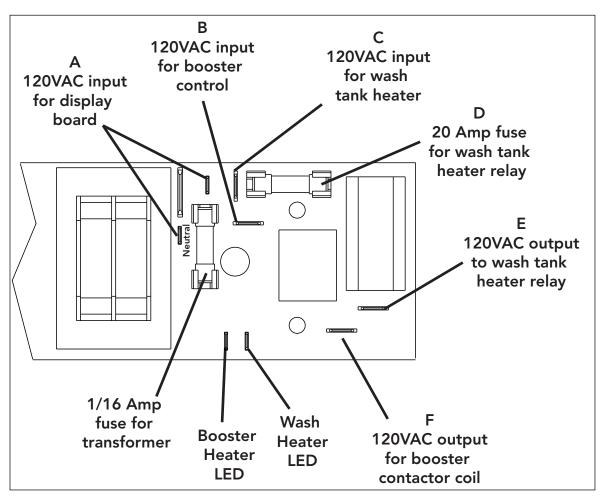


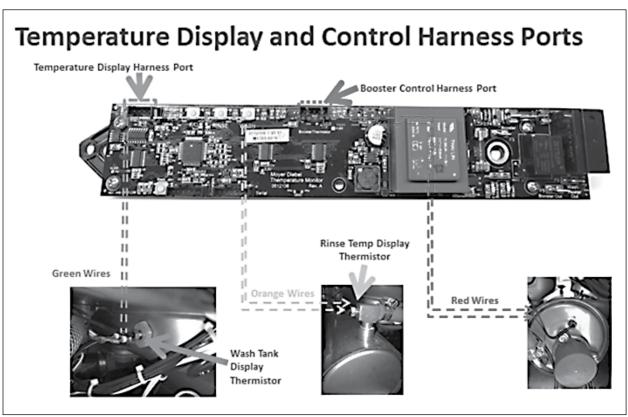
Booster Display Codes

Error Codes for Booster and Final Rinse Thermistors Only.



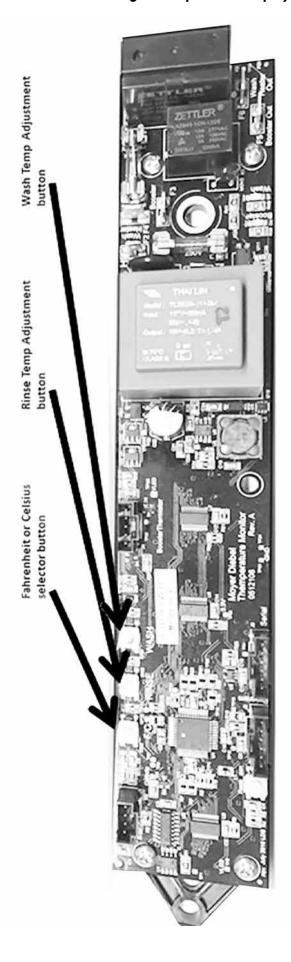






M4 Temperature Control Board Operation Explained

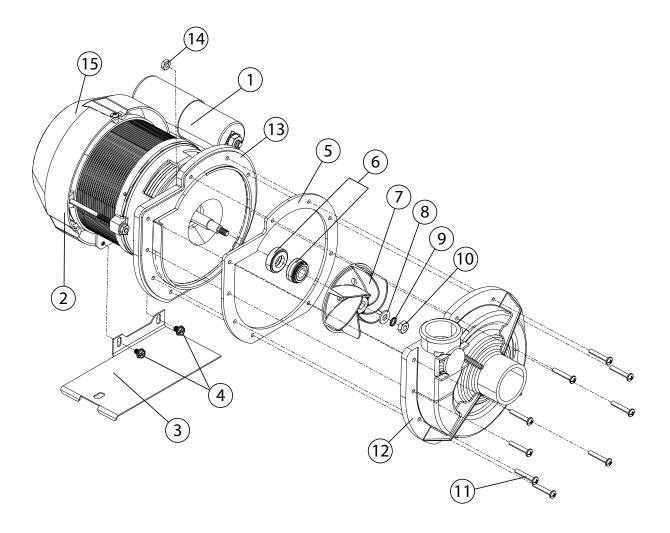
To adjust temperatures on M4 machines, push and hold the button of the target heat system. The display will begin to flash its temperature set point. Continue to push and release the button, and the available set points will scroll through the display. When you reach your desired temp set point, let go of the button, and the board will store the new setting.



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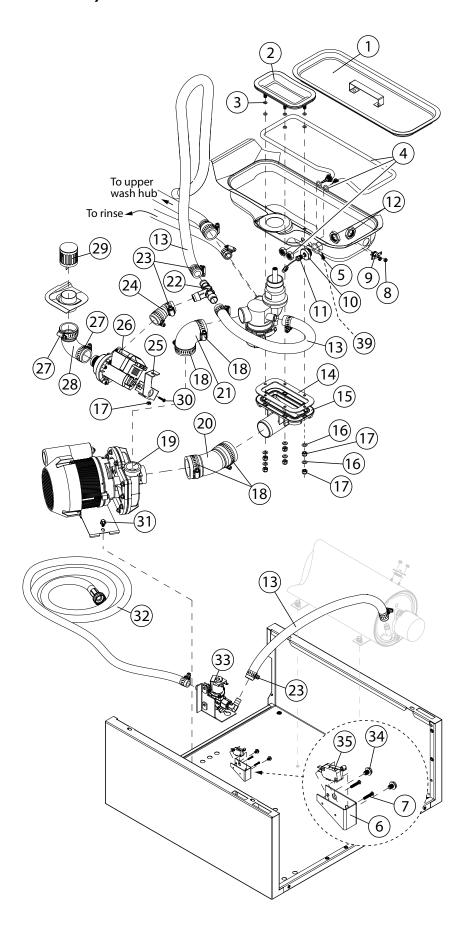
Service Replacement Parts

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| Dish Racks, Line Strainer, PRV | 68 |



| Item No. | Part No. | Description | Qty. |
|-------------|-------------|--|------|
| 1 | 0512347 | CAPACITOR 40µF | 1 |
| 2 | 0512101 | PUMP/MOTOR ASSEMBLY COMPLETE 115VAC/60/1 | 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.

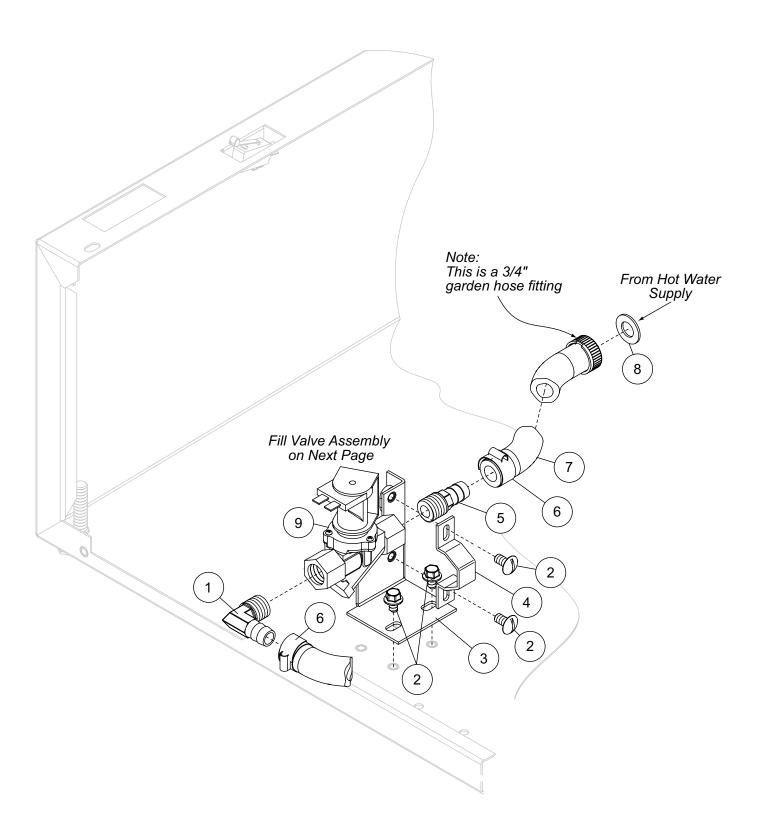


| Item No. | Part No. | Description | Qty. |
|-------------|-------------|--|------|
| 1 | 0512136 | SCREEN, SCRAP ASSY. | 1 |
| 2 | 0513324 | FLANGE, PUMP SUCTION | 1 |
| 3 | 0513677 | O-RING | A/R |
| 4 | 0512426 | HEATER, 240VAC 2000W | 1 |
| 5 | 0512099 | O-RING | 1 |
| 6 | 0313432 | BRACKET, DOOR SWITCH | 1 |
| 7 | 0508752 | SCREW, 4-40 X 5/8" RH. HD. PHILL. SST | 2 |
| 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 | 0513310 | THERMISTOR, 10 K Ω , 2 WIRE ASSY, WASH TA | NK 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 | 0513324 | 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 | 0508549 | HOSE, MOULDED (CUT TO FIT) 1-1/4" | 1 |
| 25 | 0312145 | BRACKET, DRAIN PUMP UH330 ADA | 1 |
| 26 | 0512227 | PUMP, DRAIN 115VAC | 1 |
| 27 | 0512322 | CLAMP, HOSE | 2 |
| 28 | 0513339 | HOSE, OVERFLOW | 1 |
| 29 | 0712236-1 | TUBE, OVERFLOW GUARD | 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 |
| | | | |

Base Assembly

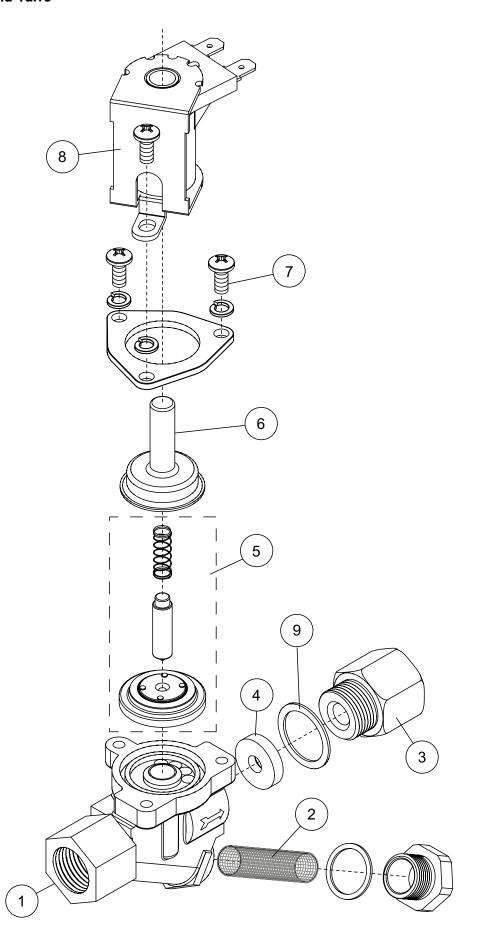
| Item No. | Part No. | Description | Qty. |
|-------------|-------------|--|------|
| 33 | 0513557 | VALVE, FILL 1.0 GPM | 1 |
| 34 | 0512792 | SCREW, 10-32 X 1/4" RD. HD. PHILL. SST | 2 |
| 35 | 0501379 | SWITCH, 15A | 1 |
| _ | 0514294 | HARNESS, WIRING | 1 |

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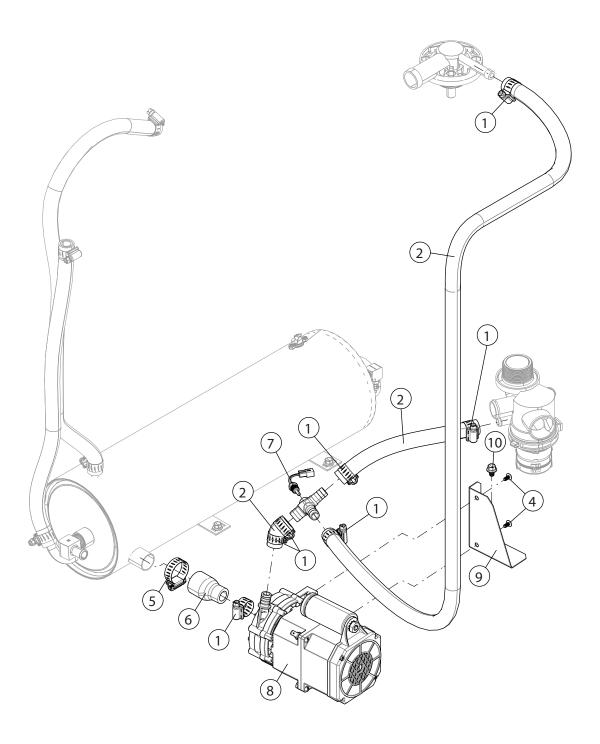
Fill Piping Assembly

| Item 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, 3/8" NPT | 1 |
| | 0513557 | VALVE, FILL 1.0 GPM | 1 |



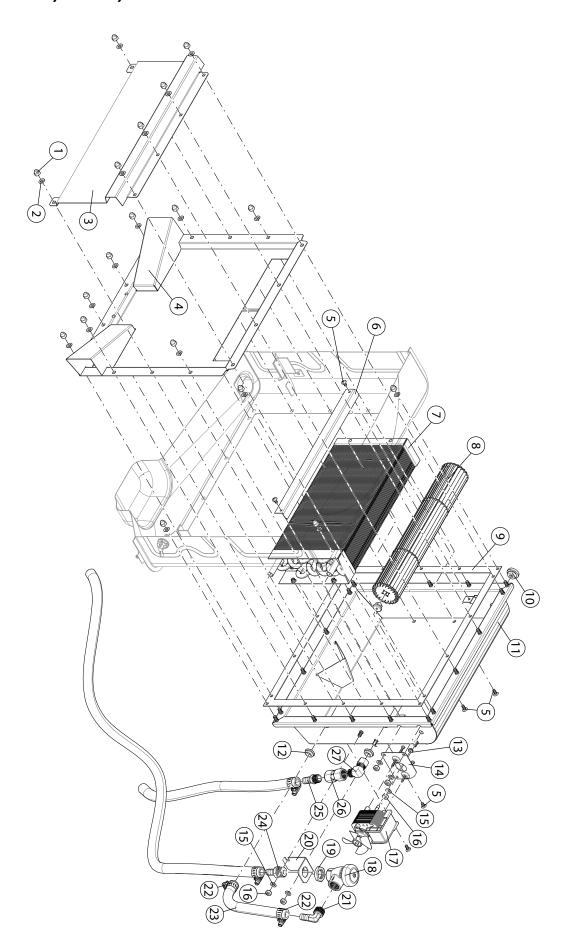
Fill Solenoid Valve

| Item No. | Part No. | Description | Qty. |
|-------------|-------------|-------------------------------|------|
| 1 | 0513557 | VALVE, FILL 1.0 GPM | 1 |
| 2 | 0502803 | SCREEN, VALVE STRAINER | 1 |
| 3 | 0502804 | GASKET, CAP | 1 |
| 4 | 0513674 | WASHER, FLOW 1.0 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 |

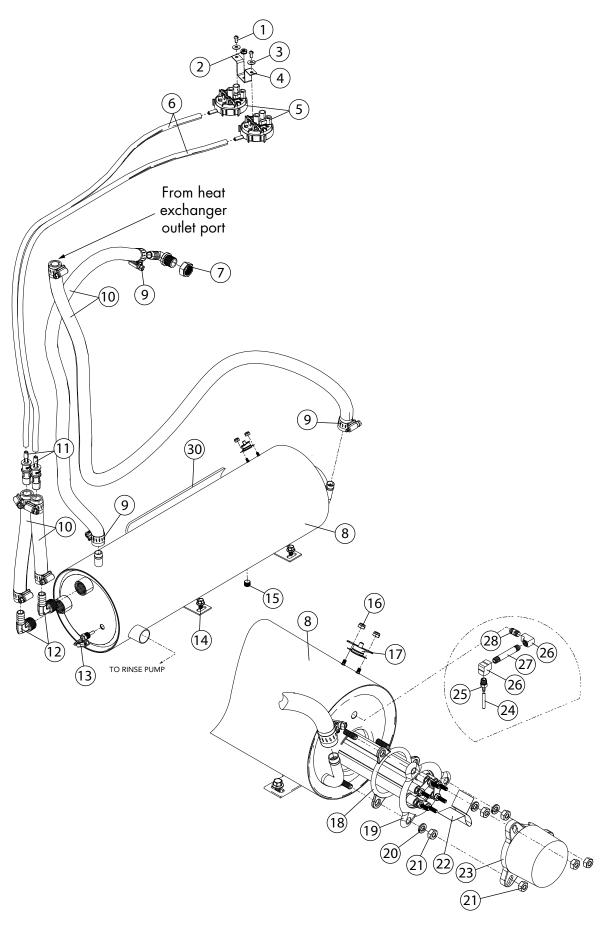


Final Rinse Piping

| Item No. | Part No. | Description | Qty. |
|-------------|-----------------|--|------|
| 1 | 0512985 | CLAMP, HOSE | 6 |
| 2 | 107417 | HOSE, RUBBER 1/2" ID X .84" OD | A/R |
| 3 | 0514324 | MANIFOLD, RINSE PUMP | 1 |
| 4 | 104624 | SCREW, 8-32 X 3/8" TRUSS HEAD | 2 |
| 5 | 0502563 | CLAMP | 1 |
| 6 | 0514323 | HOSE, MOLDED RINSE SUCTION | 1 |
| 7 | 112612 | THERMISTOR, $10K\Omega$, 2-WIRE ASSY. | 1 |
| 8 | 051431 <i>7</i> | PUMP, RINSE 115VAC, HR M4.2 | 1 |
| 9 | 0314319 | BRACKET, PUMP MOUNT | 1 |
| 10 | 0512185 | BOLT, HEX FLANGE 1/4-20 X 3/8" SS | 1 |

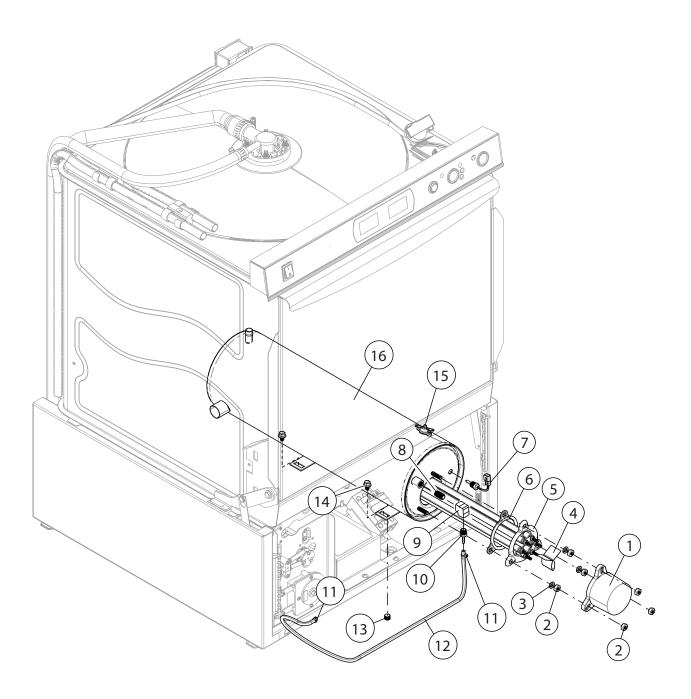


| Item No. | Part No. | Description | Qty. |
|-------------|-------------|--|------|
| 1 | 106014 | NUT, ACORN 1/4-20 SST | A/R |
| 2 | 0501476 | WASHER, 9/32" X 5/8" OD | A/R |
| 3 | 0314344 | DEFLECTOR, AIR | 1 |
| 4 | 0714332 | DEFLECTOR, AIR | 1 |
| 5 | 100007 | SCREW, 10-32 X 3/8" TRUSS HEAD SST | A/R |
| 6 | 0314311 | DEFLECTOR, FAN | 1 |
| 7 | 0514328 | COIL, HEAT RECOVERY | 1 |
| 8 | 0513572 | BLOWER | 1 |
| 9 | 0514327 | GASKET, HOUSING | 1 |
| 10 | 0513574 | BEARING, C/W RUBBER HOUSING | 2 |
| 11 | 0714337 | HOUSING, COIL | 1 |
| 12 | 0513732 | SEAL, V-RING 1/2" | 2 |
| 13 | 0513733 | SEAL, V-RING 1/2" | |
| 14 | 0313594 | MOUNT, FAN MOTOR | 1 |
| 15 | 106482 | WASHER, SPLIT LOCK 1/4" SST | 2 |
| 16 | 100003 | NUT, HEX 1/4-20 SST | 2 |
| 1 <i>7</i> | 0513573 | MOTOR, BLOWER 115VAC | 1 |
| 18 | 100500 | BREAKER, VACUUM | 1 |
| _ | 900836 | REPAIR KIT, VACUUM BREAKER 1/2" | A/R |
| 19 | 201029 | NUT, LOCK 1/2" NICKEL PLATED | 1 |
| 20 | 0314312 | BRACKET, VACUUM BREAKER M4.2 | 1 |
| 21 | 0508782 | ELBOW, 1/2" X 1/2" HOSE BARB | 1 |
| 22 | 0503679 | CLAMP, HOSE GEAR, 7/16"-25/32" #6 MINI | A/R |
| 23 | 0514322 | HOSE, HEAT EXCHANGE COIL SUPPLY M4.2 | 1 |
| 24 | 0507100 | GAUGE, PRESSURE 30LB. | 1 |
| 25 | 0502618 | BARB, HOSE 1/2" X 3/8" MPT | 1 |
| 26 | 0507324 | VALVE, CHECK 3/8" | 1 |
| 27 | 0514316 | ELBOW, 1/2" COMP. X 3/8" MNPT BRASS | 1 |

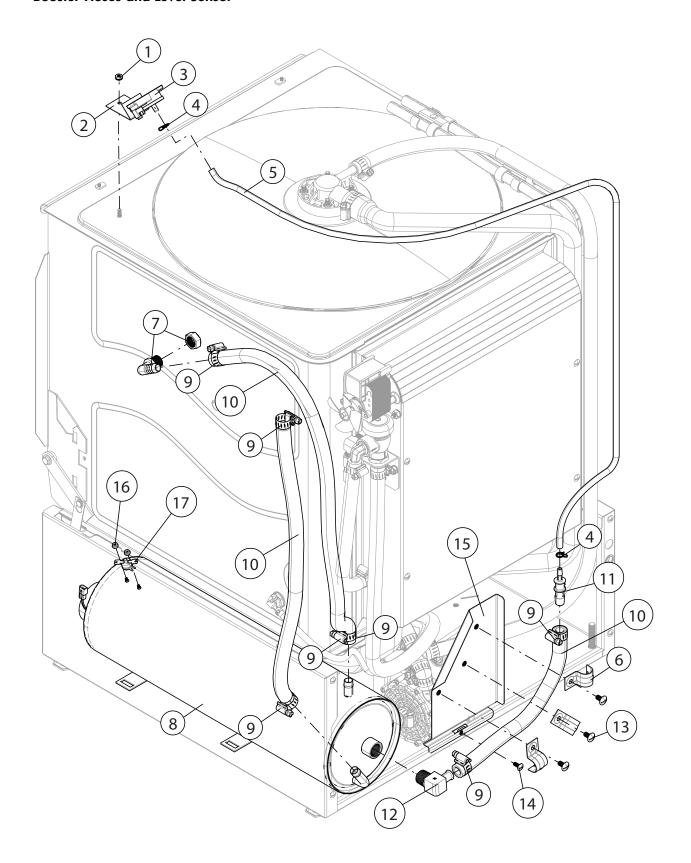


Booster and Pressure Switch Assemblies

| Item No. | Part No. | Description | Qty. |
|-------------|--------------------|--|----------|
| 1 | 109835 | SCREW, #8 X 1/2" PAN HD. PHIL. SST | 4 |
| 2 | 0503580 | NUT 10-32 SST | 4 |
| 3 | 0507709 | WASHER, FLAT #10 SST | 4 |
| 4 | 0313587 | BRACKET, PRESSURE SWITCH | 2 |
| 5 | H31171 | SWITCH, PRESSURE | 2 |
| 6 | H160121 | HOSE, EPDM | A/R |
| 7 | 0513731 | ELBOW, 1/4 NPT X 1/2" HOSE (C/W NUT) | 1 |
| 8 | 0713565 | TANK, BOOSTER | 1 |
| 9 | 0512985 | HOSE, CLAMP | A/R |
| 10 | 107417 | HOSE, RUBBER 1/2" ID X .84" OD | A/R |
| 11 | 0513650 | ADAPTER, 1/2" X 1/4" HOSE | 2 |
| 12 | 0508782 | ELBOW, 1/2" NPT X 1/2" HOSE | 2 |
| 13 | 0513310 | THERMISTOR, 10 K Ω , 2-WIRE | 1 |
| 14 | 0512185 | BOLT, HEX FLANGE 1/4-20 X 3/8" SST | 2 |
| 15 | 0508817 | PLUG, 1/8" | 1 |
| 16 | 108954 | NUT, GRIP 6-32 W/NYLON INSERT | 2 |
| 17 | 110562 | THERMOSTAT, HIGH LIMIT 240°F | 1 |
| 18 | 109985 | SEAL, ELEMENT BOOSTER | 1 |
| 19 | 111235-1 | BOOSTER, ELEMENT 5 KW | 1 |
| 20 | 106482 | WASHER, LOCK 1/4" SPLIT SST | 3 |
| 21 | 100003 | NUT, PLAIN 1/4-20 SST | 6 |
| 22 | 111885 | INSULATOR | 1 |
| 23 | 107908 | COVER, ELEMENT | 1 |
| 24 | 112883-1 | TUBING, 1/8" OD X 1/16" ID (RINSE-AID) | A/R |
| 25 | 0514158 | ADAPTER, 1/8" HOSE X 1/8" MNPT BRASS | 1 |
| 26 | 0514156 | ELBOW, 1/8" X 1/8" NPT BRASS | 2 |
| 27 | 0514155 | NIPPLE, 1/8" X 2" BRASS | 1 |
| 28 | 100939 | NIPPLE, CLOSE 1/8" NPT BRASS | 1 |
| 29 | 0512790 | INSULATION, BOOSTER TANK | 1 |
| | 0513538 0714170 | HARNESS, BOOSTER CONTROL WIRING (Not Shown) KIT, BOOSTER SERVICE (Includes items 12,13,15,17,18,26-30. Does not include item 19) | 1 A/R |

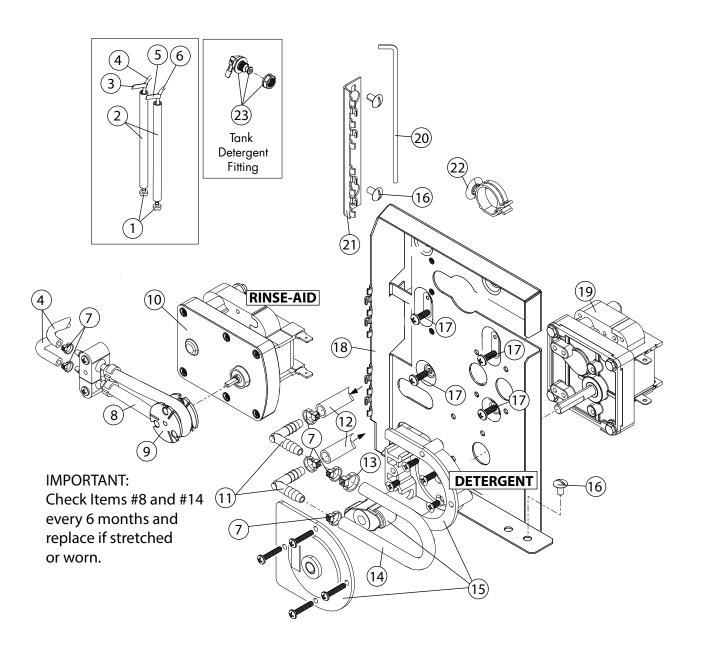


| Item No. | Part No. | Description | Qty. |
|-------------|-------------|--------------------------------------|------|
| 1 | 107908 | COVER, ELEMENT | 1 |
| 2 | 100003 | NUT, PLAIN 1/4-20 SST | 6 |
| 3 | 106482 | WASHER, LOCK 1/4" SPLIT SST | 3 |
| 4 | 111885 | PAPER, FISH | 1 |
| 5 | 0514296 | BOOSTER, ELEMENT 4.3 KW | 1 |
| 6 | 109985 | SEAL, ELEMENT BOOSTER | 1 |
| 7 | 0513310 | THERMISTOR, PROBE | 1 |
| 8 | 100939 | NIPPLE, CLOSE 1/8" NPT BRASS | 1 |
| 9 | 0514156 | ELBOW, 1/4" X 1/8" NPT BRASS | 1 |
| 10 | 0514158 | ADAPTER, 1/8" HOSE X 1/8" MNPT BRASS | 1 |
| 11 | 0501519 | TIE, CABLE 4" | 2 |
| 12 | 0502666 | HOSE, 1/8" ID X 1/4" OD PVC | A/R |
| 13 | 0508817 | PLUG, 1/8" HEX COUNTERSUNK SST | 1 |
| 14 | 0512185 | BOLT, HEX FLANGE 1/4-20 X 3/8" SST | 2 |
| 15 | 110562 | THERMOSTAT, HIGH LIMIT 240°F | 1 |
| 16 | 0714284 | tank, booster | 1 |
| | 0512790 | INSULATION, BOOSTER TANK (Not Shown) | 1 |



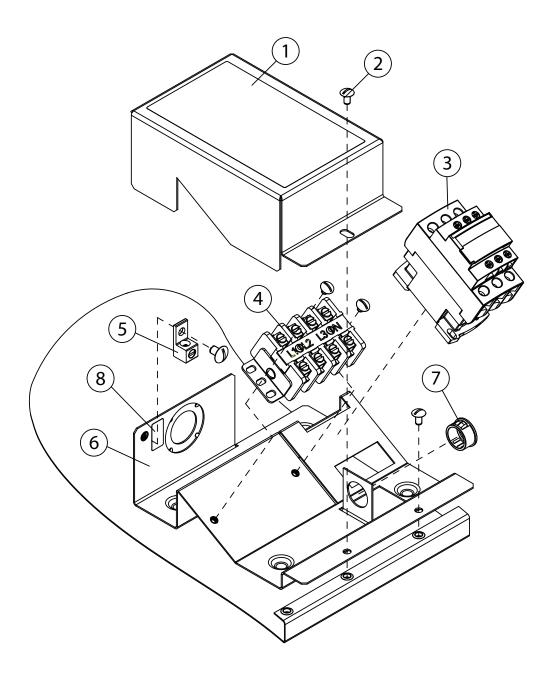
Booster Hoses and Level Sensor

| Item No. | Part No. | Description | Qty. |
|-------------|-------------|--------------------------------------|------|
| 1 | 0503580 | NUT, KEPS 10-32 SST | 1 |
| 2 | 0313865 | BRACKET, SENSOR | 1 |
| 3 | 0513831 | SENSOR, LEVEL | 1 |
| 4 | 0513696 | CLAMP, DOUBLE SPRING 10.7 MM PLATED | 2 |
| 5 | H160121 | HOSE, EPDM | A/R |
| 6 | 0513736 | CLAMP, EMT 1/2" | 3 |
| 7 | 0513731 | ELBOW, 1/4 NPT X 1/2" HOSE (C/W NUT) | 1 |
| 8 | 0713565 | tank, booster | 1 |
| 9 | 0512985 | CLAMP, HOSE | 6 |
| 10 | 107417 | HOSE, RUBBER 1/2" ID X .84" OD | A/R |
| 11 | 0513650 | ADAPTER, 1/2" X 1/4" HOSE | 2 |
| 12 | 0514318 | ELBOW, 1/2" HOSE X 1/2" MNPT BRASS | 1 |
| 13 | 100073 | SCREW, 1/4-20 X 1/2" TRUSS HEAD SST | 3 |
| 14 | 100007 | SCREW, 10-32 X 1/2" TRUSS HEAD SST | 1 |
| 15 | 0314320 | BRACKET, PRESSURE TUBE M4.2 | 1 |
| 16 | 108954 | nut, grip 6-32 W/nylon insert | 2 |
| 1 <i>7</i> | 110562 | THERMOSTAT, HIGH LIMIT 240°F | 1 |



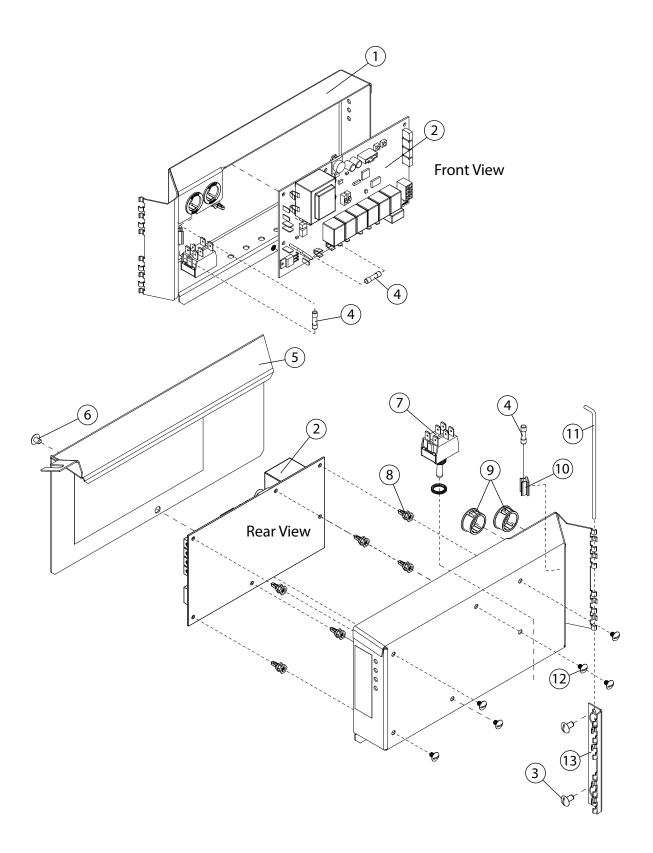
Chemical Dispensing Pumps

| Item 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 | 0503695 | LABEL, DETERGENT HOSE | A/R |
| 6 | 0502667 | HOSE, 1/4" ID X 3/8" OD PVC | A/R |
| 7 | 0501519 | TIE, NYLON 4" | 7 |
| 8 | 0706635 | TUBE, ELEMENT ASSEMBLY 45CC | 1 |
| 9 | 0707142 | ROTOR | 1 |
| 10 | 0503756 | MOTOR, INJECTOR PUMP | 1 |
| 11 | 0502644 | ELBOW, 1/4" HOSE BARB | 2 |
| 12 | 0502667 | HOSE, 1/4" ID X 3/8" OD PVC | A/R |
| 13 | 0512369 | CLAMP, HOSE | 1 |
| 14 | 114202 | TUBE, 3/16" ID X 3/8" OD X 9" LG. | 1 |
| 15 | 114203 | PUMP HD KIT, PERISTALIC | 1 |
| 16 | 100007 | SCREW, 10-32 X 3/8" TRUSS SST | 3 |
| 17 | 0504822 | SCREW, 8-32 X 1/2" PAN HD. SST | 4 |
| 18 | 0313393 | BRACKET, CHEMICAL PUMP | 1 |
| 19 | 0510870-1 | GEARMOTOR, 115/60/1, DETERGENT PUMP | 1 |
| 20 | 0313644 | PIN, HINGE | 1 |
| 21 | 0313431 | BRACKET, HINGED PANELS | 1 |
| 22 | 0513645 | HOLDER, CABLE | 4 |
| 23 _ | 0713656 110750 0513672 | KIT, DETERGENT FITTING GASKET NUT, NP 1/4' NPS PP BLACK | 1 1 1 |



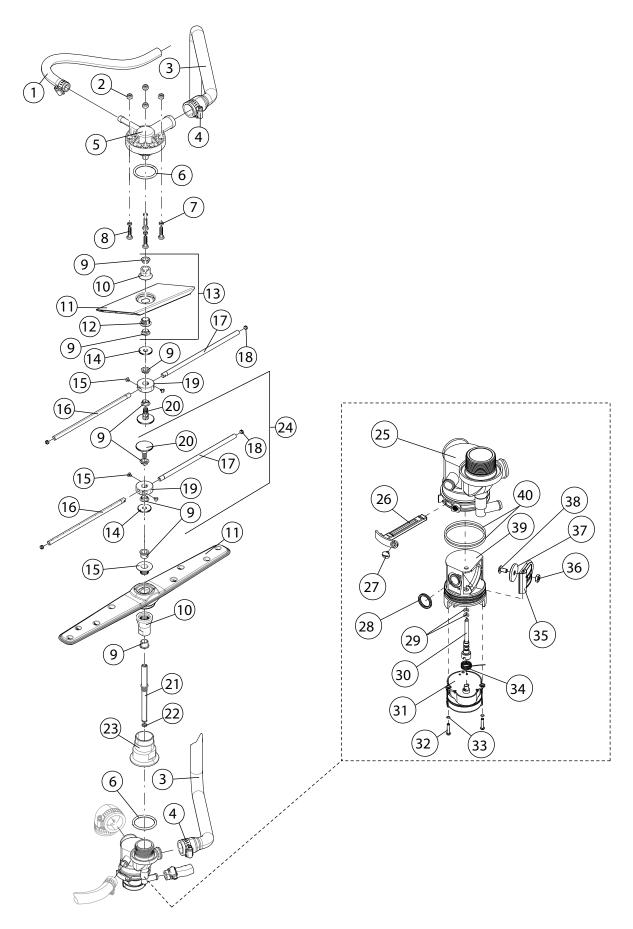
Power Input Block

| Item 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 | 1 |
| 5 | 103310 | LUG, GROUND | 1 |
| 6 | 0313395 | BOX, WIRING | 1 |
| 7 | 107964 | BUSHING, STRAIN RELIEF, SMALL | A/R |
| 8 | 0503592 | label, ground | 1 |

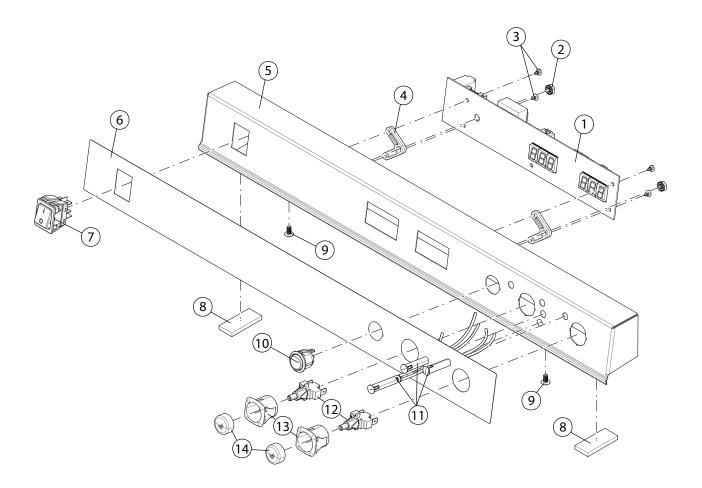


Timer Control Board Assembly

| Item No. | Part No. | Description | Qty. |
|-------------|-------------|--|------|
| 1 | 0313397-1 | BOX, CONTROL BOARD | 1 |
| 2 | 0513575 | TIMER CKT. BD. | 1 |
| 3 | 0501464 | SCREW, 10-24 X 3/8; TRUSS HD. SST | 2 |
| 4 | 0513698 | FUSE, 6A 250V | 1 |
| 5 | 0313398-1 | COVER, BOX | 1 |
| 6 | 0501411 | SCREW, 10-32 X 1/4" SST | 1 |
| 7 | 0501373 | SWITCH, BOOSTER FILL | 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 |

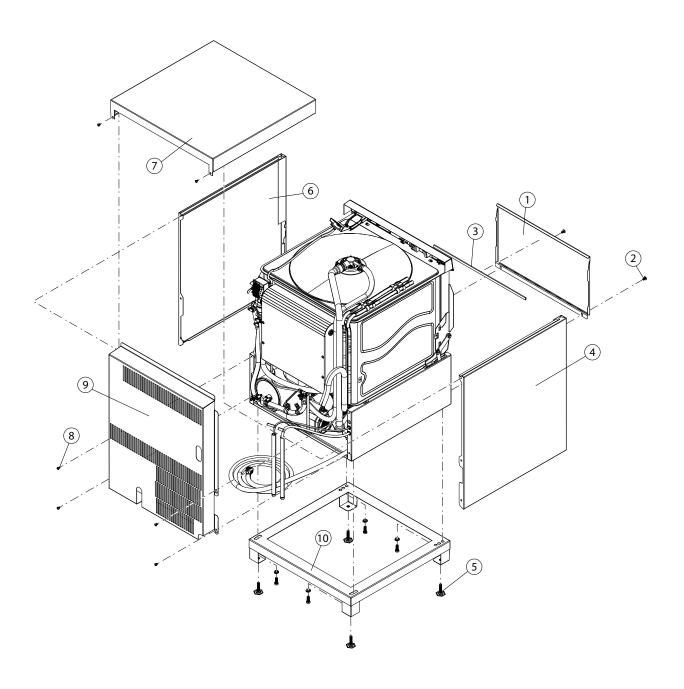


| Item No. | Part No. | Description | Qty. |
|-------------|-------------|---|------|
| 1 | 107417 | HOSE, 1/2" | A/R |
| 2 | 107967 | NUT, HEX 1/40-20 NYLON INSERT SST | 4 |
| 3 | 0513699 | HOSE, UPPER WASH ARM | 1 |
| 4 | 0502571 | CLAMP, HOSE GEAR 1-1/2" SST | 2 |
| 5 | 0514254 | HUB. UPPER WASH ARM | 1 |
| 6 | 0512133 | O-RING, 2-1/8" OD X 1-3/4" ID X 3/16" | 1 |
| 7 | 0501481 | WASHER, NYLITE | 4 |
| 8 | 100738 | BOLT, 1/4-20 X 1" SST | 4 |
| 9 | H190663 | BEARING, RINSE ARM | 4 |
| 10 | 0514271 | HUB, THREADED, WASH ARM | 2 |
| 11 | 0714276 | WASH ARM | 2 |
| 12 | 0514272 | NUT, THREADED | 2 |
| 13 | 0714277 | WASH ARM ASSEMBLY (INCLUDES ITEMS 9-12) | 2 |
| 14 | 0514256 | NUT, WASH ARM | 2 |
| 15 | 0501408 | SCREW, 8-32 X 1/4" TRUSS HEAD PHILIPPS SST | 4 |
| 16 | 0514259 | ARM, LH RINSE (8-HOLES) | 2 |
| 1 <i>7</i> | 0514260 | ARM, RH RINSE (7-HOLES) | 2 |
| 18 | 0512843 | CAP, RINSE ARM | 4 |
| 19 | 0514269 | HUB, RINSE ARM | 2 |
| 20 | 0514270 | SPINDLE, RINSE ARM | 2 |
| 21 | 0512124 | SHAFT, LOWER | 1 |
| 22 | 0512239 | O-RING | 1 |
| 23 | 0512066 | HUB, LOWER WASH ARM | 1 |
| 24 | 0714258 | RINSE ARM ASSEMBLY, COMPLETE (Includes Items 9, 14-20,) | 2 |
| 25 | 0513439 | HOUSING, MANIFOLD FWR | 1 |
| 26 | 0513443 | PIN, RETENTION | 1 |
| 27 | 0509439 | SCREW, RETENTION PIN 10-32 X 5/16" SST | 1 |
| 28 | 0513446 | O-RING, QUAD | 1 |
| 29 | 0513445 | O-RING, PIVOT SHAFT | 2 |
| 30 | 0513447 | SHAFT, FLAPPER | 1 |
| 31 | 0712123 | MOTOR, DRAIN VALVE | 1 |
| _ | 0509257 | PIN, MOTOR (COMES WITH MOTOR) | 1 |
| 32 | 104883 | SCREW, MOTOR 6-32 X 3/8" SST | 2 |
| 33 | 0501497 | WASHER, SPLIT LOCK #8 | 2 |
| 34 | 0512126 | SPRING, TORSION | 1 |
| 35 | 0513442 | FLAPPER | 1 |
| 36 | 100194 | NUT, FLAPPER SEAL 10-32 SST | 1 |
| 37 | 0512127 | GASKET, FLAPPER | 1 |
| 38 | 100007 | SCREW, FLAPPER SEAL 10-32 X 3/8" RD.HD. SST | 1 |
| 39 | 0513441 | BODY, CARTRIDGE DRAIN VALVE | 1 |
| 40 | 0513444 | O-RING, CARTRIDGE BODY | 1 |
| - | 0713667 | CARTRIDGE ASSEMBLY, DRAIN VALVE COMPLETE (INCLUDES ITEMS 25-40) | 1 |



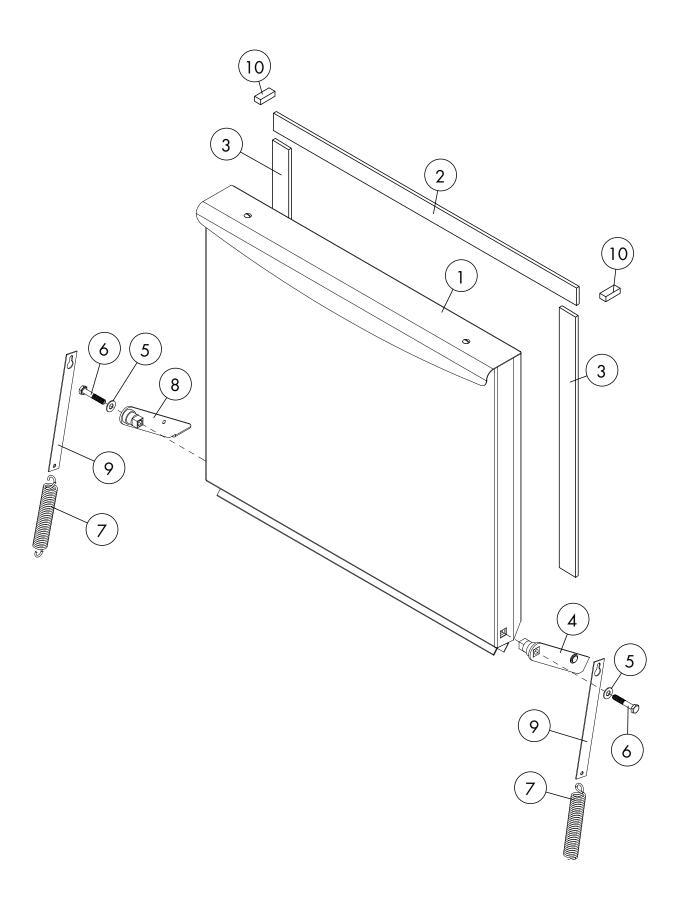
Control Panel

| Item No. | Part No. | Description | Qty. |
|-------------|--------------------|--------------------------------------|------|
| | | | |
| 1 | 0514315 | 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 | 0514336 | LABEL, FACIA 601HRG | 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 | 3 |
| 12 | 0512216 | CONTACT, MOMENTARY, N.O. | 2 |
| 13 | 051221 <i>7</i> -1 | HOUSING, SWITCH, ROUND | 2 |
| 14 | 0512218-1 | BUTTON, SWITCH GREEN, ROUND | 2 |



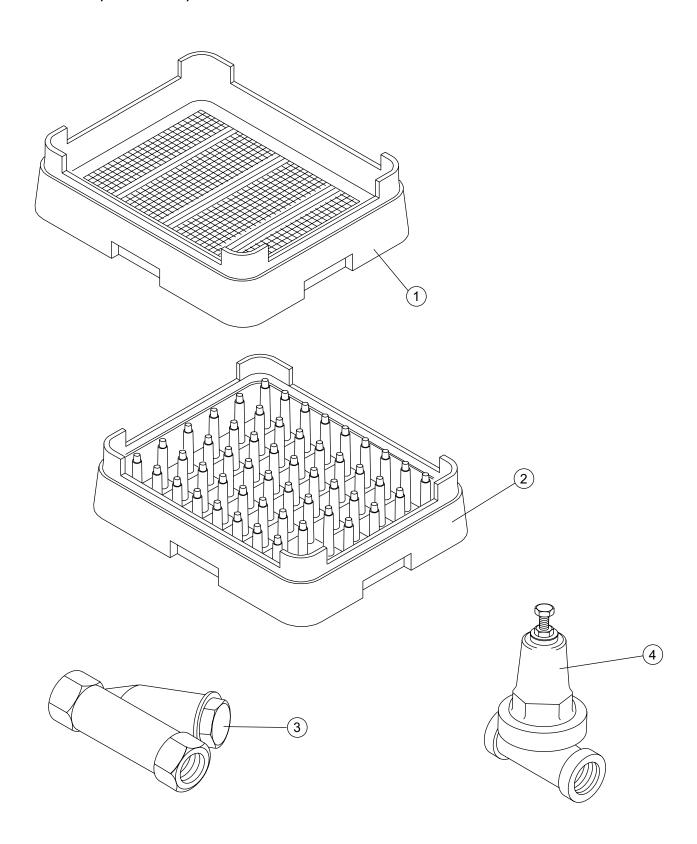
Panels

| Item No. | Part No. | Description | Qty. |
|-------------|-------------|------------------------------------|------|
| 1 | 0313406 | PANEL, FRONT | 1 |
| 2 | 100779 | SCREW 1/4-20 X 5/8" TRUSS SS PHIL | A/R |
| 3 | 0513735 | GASKET | 1 |
| 4 | 0314232 | PANEL, LH SIDE | 1 |
| 5 | 0503718 | FOOT, ADJUSTING | 4 |
| 6 | 0314237 | PANEL, RH SIDE | 1 |
| 7 | 0313584-1 | PANEL, TOP | 1 |
| 8 | 100007 | SCREW, TRUSS SLOT SST 10-32 X 3/8" | A/R |
| 9 | 0374233 | PANEL, REAR | 1 |
| 10 | 0712393 | STAND, 6" | 1 |



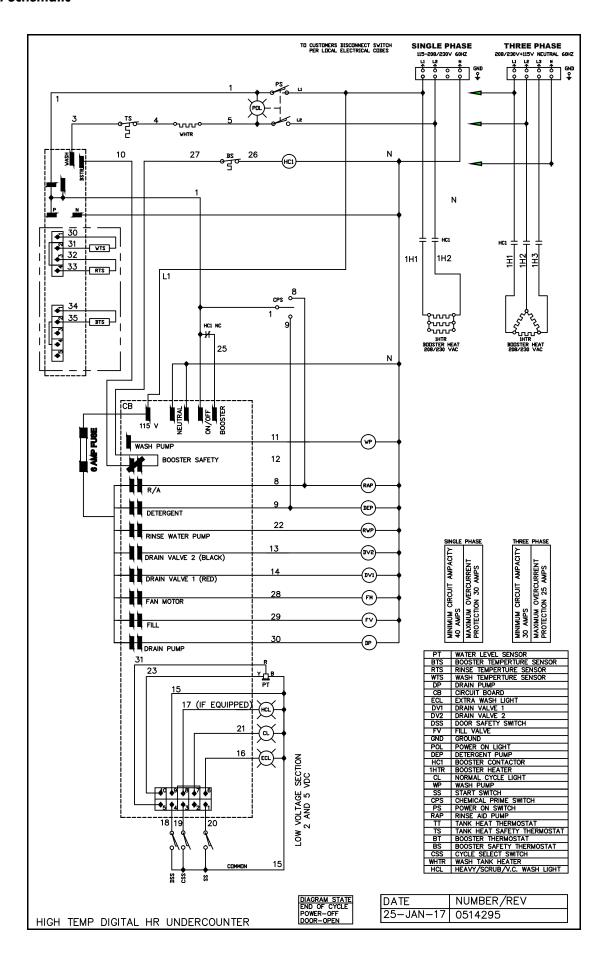
Door Assembly

| Item No. | Part No. | Description | Qty. |
|-------------|-------------|------------------------------|------|
| 1 | 0713136 | DOOR ASSEMBLY | 1 |
| 2 | 0513558 | GASKET, DOOR TOP | 1 |
| 3 | 0513727 | GASKET, DOOR SIDE | 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 | 0713429 | HINGE, LH ASSY | 1 |
| 9 | 0313430 | ARM, DOOR SPRING | 2 |
| 10 | 0512320 | GASKET, STEAM | 2 |

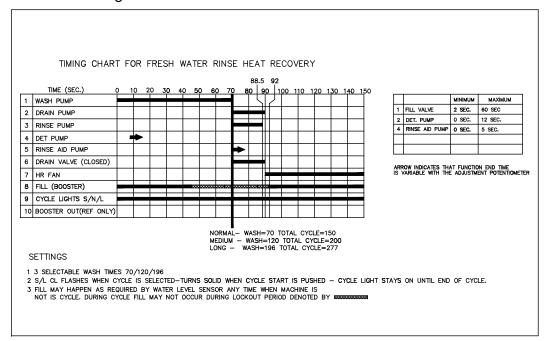


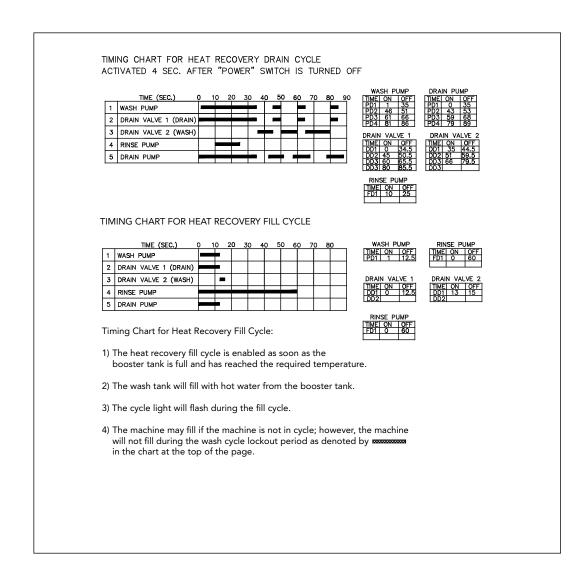
Dish Racks, Line Strainer, PRV

| Item 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 | 1 |
| 4 | 108265 | VALVE, PRESSURE REGULATING (PRV) | 1 |



601HRG Timing Charts





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