

Champion®

The Dishwashing Machine Specialists

Installation, Operation, Cleaning and Maintenance Manual



High Temperature Undercounter Dishwasher

Model:
UH140B

Hot water sanitizing with 4kW built-in
stainless steel electric booster

Option:

6kW built-in electric stainless steel booster



Issue Date: 4.24.24

Manual P/N 0514791. Rev A

For machines beginning with S/N W2404118766 and above

3765 Champion Boulevard
Winston-Salem, NC 27105
(336) 661-1992 Fax: (336) 661-1660
Toll-free: 1 (800) 858-4477

2674 N. Service Road, Jordan Station
Ontario, Canada L0R 1S0
(905) 562-4195 Fax: (905) 562-4618
Toll-free: 1 (800) 263-5798



The Spirit of Excellence

National Service Department

In the USA:

Toll-free: 1- (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 right front corner
of the lower panel

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

Revision Record

We reserve the right to make changes to this manual without notice and without incurring any liability by those changes. Equipment owners may request a revised manual, at no charge, by calling 1 (800) 858-4477 in the USA or by calling 1 (800) 263-5798 in Canada.

REVISION DATE	PAGES	EFFECTIVE S/N	DESCRIPTION
APR-24-24	ALL	W2404118766	Released first edition

Safety Symbols

The following symbols are used throughout this manual to alert the reader to important information.



WARNING:

Warning statements indicate a condition or practice that can result in personal injury or possible death.



CAUTION:

Caution statements indicate a condition or practice that can result in damage to the machine or associated equipment.



DO NOT:

Do not statements indicate that a condition or practice will diminish the effective operation of the machine.



OKAY:

Okay statements indicate that a condition or practice is correct and should be followed.



NOTE:

Note statements highlight important information necessary for the operation of the machine.

Table of Contents

Revision History	i
Safety Symbols	ii

Installation1

Receiving and Placement	1
Installation Codes	2
Water Connection	3
Drain Connection	4
Electrical Connection.....	6
Detergent Set-up	8
Rinse-Aid Set-up.....	10

Operation12

Control Panel Description.....	12
Loading Wares.....	13
Fill Mode	14
Wash Mode.....	15
Auto-Clean Drain Mode.....	16

Cleaning17

Wash and Rinse Spray Arms, Scrap Screens, Exterior.....	17
Deliming.....	18

Maintenance.....19

Schedules	19
Troubleshooting Chart	20

Replacement Parts.....21

Timing Chart and Electrical Schematic46

Timing Chart	46
Electrical Schematic	47

Limited Warranty

Champion Industries, Bi-Line Systems (herein referred to as "The Companies"), 3765 Champion Blvd., Winston-Salem, North Carolina, 27105) warrants machines, and parts, as set out below:

WARRANTY OF MACHINES: "The Companies" warrant all new machines of its manufacture bearing the name Champion or Bi-Line and installed within the United States to be free from defects in material and workmanship for a period of one (1) year from the date of installation or fifteen (15) months from the date of shipment by "The Companies", whichever occurs first. Products shipped outside of United States are not covered by this Limited Warranty. The warranty registration card must be returned to "The Companies" within ten (10) days after installation or online to "The Companies" at www.championindustries.com/warranty-registration for the United States or by fax using the form provided at the front of this manual. If the warranty card, fax or email is not sent to "The Companies" within 15 days, then the warranty will expire after 15 months from the date of shipment. "The Companies" shall not assume any responsibility for additional installation costs 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 Companies", at their election, will either repair or replace the defective parts, the machine or accept return of the machine for full credit. In the event that "The Companies" elect to repair, the labor and work to be performed in connection with the warranty shall be done by "The Companies" authorized service agent during regular working hours and shall be covered at normal labor rates. Overtime charges are the responsibility of the equipment purchaser. Warranty travel is covered up to 50 miles from the authorized service technician's servicing office. If travel exceeds 50 miles, then the end user is responsible for any additional travel expense. Service calls initiated under warranty that are found to not contain any defects in materials or workmanship, shall not be covered by "The Companies". Defective parts become the property of "The Companies". Use of non-OEM replacement parts not authorized by "The Companies" shall relieve "The Companies" of all liability in connection with its warranty. In no event will "The Companies' warranty obligation exceed "The Companies" charge for the machine. Machines that come with a factory paid start-up shall be limited to one authorized service call. Installation problems or delays of any kind shall not be covered by "The Companies" and are the sole responsibility of the equipment purchaser.

The following are not covered by "The Companies" warranty:

- a. Element tubes, chemical squeeze tubes, O-rings, or curtains
- b. Vacuum breakers
- c. Adjustments to structural or mechanical components covered by recommended maintenance procedures
- d. Replacement of fuses, resetting overload breakers, or high limit thermostats
- e. Adjustment of thermostats, or temperature controlling devices
- f. Adjustment of clutches
- g. Adjustments of water pressure(s)
- h. Adjustments of chemical pumps
- i. Opening or closing of utility supply valves or switching of electrical supply current
- j. Cleaning of valves, strainers, screens, nozzles, or spray pipes

- k. Performance of regular maintenance and cleaning as outlined in the operator's guide
- l. Damages resulting from water conditions, accidents, alterations, improper use, abuse, tampering, improper installation, low voltage conditions, inadequate wiring, outdoor use, or failure to follow maintenance and operation procedures
- m. Wear on pulper cutter blocks, pulse vanes, and auger brush
- n. Damages due to improper storage
- o. Special installations or applications, including remote locations, are limited in coverage by this warranty. Any installation that requires additional work, and/or travel to gain access to a machine for service is the sole responsibility of the equipment purchaser

Defects not covered by the warranty but not limited to are:

1. Damage to the exterior or interior finish
2. Damage caused by improper connection to utility service other than that designated on the rating plate
3. Inadequate or excessive water pressure
4. Corrosion due to foreign materials, improper water supplies, improper chemicals, or chemicals dispensed in excess of recommended concentrations
5. Failure of electrical components due to connection of chemical dispensing equipment installed by others
6. Leaks and damage due to poor water quality
7. Leaks and damage caused by the installer, including machine table connections
8. Leaks or damage caused by chemical dispensing equipment connections installed by others
9. Failure to comply with all local building codes
10. Damage caused by labor dispute

WARRANTY OF PARTS: "The Companies" warrant all new machine parts produced or authorized by "The Companies" to be free from defects in material and workmanship for a period of 90 days from the date of invoice. If any defect in material and workmanship is found to exist within the warranty period, "The Companies" will refund the cost of the defective part.

DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITY. "THE COMPANIES" WARRANTY IS ONLY TO THE EXTENT REFLECTED ABOVE. "THE COMPANIES" MAKE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY, OR FITNESS OF PURPOSE. "THE COMPANIES" 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 COMPANIES" MACHINES AND PARTS. ALL OTHER REMEDIES ARE EXCLUDED, INCLUDING ANY LIABILITY FOR INCIDENTALS OR CONSEQUENTIAL DAMAGES.

Champion Industries or Bi-Line Systems does not authorize any other person, including persons who deal in Champion Industries or Bi-Line Systems machines, to change this warranty or create any other obligation in connection with Champion Industries or Bi-Line Systems machines.

NON STANDARD VOLTAGES: Contact Factory for availability and price. NOTE: Options prices apply only when ordered with machine.

Champion Industries/Bi-Line Systems 3765 Champion Blvd., Winston-Salem, 27105, North Carolina, USA

Tel: (336)661-1556, Fax: (336) 661-1979, email: sales@championindustries.com

Receiving



Inspect the outside of the dishwasher carton for signs of damage.

Remove the carton and inspect the dishwasher for damage.

Check for any options or accessories that may have shipped with your dishwasher.

Register by fax using the form at the front of this manual or online at:
<http://www.championindustries.com/register>



CAUTION:

Be careful when lifting and moving the machine to avoid damage.

Placement

1. Compare the installation site utility connections with the dishwasher utility connections and make sure they are the same.
2. Level the machine using the four leveling feet. Level side-to-side and front-to-back.
3. Plumbing connections must be made before the electrical installation begins.
4. 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].
5. 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.
8. The chemical tubing taped to the back of the machine must be repositioned before permanently placing the machine.
9. Place the dishwasher in its permanent location.
10. Remove the lower front panel in preparation for utility installations.

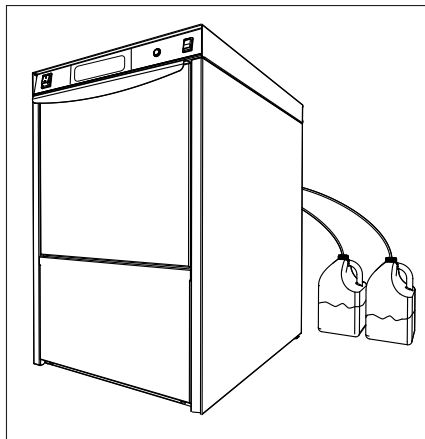


Fig. 1 -
Do not elevate chemical containers

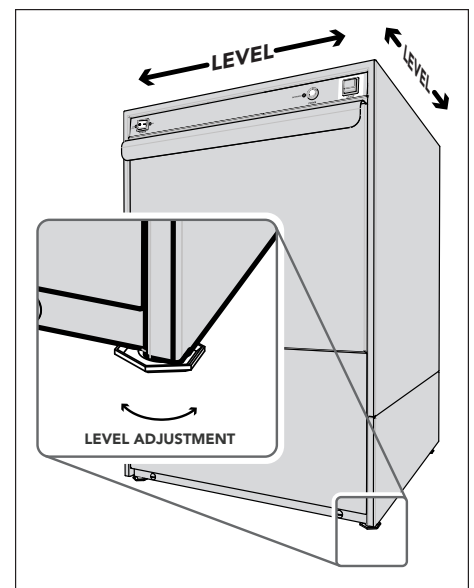


Fig. 2 -
Level the machine.

Installation Codes

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.



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.

STOP



STOP

ALL PLUMBING CONNECTIONS MUST BE MADE **BEFORE** THE ELECTRICAL INSTALLATION.
DAMAGE TO THE WATER HEATERS WILL OCCUR IF POWER IS TURNED ON WITHOUT AN
ADEQUATE WATER SUPPLY.

Water Connection



**HOT
WATER**

Connect the plumbing in accordance with the specifications below.



MINIMUM 1/2" NPT OR LARGER HOT WATER SUPPLY LINE.



CAUTION: To prevent damage to the dishwasher supply valves, the installing plumber must thoroughly flush debris from the water supply line before connecting it to the dishwasher.



NOTE: All plumbing connections **MUST BE POSITIONED** to allow the machine to be moved for service and cleaning.

BOOSTER RISE °F	BOOSTER kW	MINIMUM INCOMING TEMPERATURE	MINIMUM INCOMING SUPPLY FLOWING PRESSURE
40° RISE	4kW	140°F/ 60°C	30 PSI/207kPa
70° RISE	6kW	110°F/ 43°C	30 PSI/207 kPa



WATER HARDNESS OF 3 GRAINS/US GAL - 0.83 IMP GAL - 5.3mg/L OR LESS.



THE DISHWASHER IS EQUIPPED WITH A 6 FT / 1.8 m FLEXIBLE FILL HOSE WITH A 3/4" FNPT FITTING.



THE PRV SHIPPED INSIDE THE DISHWASHER MUST BE INSTALLED IN THE INCOMING WATER LINE AFTER THE SERVICE SHUT-OFF VALVE.

THE PRV MUST BE ADJUSTED TO PROVIDE 20-22 PSI FLOWING PRESSURE MEASURED AT THE DISHWASHER.



INSTALL A 1/2" OR LARGER SHUT-OFF VALVE IN THE WATER SUPPLY LINE AS CLOSE TO THE DISHWASHER AS POSSIBLE FOR SERVICING.

Continued on the next page.

Drain Connection



DRAIN

Connect the drain in accordance with the specifications below.



CAUTION: The dishwasher drain connection must comply with all local plumbing, health and safety codes.



THE DISHWASHER IS EQUIPPED WITH A 4FT / 1.2 m CLEAR BRAIDED DRAIN HOSE AND A 3/4" MNPT x 5/8" HOSE BARB ADAPTER.



CONNECT THE DRAIN HOSE TO A 1-1/2" WYE FITTING.



THE DRAIN HOSE MUST BE VENTED TO PREVENT SIPHONING.



DRAIN CONNECTION WITH A DEDICATED WASTE LINE IS STRONGLY RECOMMENDED.



DO NOT

- add an extension to the drain hose
- modify or remove the syphon loop
- discard the supplied drain hose fitting

Drain Connection

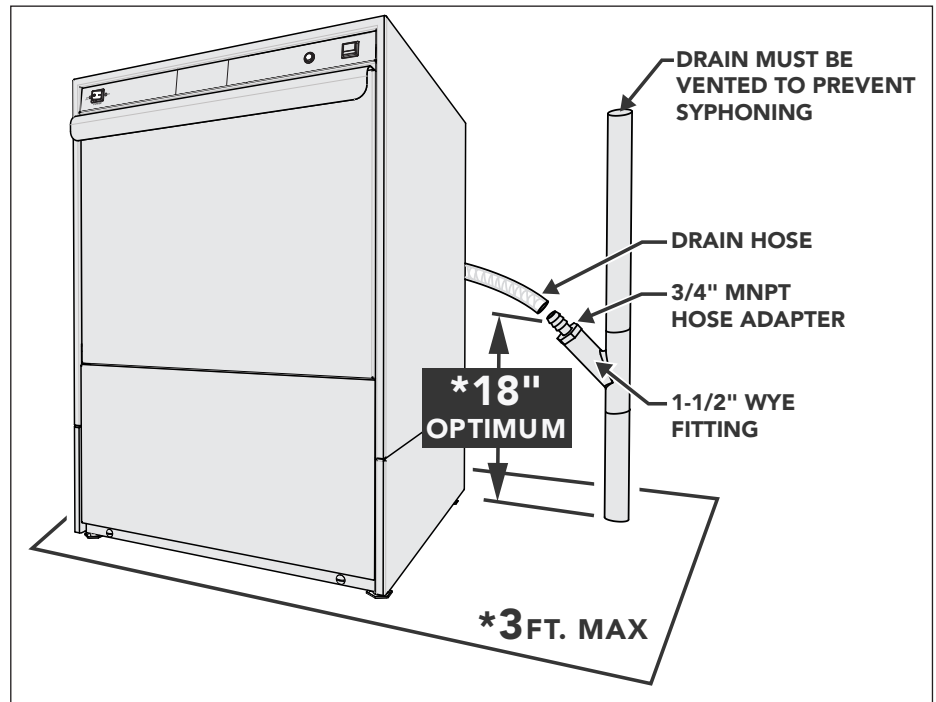


Fig. 3
Configuring the drain line.

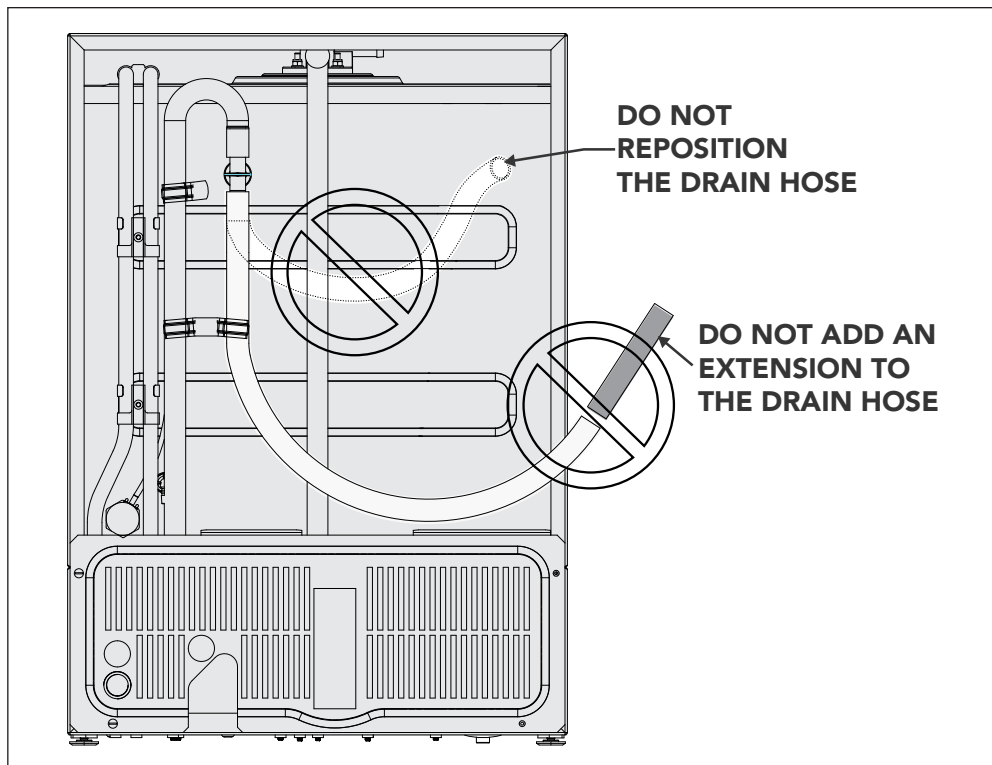


Fig. 4
Do not alter the drain line.

Electrical Connection



WARNING:Electrocution may occur when working on energized circuits. Disconnect power at the main breaker or service disconnect switch, then lock out and tag it to indicate that work is being performed on the circuit.



CAUTION:Electrical connections must be made AFTER the plumbing installation. Damage to the water heaters will occur if the power is turned on without an adequate water supply.

Follow the instructions below and on the next page to connect power to the machine.

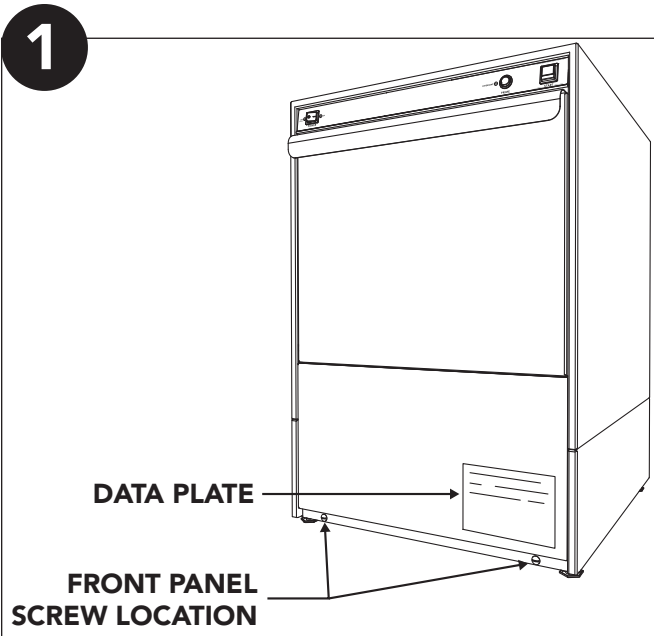


Fig. 5

- ! CHECK THE ELECTRICAL SPECIFICATIONS ON MACHINE DATA PLATE.
- ! REFER TO THE BREAKER SIZE TABLE BELOW AND ENSURE THE BUILDING BREAKER SIZE MATCHES.
- ! REMOVE DISHWASHER LOWER FRONT PANEL TO ACCESS INTERNAL COMPONENTS FOR INSTALLATION

40°F/22°C Rise Electric Booster (4kW)				70°F/39°C Rise Electric Booster (6kW)			
Elec. Specs	Rated Amps	Minium Supply Circuit Ampacity	Maximum Overcurrent Protective Device (Breaker Size)	Elec. Specs	Rated Amps	Minium Supply Circuit Ampacity	Maximum Overcurrent Protective Device (Breaker Size)
208/50/60/1	22	30	30	208/50/60/1	29	40	40
240/50/60/1	24	30	30	240/50/60/1	31	40	40

Table - 1
Breaker (Service Disconnect Switch) Size

Electrical Connection (continued)

2

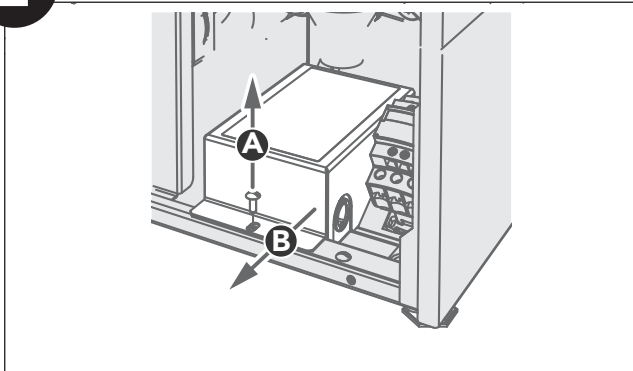


Fig. 6

- A** REMOVE THE LEFT SCREW ON THE FRONT LIP OF THE TERMINAL BOX.
- B** LIFT AND REMOVE THE COVER TO ACCESS THE TERMINAL BLOCK.

3

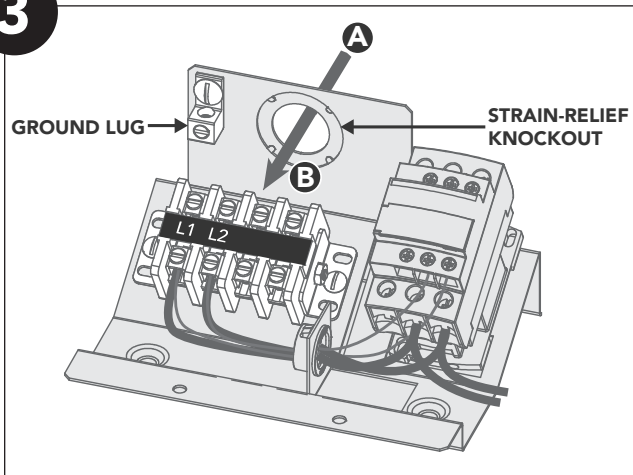


Fig. 7

STOP



STOP

A 30" / 76 cm SERVICE LOOP MUST BE PROVIDED BEHIND THE UNIT FOR SERVICING.

A

THREAD THE POWER CABLE THROUGH THE MIDDLE SLOT IN THE REAR PANEL.

B

SECURE THE CABLE TO THE TERMINAL BOX USING THE PROPER STRAIN RELIEF.

4

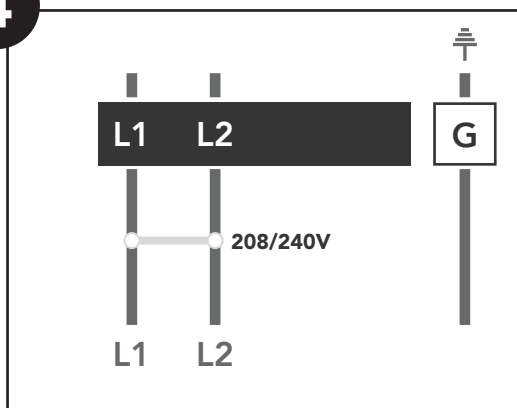


Fig. 8

!

CONNECT THE INCOMING POWER AS SHOWN IN FIG. 8.

!

208-240V / 50/60Hz / 1Ø
SINGLE PHASE - TWO WIRE PLUS GROUND

! VERY IMPORTANT !

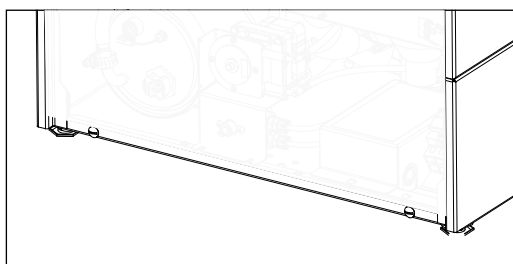
MACHINE START-UP

(Chemical Dispensing Pumps)

PLACE THE CHEMICAL CONTAINERS AS CLOSE TO THE MACHINE AS POSSIBLE. DO NOT ELEVATE THE CONTAINERS ABOVE THE FINISHED FLOOR

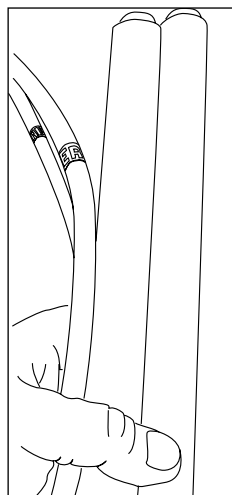
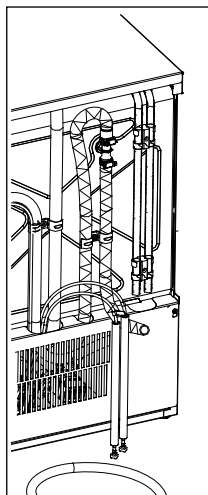
! VERY IMPORTANT !

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.

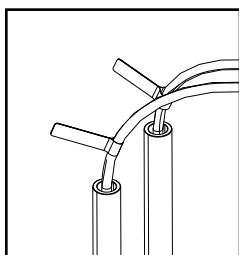


The detergent and rinse-aid pumps are located at the lower left-side of the machine behind the lower panel.

The tubing is stowed on the back of the machine for shipping.



Each pump is equipped with 6 feet/ 1.8 meter of pick-up tubing. The tubing consists of supply tubing, stiffener tube, and strainer.



A red label marked **DETERGENT** and a blue label marked **RINSE-AID**, identify the lines.

Detergent Set-up

DET

- ❗ USE A NON-CHLORINATED COMMERCIAL GRADE DETERGENT.
- ❗ WASH TANK CAPACITY: 4 US GAL / 3.3 IMP. GAL / 15 L.
- ❗ DETERGENT INJECTION POINT ON WASH TANK REAR WALL.
- ❗ DETERGENT DISPENSING TIME WAS SET AT THE FACTORY.
The final adjustment should be performed by the chemical supplier.
- ❗ DETERGENT PUMP IS LOCATED BEHIND LOWER FRONT PANEL.

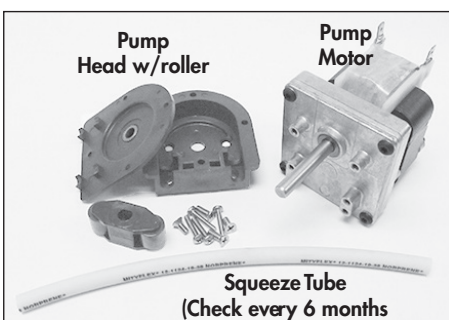


Fig. 9

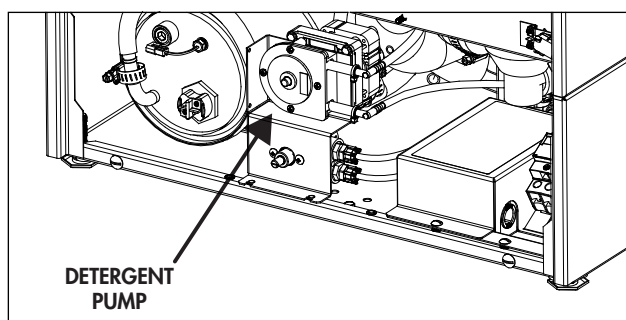


Fig. 10

Prime the Detergent Pump

1. Place the detergent pick-up tube in a full container of detergent.
2. Push dishwasher power switch ON. The dishwasher will automatically fill with water.
3. When the fill is complete, open the dishwasher door and push the detergent PRIME switch UP. The detergent pump will run.
4. Continue to hold the prime button and watch the detergent injector at the back of the dishwasher for signs of chemical entering the machine.
5. Release the Prime button and close the dishwasher door. Priming is complete.



NOTE: Prime the detergent pump during initial set-up and whenever the chemical container is replaced.

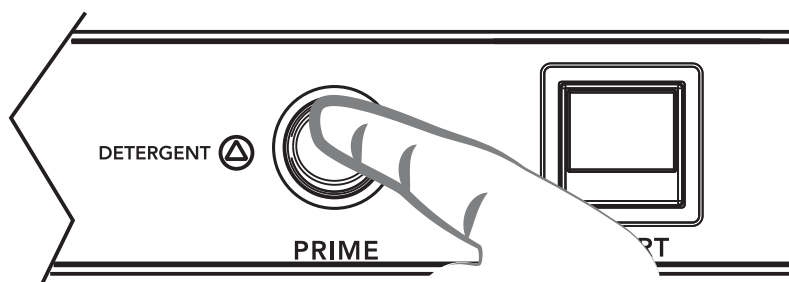


Fig. 11

Rinse-aid Set-up



! CONSULT CHEMICAL SUPPLIER FOR THE CORRECT RINSE-AID.

! RINSE WATER PER RACK: 0.84 US GAL / 0.7 IMP. GAL / 3.2 L.

! RINSE-AID INJECTION POINT IS INTO THE RINSE ARMS.

! RINSE-AID VOLUME WAS SET AT THE FACTORY.
The final adjustment should be performed by the chemical supplier.

! RINSE-AID PUMP IS LOCATED BEHIND THE LOWER FRONT PANEL.

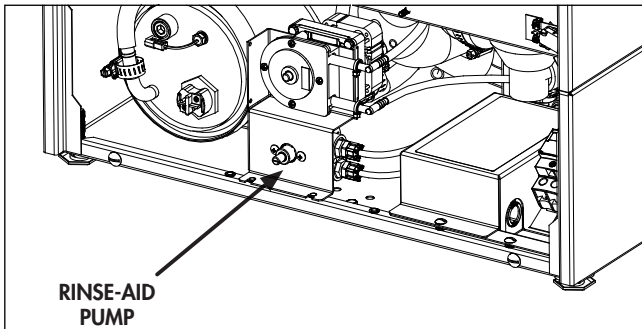


Fig. 13

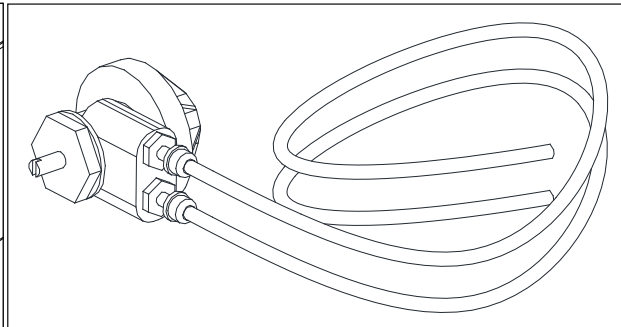
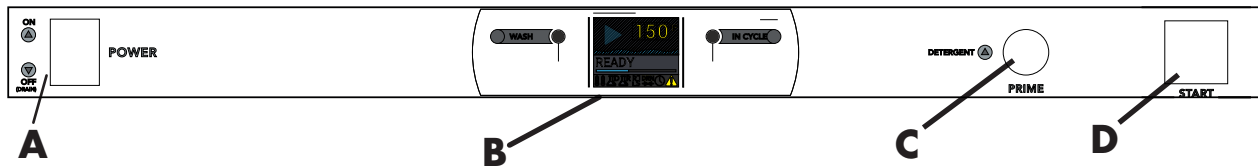


Fig. 14

***This Page
Intentionally
Left Blank***

Operation

Control Panel Description



- A - ON-OFF/Drain** power switch turns power on and off. It initiates the automatic fill cycle when turned on and the automatic drain cycle when turned off.
- B - LCD** screen displays machine status: including temperatures, operation, heating and autoclean functions such as, wait, and in-cycle. **TEMPERATURE DISPLAY** displays operation codes for the operator. The minimum wash water temperature is 150°F/66°C. The minimum/maximum final rinse temperature is 180-195°F/ 82-91°C. **WAIT INDICATOR** light illuminates during the initial fill and as the booster heats to the minimum 180°F/82°C. The indicator light goes out when 180°F/82°C is achieved.
- C - DETERGENT PRIME SWITCH** when pressed, runs the detergent dispensing pump to prime the pick-up hose during initial set-up and whenever the detergent supply container is changed.
- D - START PUSH BUTTON** Pressing the START button initiates an automatic timed cycle and illuminates the IN CYCLE light.

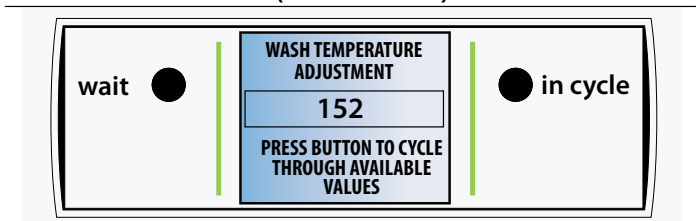
Parameter Setting Instructions

0514058 REV A -30-MAR-2021



CAUTION: Parameter changes must be made by qualified personnel only.

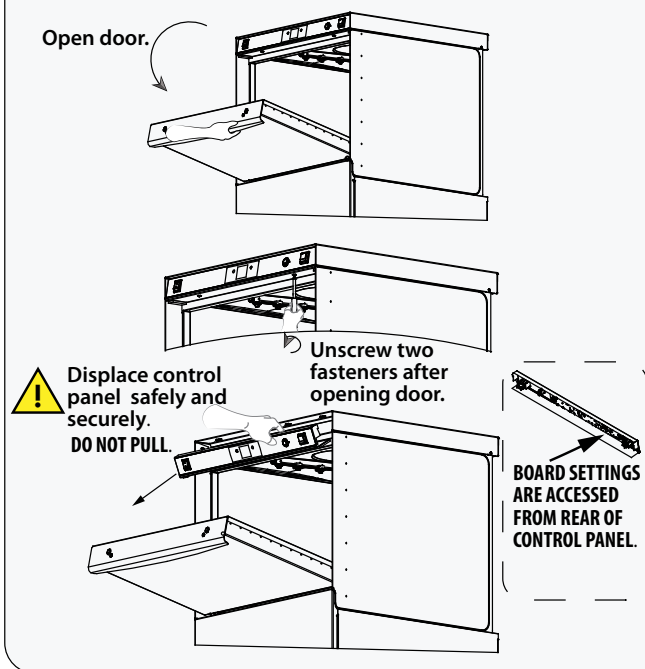
(LCD SCREEN)



The following parameters may be changed depending on model:

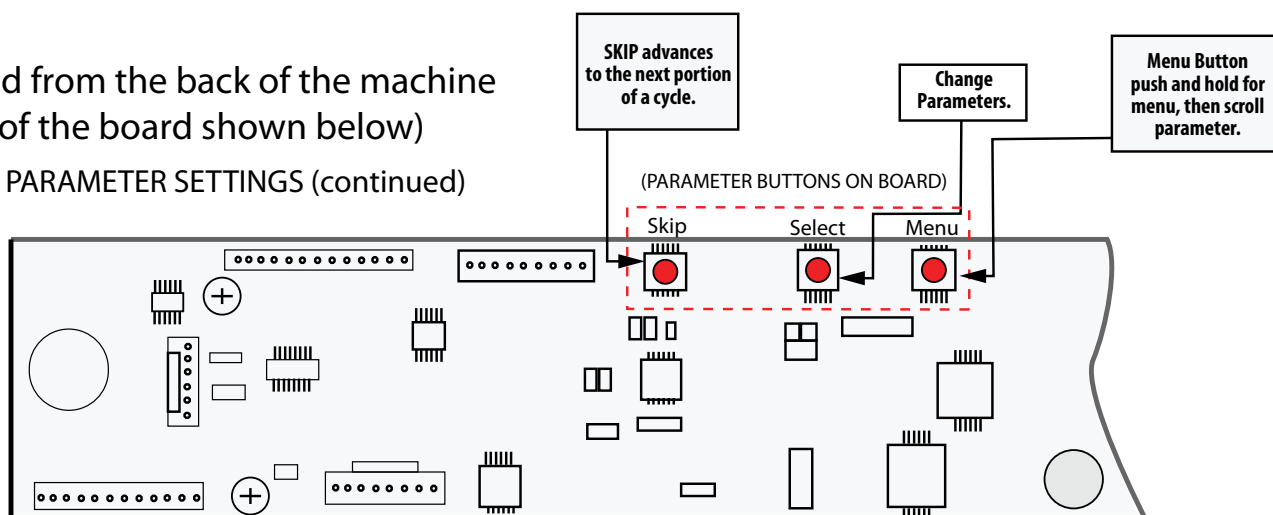
1. DETERGENT CONCENTRATION
2. RINSE TEMP
3. WASH TEMP
4. FILL TIME
5. UNITS (F-C)
6. LANGUAGE (English - French)

Locate control board shown below:



Viewed from the back of the machine
(Back of the board shown below)

PARAMETER SETTINGS (continued)



To Change Parameters:

1. Push and Hold the "Menu" button.
2. DET settings screen will appear first.
3. Push menu button to scroll through until desired parameter is reached.
4. Push "CHANGE" button until desired setting is reached.
5. Release and control will return to normal operation (approximately 3 seconds).

OPERATIONAL DISPLAY

The screen displays the operational status of the machine throughout the cycle.

• Start-up Sequence



1. When power switch is turned ON, system information screen will show briefly.
2. This shows firmware version, parameter settings, and cycle counts.



1. Machine is filling.
2. Wait light is illuminated.
3. Progress bar shows fill time remaining.



1. Red thermometer indicator shows booster tank is heating.
2. Wait light remains illuminated.
3. Wait light indicates cycle is pending.
4. Progress bar shows remaining heat time.



1. Booster heater has achieved temperature
2. Blue thermometer bar shows the wash tank heat is active.
3. Wait light is out and READY shows a cycle may begin.



1. Ready indicates the machine will wash.
2. 155°F indicates the wash tank temperature.

Operational Display (continued)

WASH CYCLE



WASH

1. The status indicator shows cycle progress.
2. In-cycle light is illuminated.



DRAIN

1. When the wash cycle is complete the machine will drain all of the water and refill with fresh hot water.



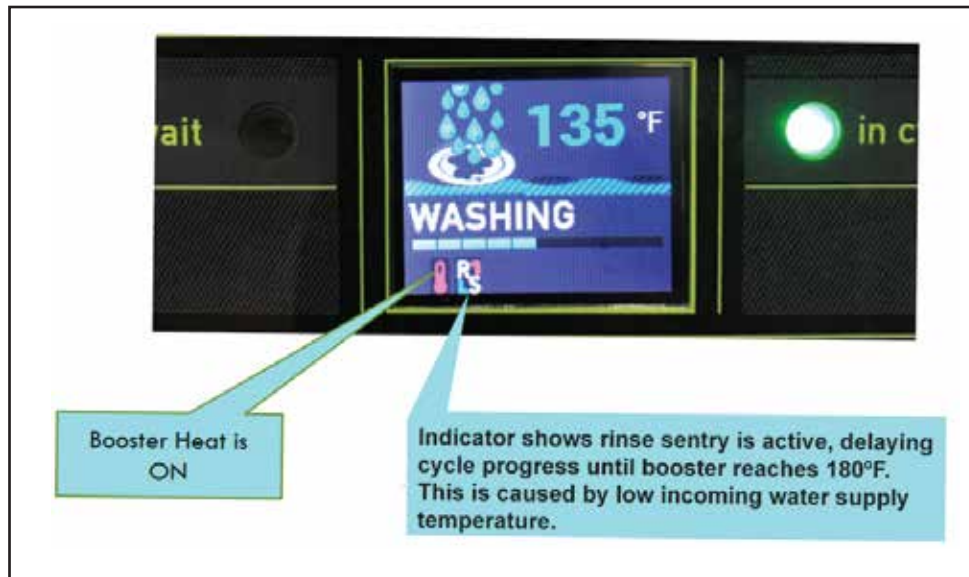
RINSE

1. Display changes to red and indicates rinse temp.

Operation

Operation - Rinse Sentry, Auto-Clean, Drain Mode

RINSE SENTRY



AUTOCLEAN DRAIN



1. When machine is turned off, the AutoClean screen with the status indicator is shown.



2. This takes approximately 2-1/2 minutes.
3. When complete, open door, clean screens and wash/rinse arms and allow machine interior to air dry.

Cleaning

! Clean the machine at the end of each meal period, every 2 hours of continuous operation, and at the end of the day.



CAUTION: Dishwasher surfaces may be hot. Cleaning chemicals may be caustic to the skin and eyes. Wear protective clothing and eye protection when handling chemicals and cleaning the machine.



NEVER USE A METALLIC SCRUB PAD TO CLEAN THE DISHWASHER. USE A SOFT CLOTH AND MILD DETERGENT.

NEVER SPRAY THE EXTERIOR OF THE MACHINE WITH WATER. USE A SOFT CLOTH AND MILD DETERGENT.

Push the power button OFF, the light will go out.

The machine will enter the Auto-clean mode and then drain.

Remove the upper and lower wash and rinse spray arms. Flush with clean water in a sink.

Refer to Fig.19 below. Check the rinse spray arm nozzles. If necessary, remove the end plug and clean the nozzles with a small paper clip to remove debris. Flush the arms thoroughly and replace the end plugs.

Remove the scrap screen making sure debris does not fall out of the screen and into the wash tank. Flush and back flush the screen in a sink.

Wipe the sump clean with a soft cloth and clean the sump strainer.

Wipe the exterior of the machine with a soft cloth and mild detergent.

Reassemble the machine and leave the door open to aid overnight drying.

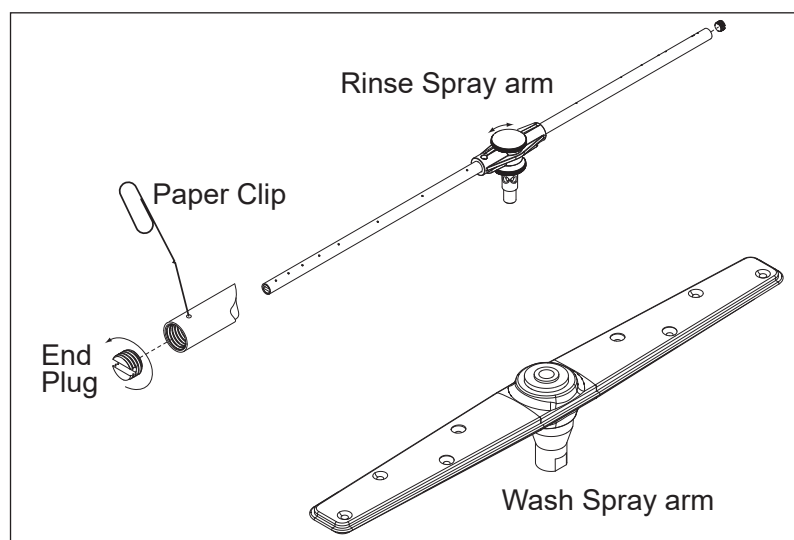


Fig. 19

Cleaning - Deliming



WARNING:

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

Deliming solutions can cause severe irritation and possible chemical burns. Always wear protective clothing and goggles when handling chemicals.

Follow the steps below to delime the dishwasher.

1. Open the dishwasher door and remove the dish rack.
2. Remove the detergent and rinse-aid chemical supply tubing from their chemical supply containers.
3. Place the pick-up tubes in a container of hot water.
4. Push the dishwasher power switch to the ON position. The dishwasher will fill with water.
5. Press and hold the detergent prime switch UP to flush the detergent from the supply tubing. Release the switch.
6. Turn the dishwasher power switch to OFF/DRAIN to drain the wash tank. The WASH indicator light will go out in about 2 minutes.
7. **Always wear eye protection, rubber gloves and protective clothing when handling chemicals.**
8. 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.
10. Press the power switch to the ON position. The machine will fill with water.
11. Press and hold the Start button for one second to initiate an automatic cycle.
12. When the cycle has ended, open the door and check the deliming results.
Repeat steps 6-11 if necessary. Push the power switch to OFF/Drain to drain the machine.
13. Push the power switch ON to refill the machine. Place an empty dish rack in the machine.
14. Run 4 empty cycles to ensure all deliming chemicals are flushed from the machine.
15. Return chemical supply tubing to their containers and prime the chemical lines.
16. Deliming is complete.

Maintenance - Schedules

Daily Maintenance

1. Check all of the wash arm and rinse arm spray jets and clean as necessary.
2. Make sure the water supply is on and the drain is not clogged.
3. Check the temperature display and ensure it is operating.
4. Make sure the dish racks are in good condition.
5. Check the chemical containers and refill as needed.
6. Follow the cleaning procedures on page 15.

Weekly Maintenance

1. Perform Steps 1-6 in the Daily Maintenance.
2. Inspect water lines for leaks.
3. Check for water leaks underneath the dishwasher.
4. Make sure the floor drain and/or drain lines are unobstructed.
5. Make sure the dishwasher is level.
6. Clean accumulated lime deposits from the wash tank heating element.
7. Inspect the scrap screen and replace if damaged.
8. Check the spray arms and replace or repair if damaged.

Semi-Annual Maintenance

1. Inspect the chemical dispensing pump tubing for cuts, kinks or bends and replace if necessary.
2. Place an empty dish rack inside the dishwasher. Remove the pick-up tubes from the chemical containers. Place the tubes in a container of hot water and run the dishwasher for twenty cycles to thoroughly flush the lines. Check the lines to ensure they are unobstructed.
3. Disassemble the detergent pump and replace the squeeze tube. Reassemble.
4. Return the pick-up tubes into full chemical containers and return the machine to service.

Yearly Maintenance

Contact your authorized service agent for a preventive maintenance inspection.

Lubrication

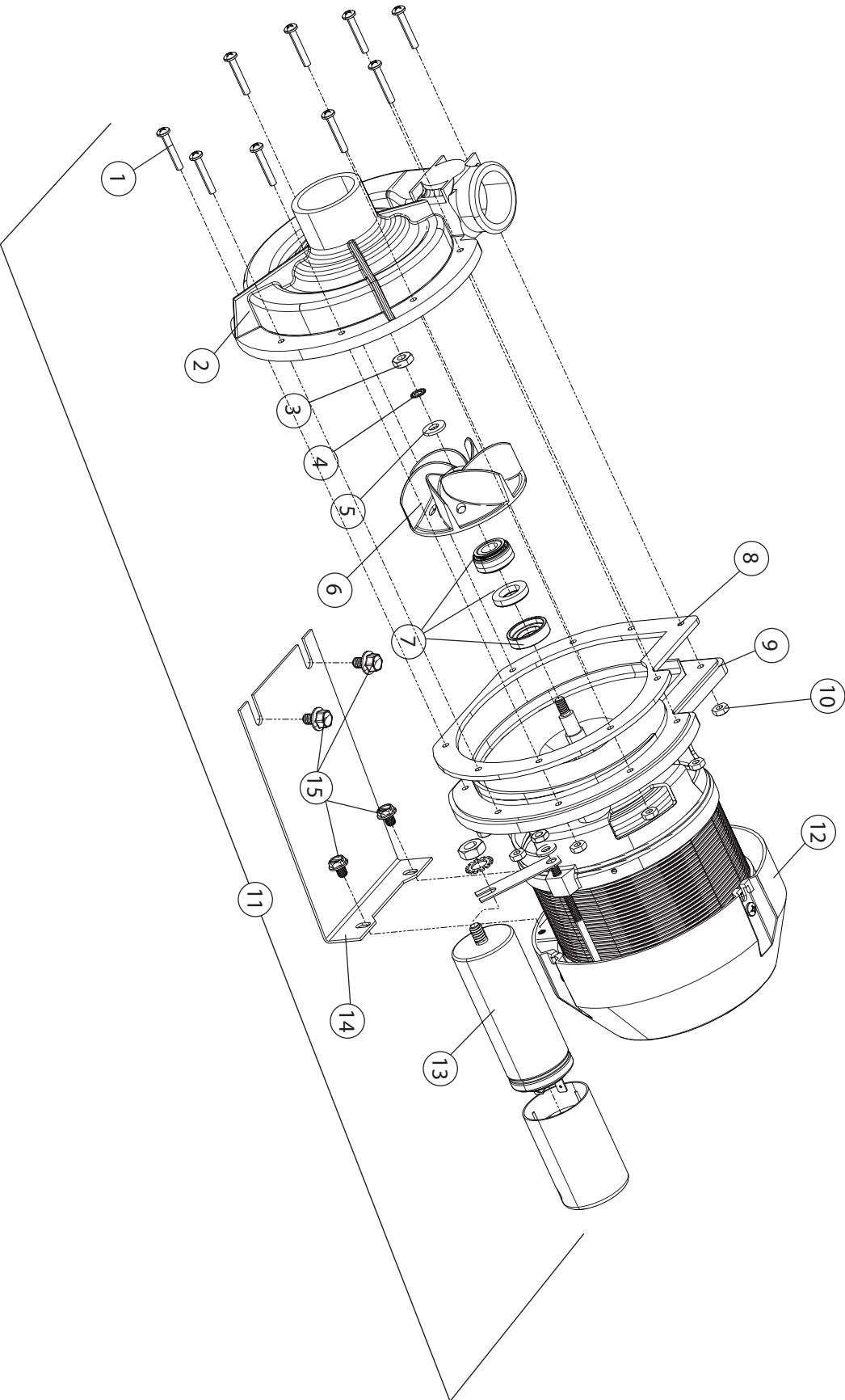
There are no lubrication points for this dishwasher.

Maintenance - Troubleshooting Chart

Condition	Cause	Solution
Dishwasher will not run.	Door not closed. Main power OFF. Dishwasher OFF.	Close door completely. Check breaker on panel. Turn dishwasher power switch ON.
Low or no water. Temperature display indicates "LP"	Main water supply off. Fill hose kinked. Low incoming water pressure Solenoid valve defective. Solenoid strainer clogged. Clogged rinse jets	Open supply valve. Straighten fill hose. Check for kinked or damaged lines. Set flowing water pressure to 20-22 PSI. Install repair kit or replace. Clean strainer. Delime rinse arms, clean rinse jets.
Chemicals won't feed into dishwasher.	Chemical supply low. Supply tubing damaged. Supply tubing kinked. Pick-up tube clogged Squeeze tube or diaphragm bad.	Refill chemical container. Replace tubing. Straighten tubing. Clean/replace tube. Replace defective components.
Low water pressure pumped from wash spray arms.	Clogged scrap screen. Clogged spray arms. Clogged pump intake screen.	Clean scrap screen. Clean spray arms. Inspect sump and clean pump intake screen.
Poor wash results.	Excessively hard water. Water temperature low. Thermistor defective. (See chemicals won't feed above.) (See low or no water above.) Chemical injector defective. Wares incorrectly loaded. in dishrack. Booster high limit tripped. Wash tank high limit tripped.	Contact chemical supplier. Raise incoming water temperature to 140°F 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. Reposition wares or reduce amount of wares in dish racks. Reset or replace high limit. Reset or replace high limit.
Water has drained out of the wash tank while the dishwasher was idle.	Anti-siphon loop in drain hose has been removed. 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.
WAIT light is on for an extended period of time. Dishwasher stays in wash cycle for an extended period of time..	Incoming water supply cold 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.	Raise incoming water temperature. Replace final rinse booster thermistor.

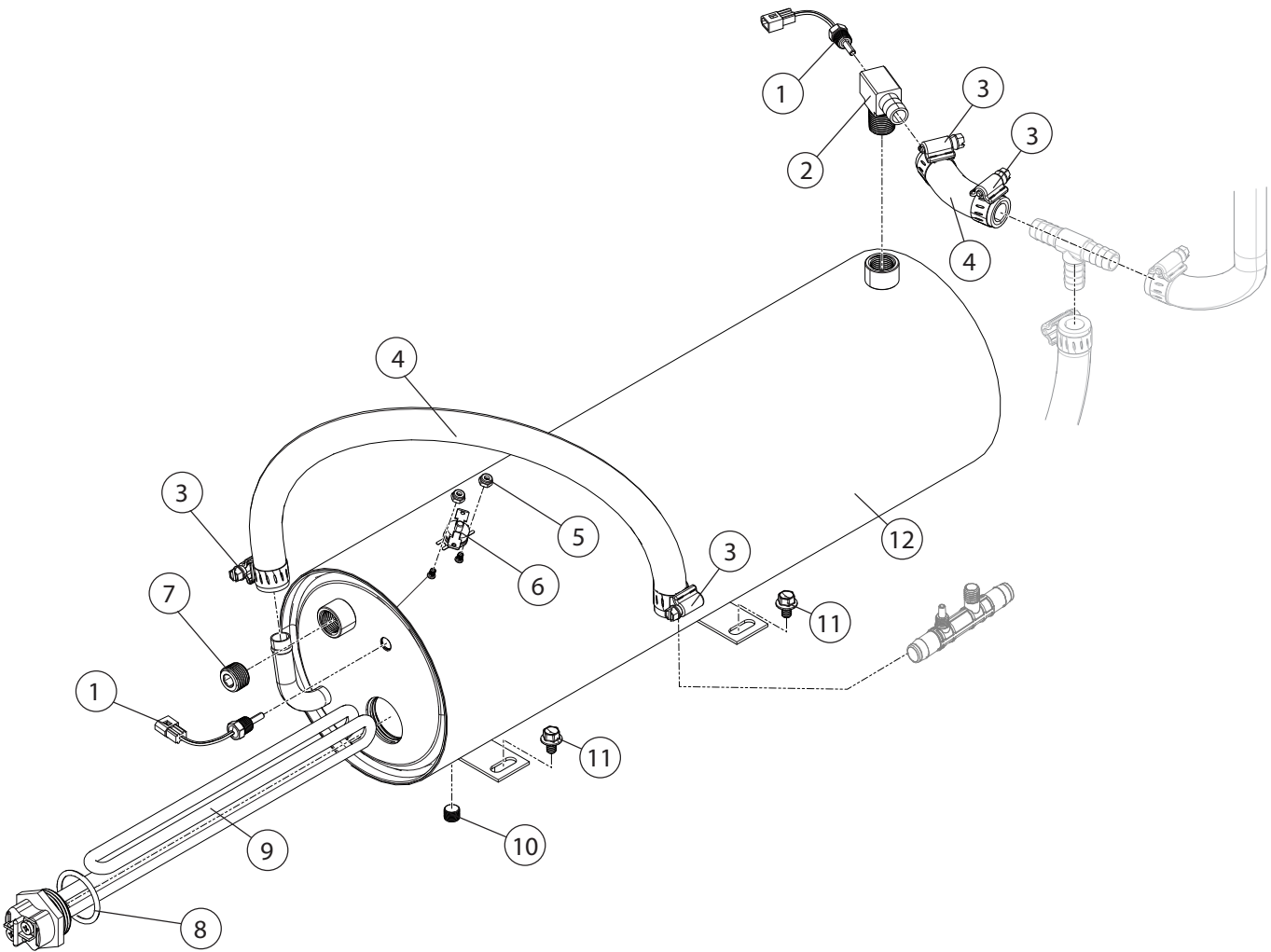
Service Replacement Parts

Illustrations	Page
Wash Pump/Motor Assembly	22
Booster	24
Control Panel.....	26
Power Wiring Box.....	28
Fill Valve	30
Wash and Rinse Spray Arms	32
Hoses and Drain Pump	34
Panels and Door	36
Upper Tank	38
Rear Tank.....	40
Chemical Dispensing Pumps	42
Dish racks and Pressure Regulating Valve (PRV).....	44



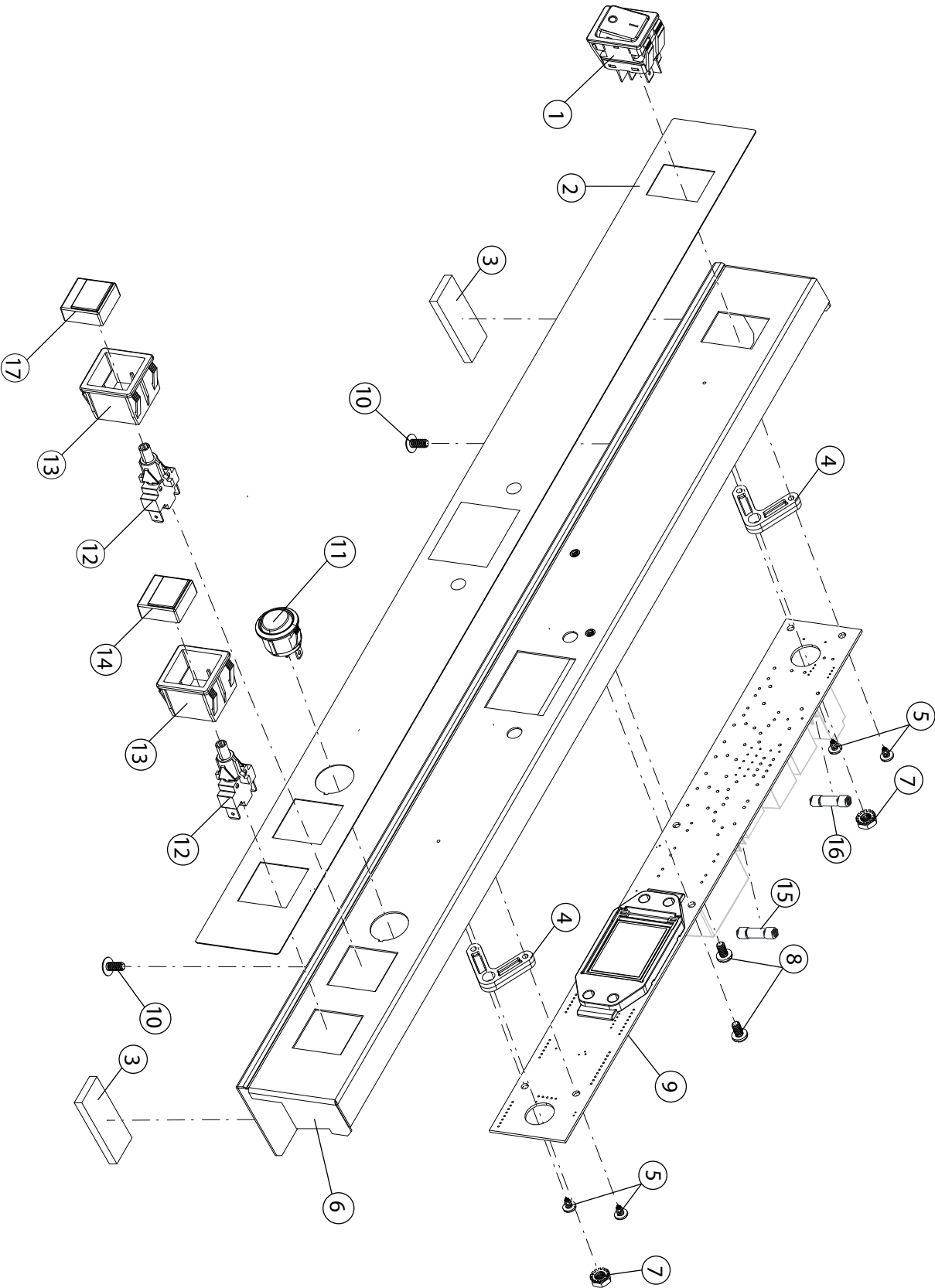
Item No.	Part No.	Description	Qty.
1	0512340	SCREW, M4, PHIL, PAN HD.	9
2	0512341	VOLLUTE. PUMP	1
3	114144	NUT, M6 (LEFT-HAND THREAD)	1
4	0501501	WASHER, LOCK, 1/4"	1
5	0501478	WASHER, PLAIN, 17/64"	1
6	0512345	IMPELLER	1
7	114139	SEAL, PUMP	1
8	110285	GASKET PUMP	1
9	114137	PLATE, PUMP BACKING	1
10	107337	NUT, M4	9
11	0512101-1	PUMP/MOTOR ASSEMBLY COMPLETE 220VAC/60/1	1
12	0513131	COVER, REAR MOTOR FAN	1
13	H29043	CAPACITOR 16 μ F	1
14	0312144	BRACKET, WASH PUMP	1
15	0512185	BOLT, HEX FLANGE 1/4-20 X 3/8" SST	2

THE MOTOR IS NOT A SEPARATE PART



Item No.	Part No.	Description	Qty.
1	0513310	THERMISTOR	1
2	0513314	TEE, RINSE 1/2" HB X 3/8" NPT X 1/8" NPT BRASS	1
3	0512985	CLAMP, HOSE	4
4	107417	HOSE, RUBBER 1/2" ID X 0.84" OD	A/R
5	108954	NUT, GRIP, 6-32 W/NYLON INSERT SST	2
6	110562	THERMOSTAT, FIXED, SNAP, 240°F	1
7	0513880	PLUG, 3/8" NPT FACE	1
8	0512928	GASKET, HEATER	1
9	0512847	HEATER, SCREW PLUG, 4KW 208V (Does not include gasket)	1
—	0512848	HEATER, SCREW PLUG, 6KW 220V (Does not include gasket)	1
10	100210	PLUG, 1/8" NPT SQ. HEAD, SST	1
11	0512185	BOLT, HEX FLANGE 1/4-20 X 3/8" SST	2
12	0713850	TANK, BOOSTER	1

Control Panel

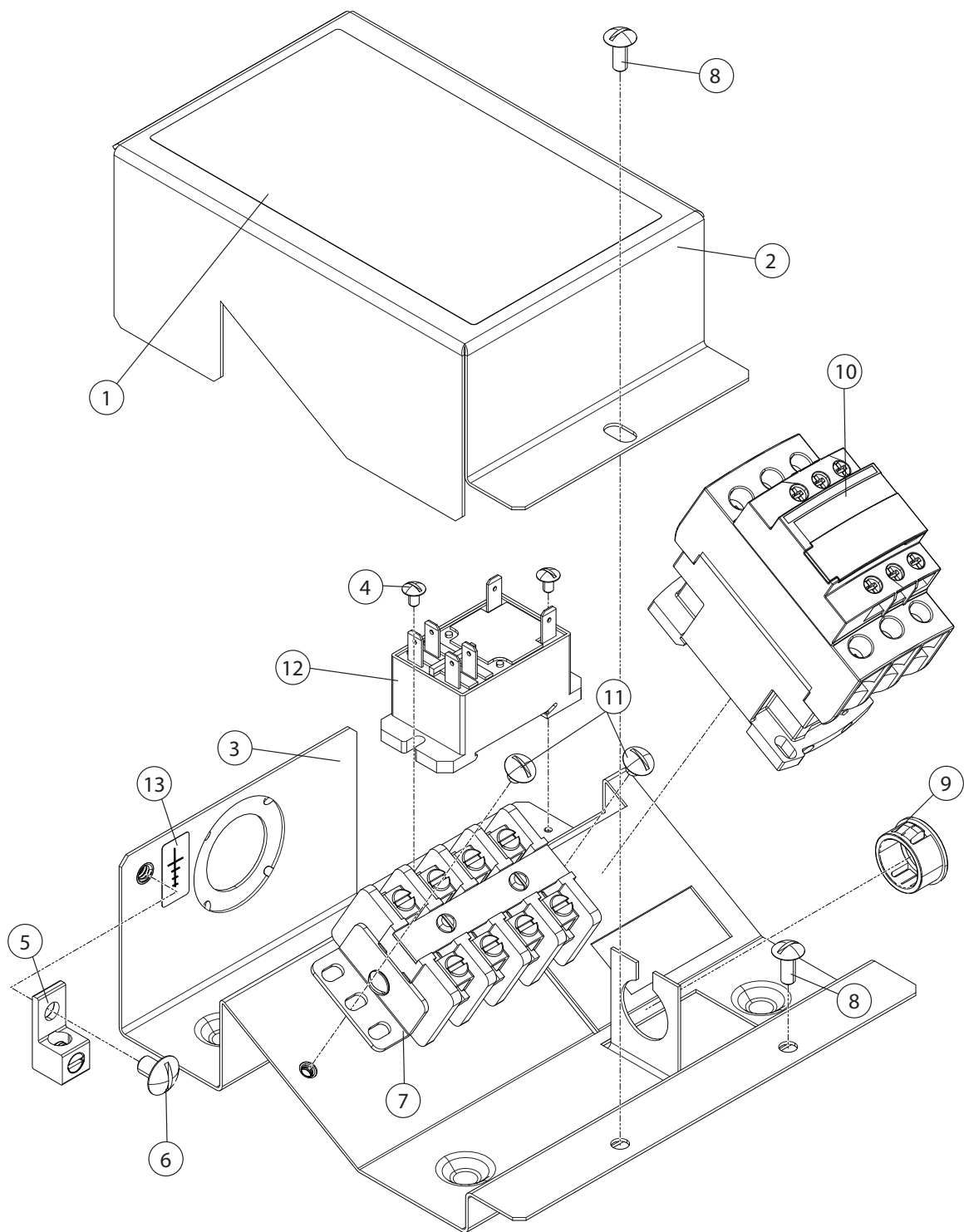


Item No.	Part No.	Description	Qty.
1	0512221	SWITCH, ROCKER DPST 250V NEON	1
2	0514788	LABEL, FACIA UH140B	1
3	0512320	GASKET, STEAM	2
4	0512357	STANDOF, LED DISPLAY BOARD	2
5	0512978	SCREW 6-18 X 1/4 PAN HEAD PHILLIPS SS	4
6	0314789	PANEL, FACIA, UH140B	1
7	0503580	NUT, 10-32	2
8	0501563	SCREW, #8 X 3/8"	2
9	0713985	KIT, SERIES CONTROL CIRCUIT BOARD	1
10	104624	SCREW 8-32 X 3/8 TRUSS HD	1
11	0512226	SWITCH, ROCKER RND SPDT MOMENTARY	1
12	0512216	CONTACT, SWITCH MOMENTARY (N.O.)	1
13	0512217	HOUSING, PUSH BUTTON SWITCH	1
14	0512218	PUSH BUTTON, GREEN	1
15	0513795	FUSE, 1/16A	1
16	0512373	FUSE, 4A	1
17	0512219	PUSH BUTTON, GREY	1

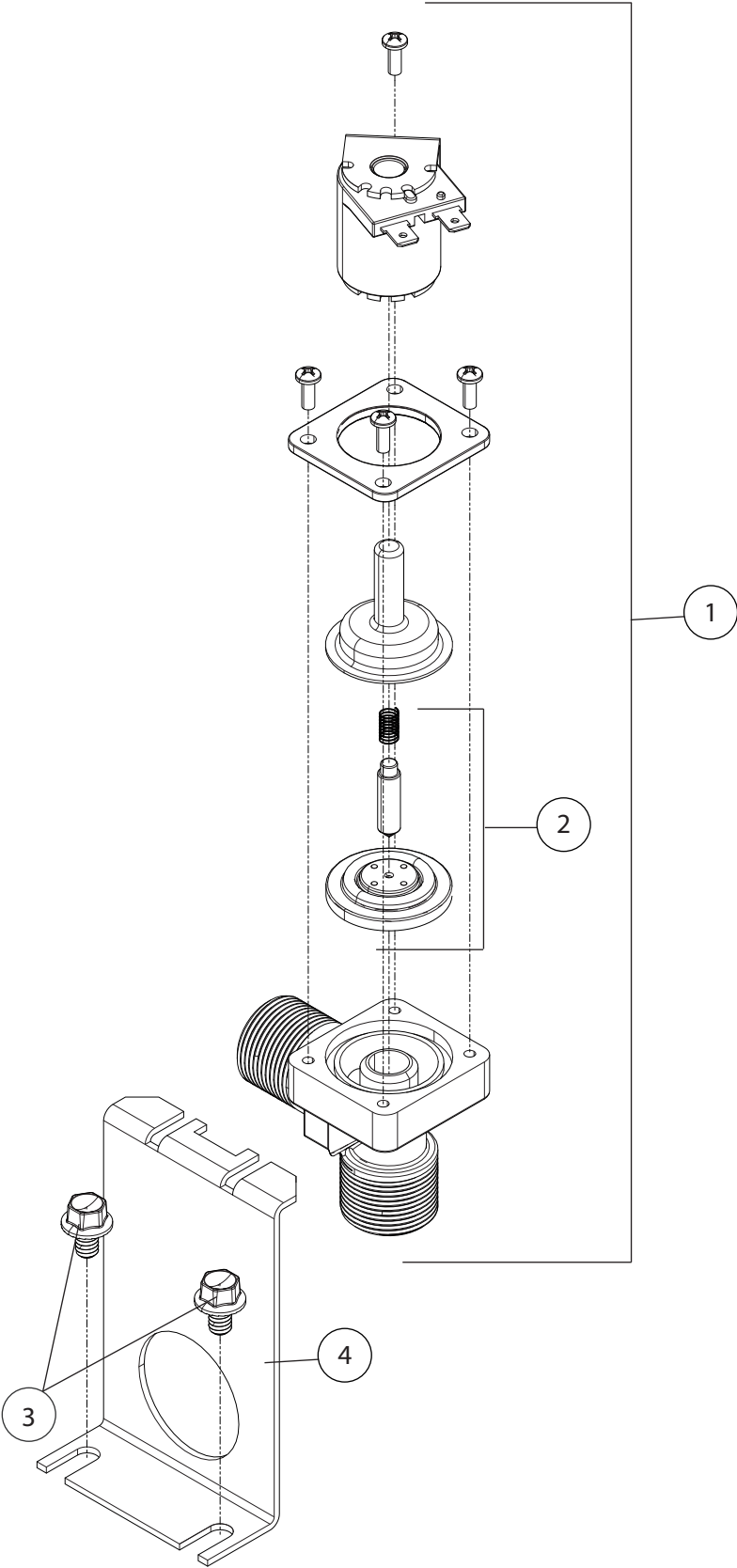
Harnesses Not Shown:

-	0513837	HARNESS, SENSOR	1
-	0513836	HARNESS, SWITCH	1
-	0514717	HARNESS, WIRING UH110E M2 / 383 HT-E INTERNATIONAL	1

Power Wiring Box

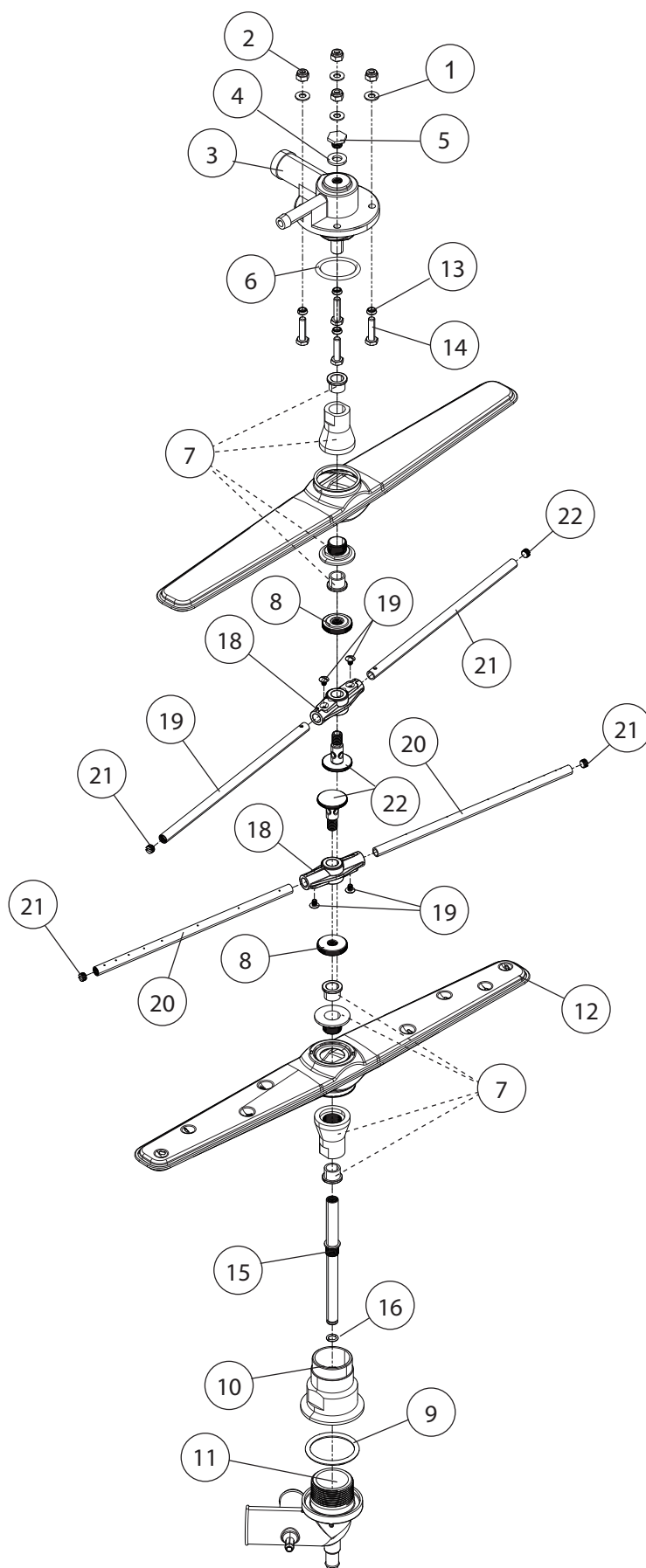


Item No.	Part No.	Description	Qty.
1	0512472	LABEL, CONNECTION BOX	1
2	0313396	COVER, BOX WIRING	1
3	0313395	BOX, WIRING	1
4	0503638	SCREW, 6-32 X 1/4"	2
5	103310	LUG, GROUND	1
6	0512185	SCREW, 1/4-20 X 3/8"	1
7	0509527	BLOCK, TERMINAL, 4-POLE	1
8	0501412	SCREW, 10-32 X 3/8", TRUSS HD.	2
9	107964	BUSHING, STRAIN RELIEF, SMALL	A/R
10	C120444	CONTACTOR, 3-POLE , 25/40A, 240VAC COIL	1
11	0512792	SCREW 10-32 X 1/4"	2
12	0514162	RELAY, DPDT, 30A, 240VAC COIL	1
13	0503592	LABEL, GROUND	1
—	0513838	MAIN WIRING HARNESS (NOT SHOWN)	1



Item No.	Part No.	Description	Qty.
1	0512853-1	VALVE, WATER INLET 220VAC 50/60 /1 (Includes Items 2)	1
2	0512860	KIT, REPAIR SOLENOID VALVE	A/R
3	0512185	BOLT, HEX FLANGE 1/4-20 X 3/8" SST	2
4	0313862	BRACKET, VALVE	1

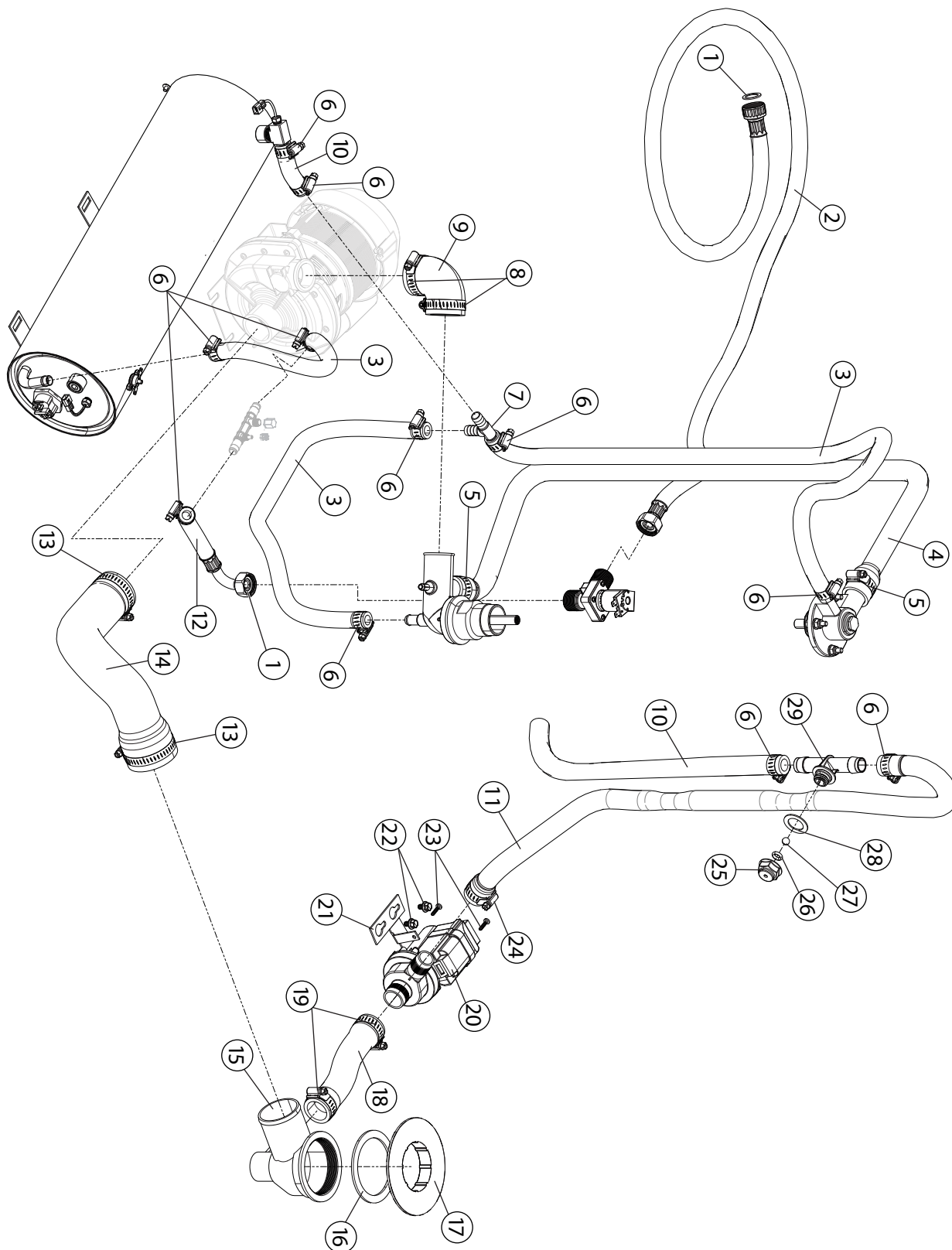
Wash and Rinse Spray Arms



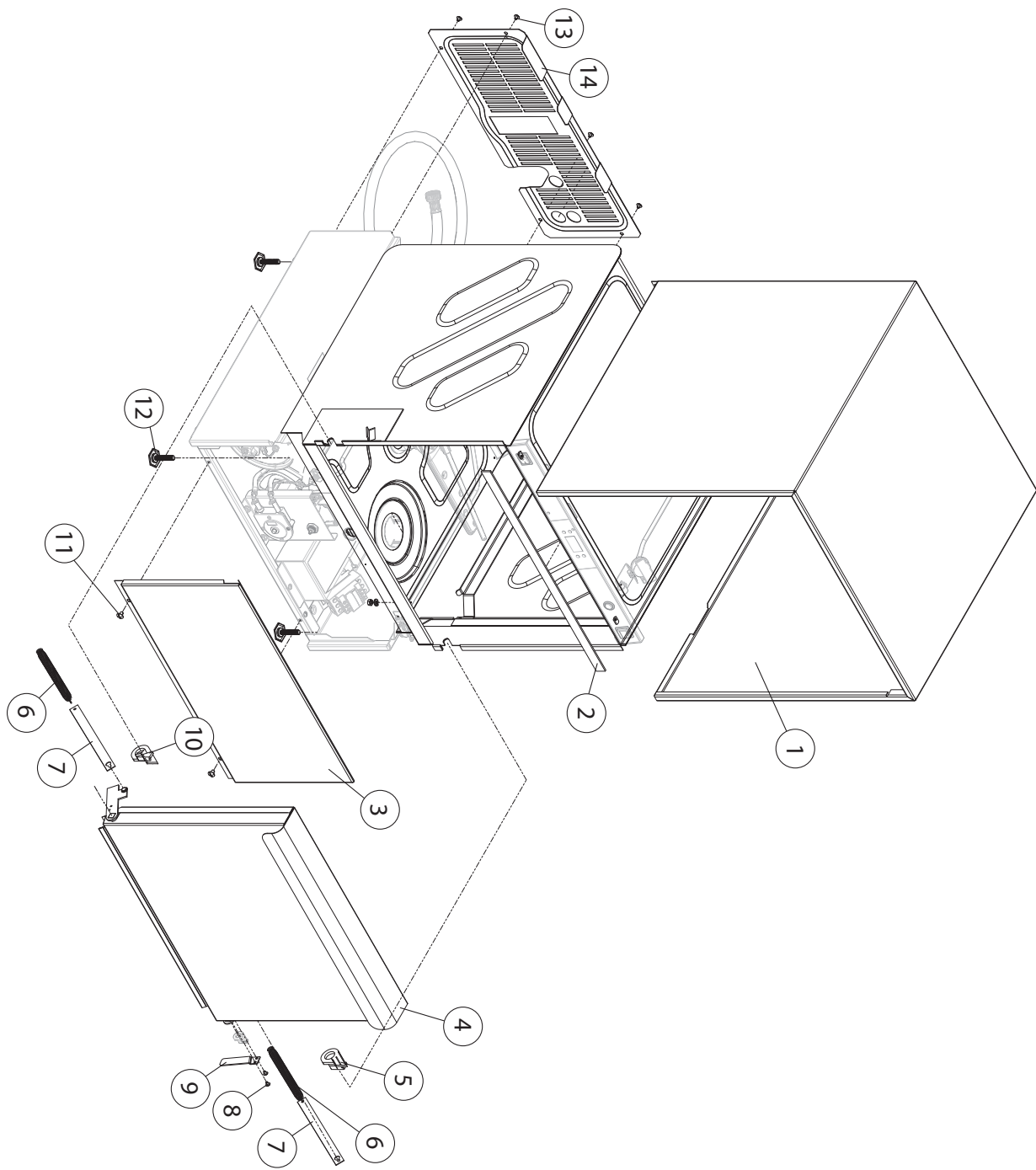
Item No.	Part No.	Description	Qty.
1	0501478	WASHER, 17/64 id X 9/16" OD SST	4
2	107967	NUT, GRIP 1/40-20 NYLON INSERT SST	4
3	H35509	HUB, UPPER SPRAY ARM	1
4	107873	WASHER, PACKING	1
5	110215	PLUG, UPPER MANIFOLD	1
6	0512133	O-RING, 2-1/8" OD X 1-3/4" ID X 3/16"	1
7*	0712749	BEARING ASSEMBLY	2
8	H34998	SPACER, NUT	2
9	0512133	O-RING, 2-1/8" OD X 1-3/4" ID X 3/16"	1
10	0512066	HUB, LOWER WASH ARM	1
11	0512918	MANIFOLD, LOWER FWR	1
12	H420548	WASH ARM ASSEMBLY <i>(Includes Item 7)</i>	2
13	0501481	WASHER, NYLITE	4
14	100738	BOLT, 1/4-20 X 1" SST	4
15	0512124	SHAFT, LOWER	1
16	0512239	O-RING	1
17	0312840	HUB, RINSE ARM, MOLDED	2
18	0501408	SCREW, TRUSS SLOTTED 8-32 X 1/4" SST	4
19	0512841	ARM, RIGHT-HAND RINSE (7 JETS)	2
20	0512842	ARM, LEFT-HAND RINSE (8 JETS)	2
21	0512843	CAP, RINSE ARM, 5/16-24	4
22	H36275	SPINDLE, RINSE ARM	2
—	0712834	RINSE ARM ASSEMBLY <i>(Includes Items 8, 18-23)</i>	2

* 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.

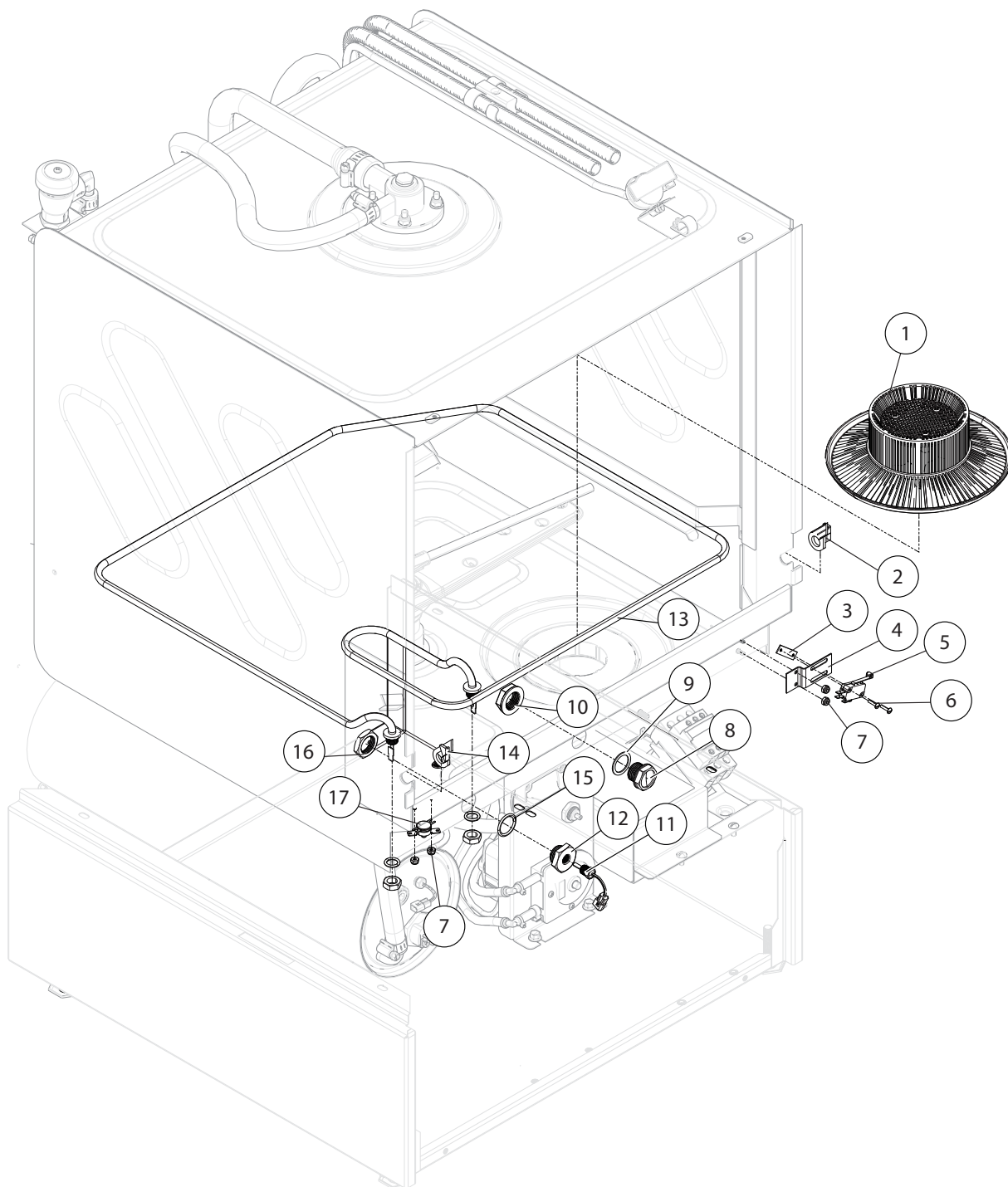


Item No.	Part No.	Description	Qty.
1	0512936	WASHER, SILICON 5/8" ID X 7/8" OD	3
2	0512925	HOSE, FILL	1
3	107417	HOSE, RUBBER 1/2" ID X .84" OD	A/R
4	0512120	HOSE, UPPER WASH ARM	1
5	0502571	CLAMP, HOSE	2
6	0503679	CLAMP, HOSE	10
7	0512134	TEE, 3/4" POLY	1
8	0502571	CLAMP, HOSE	2
9	0512119	HOSE, DISCHARGE WASH PUMP	1
10	0509302	HOSE, 5/8" ID X 1" OD	A/R
11	0513849	HOSE, DRAIN MOLDED	1
12	0512926	HOSE, BOOSTER FILL	1
13	0512322	CLAMP, HOSE	2
14	0512855	HOSE, SUCTION WASH PUMP	1
15	D500605	ELBOW, PUMP SUCTION	1
16	D80208	GASKET, PUMP SUCTION	1
17	D540088	FLANGE, PUMP SUCTION	1
18	0512929	HOSE, 1" ID X 1-3/8" OD PVC	1
19	0502563	CLAMP, HOSE GEAR-TYPE	2
20	H35544	PUMP, DRAIN	1
21	0312145-2	BRACKET, DRAIN PUMP	1
22	0512185	BOLT, HEX FLANGE, 1/4-20 X 3/8" SST	2
23	109835	SCREW, #8 X 1/2" PAN HD., PHILS SST	2
24	0512322	CLAMP, HOSE GEAR-TYPE 1-13/16"- 2-3/4" MAX SST	1
25	0513842	NUT, ANTI-SIPHON VALVE	1
26	0513847	O-RING	1
27	0513843	BALL, 3/8" DIA. SST	1
28	0513848	WASHER, SILICONE	1
29	0513841	BODY, ANTI-SIPHON VALVE	1

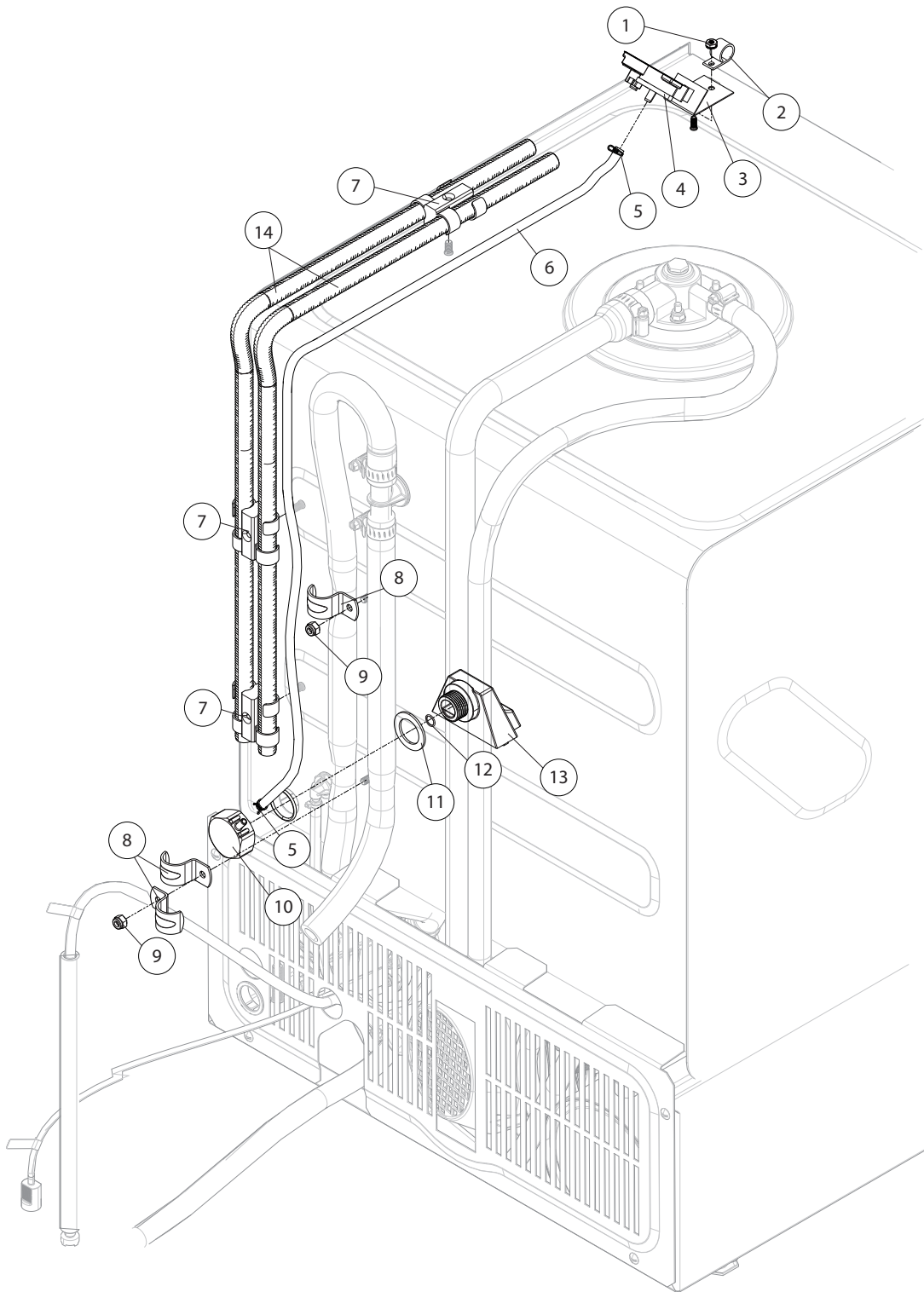


Item No.	Part No.	Description	Qty.
1	0312905	WRAP, OUTER PANEL	1
2	0512930	GASKET, DOOR, 1/8" X 7/8" 22-5/8"	1
3	0313893	PANEL, FRONT	1
4	0713141	DOOR	1
5	0512953	GASKET, RH DOOR HINGE	1
6	0512854	SPRING, DOOR	2
7	0312892	ARM, DOOR SPRING	2
8	0503745	SCREW, 8-32 X 3/16" PHIL. SST	2
9	0312908	ACTIVATOR, DOOR SWITCH	1
10	0512954	GASKET, LH DOOR HINGE	1
11	100779	SCREW, 1/4-20 X 5/8" TRUSS HD. PHIL. SST	2
12	0503718	FOOT, ADJUSTING	4
13	0501412	SCREW, 10-32 X 3/8" TRUSS PHIL. SST	5
14	0313867	PANEL, REAR	1

Upper Tank

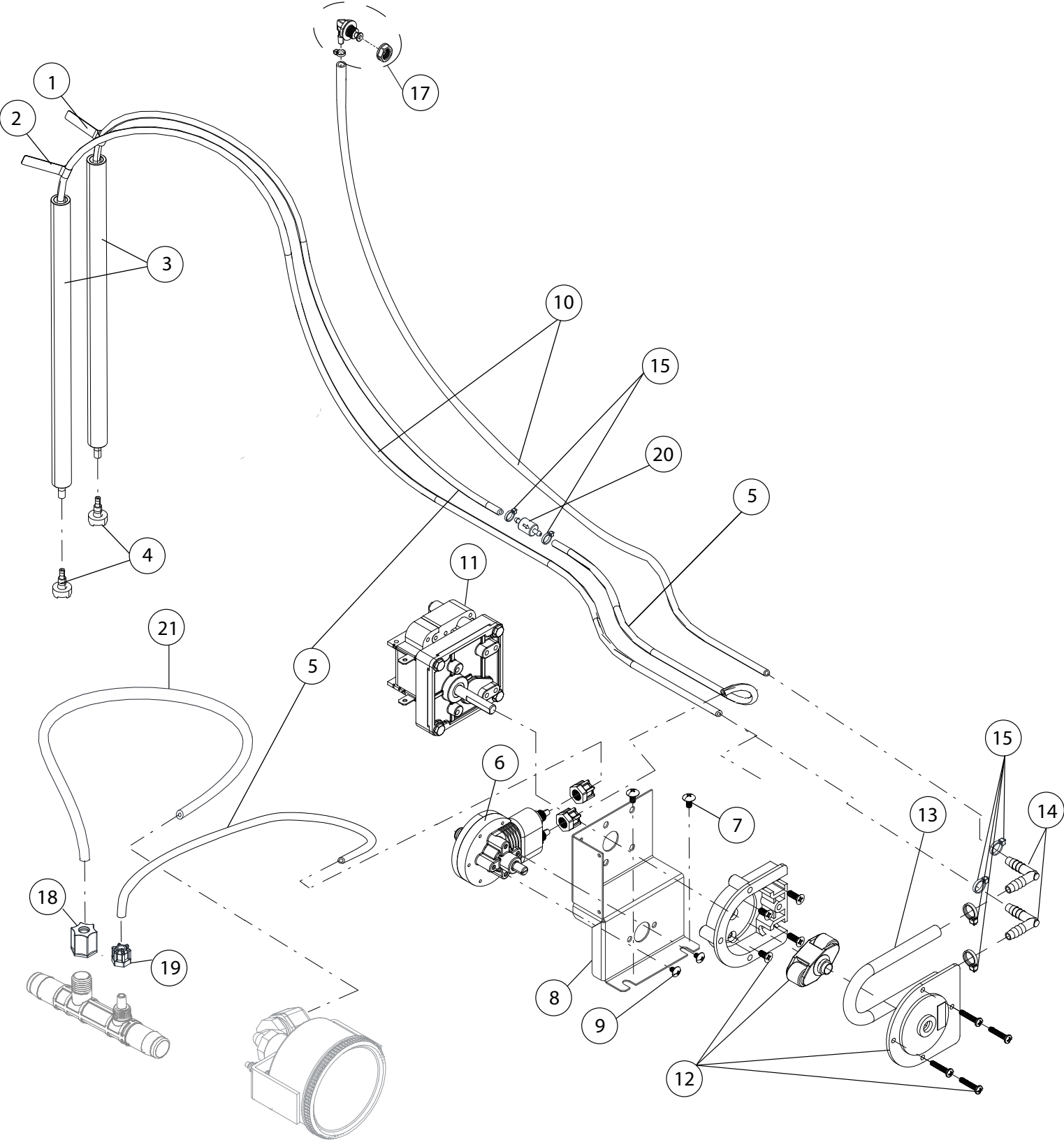


Item No.	Part No.	Description	Qty.
1	0713871	SCREEN, SCRAP	1
2	0512953	GASKET, RH DOOR HINGE	1
3	0307369	PLATE, NUT 4-40	1
4	0312948	BRACKET, SWITCH DOOR	1
5	0501379	SWITCH, DOOR 15A	1
6	0501437	SCREW, 4-40 X 1/2" PAN HEAD PHILS. SST	2
7	108954	NUT, GRIP 6-32 W/NYLON INSERT SST	2
8	108418	PLUG, 1/2"	1
9	109034	GASKET, FIBER	1
10	108417	NUT	1
11	0513310	THERMISTER	1
12	0512299	ADAPTER, THERMISTER	1
13	0512846	ELEMENT, TANK 2kW 240VAC	1
14	0512954	GASKET, LH DOOR HINGE	1
15	0512099	O-RING	1
16	201029-1	NUT, 1/2" NP	1
17	113604	THERMOSTAT, FIXED SNAP, 212°F	1



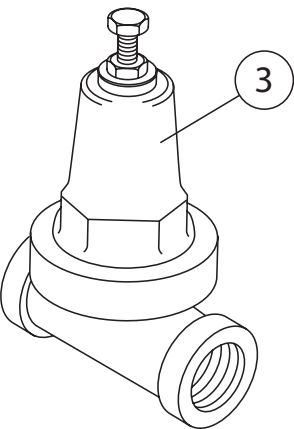
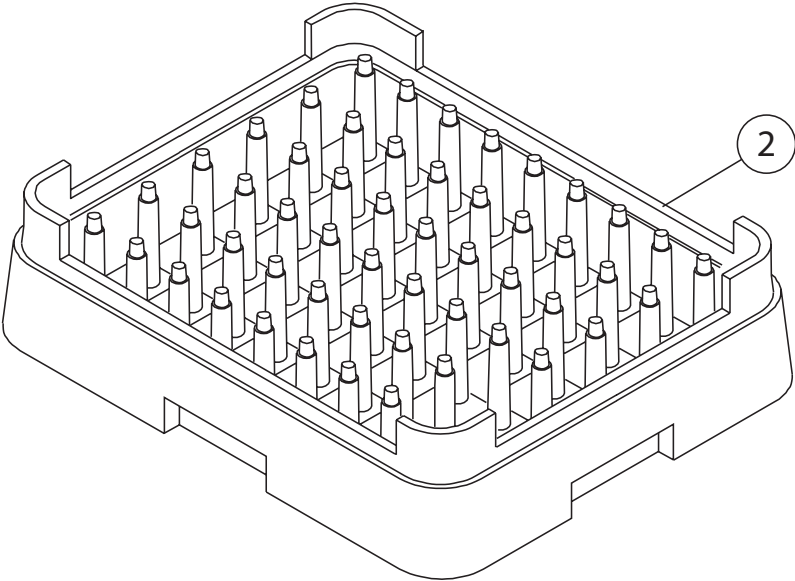
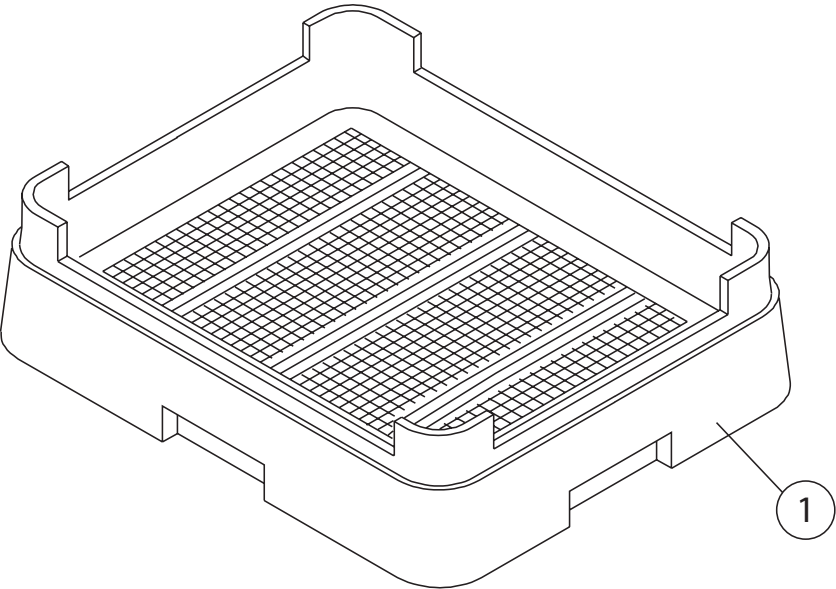
Item No.	Part No.	Description	Qty.
1	0503580	NUT, 10-32 SST	1
2	0513645	HOLDER, CABLE 5/8"	1
3	0313865	BRACKET, SENSOR	1
4	0513831	SENSOR, LEVEL	1
5	H450134	CLAMP, HOSE	2
6	H160121	HOSE, AIR	A/R
7	0512761	CLAMP, DOUBLE CONDUIT	3
8	B502523	CLAMP, 3/4" PLATED STRAP	3
9	107967	NUT, GRIP, 1/4-20 W/NYLON INSERT SST	3
10	H25010	TRAP, AIR	1
11	H25263	GASKET, AIR TRAP	1
12	H25239	O-RING	1
13	H25011	COVER, AIR TRAP	1
14	0512757	CONDUIT, 1/2"	1

Chemical Pumps

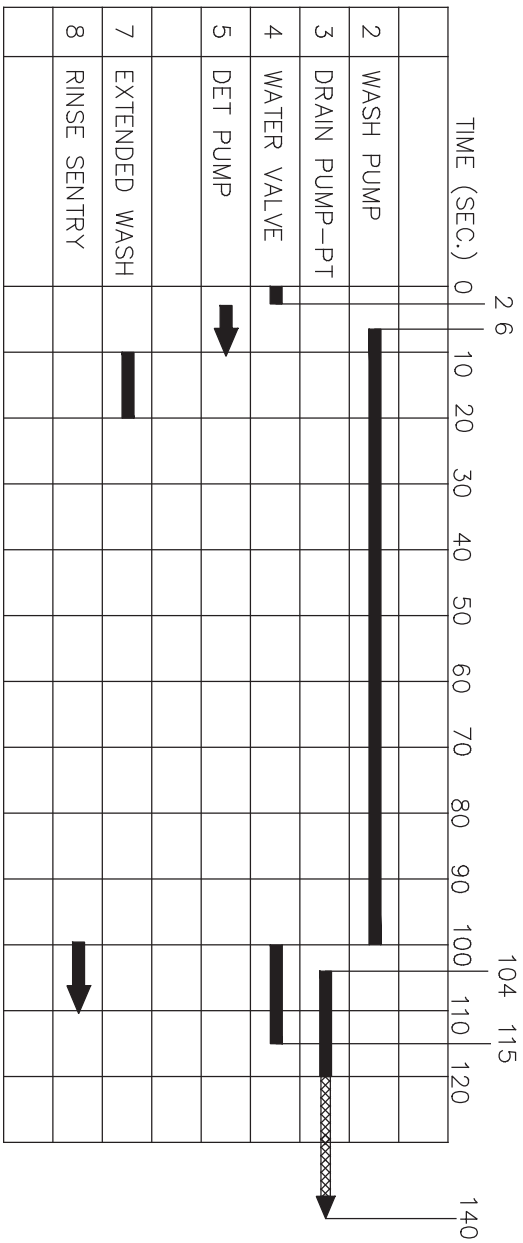


Item No.	Part No.	Description	Qty.
1	0505483	LABEL, RINSE-AID HOSE	1
2	0503695	LABEL, DETERGENT HOSE	1
3	0306363	TUBE, 3/8" ID X 12" LG. STIFFENER	A/R
4	0501869	STRAINER	2
5	0512475-1	HOSE 4MM ID 6MM OD PVC	A/R
6	0513986	RINSE AID PUMP	1
7	100007	SCREW 10-32 X 3/8" TRUSS HD	2
8	0313977	BRACKET	1
9	0501563	SCREW #8 3/8" SS PHILLIP TRUSS HD	2
10	0502667	HOSE, 1/4ID X 3/8OD PVC	A/R
11	0510870-1	GEARMOTOR, 115/60/1	1
12	114203	PUMP HD KT, PERISTALIC	1
13	114202	TUBE AS,SANTOPRENE, 3/16 X 3/8 X 8.5 LG	1
14	0502644	ELBOW, 1/4 HOSE BARB	1
15	0501519	TIE, NYLON 4"	4
17	0713656	KIT, DETERGENT FITTING	1
18	0514621	NUT, COMPRESSION RINSE	1
19	0514622	NUT, CHEMICAL TUB	1
20	0513745	VALVE, CHEMICAL HOSE CHECK	1
21	107928	1/4" NATURAL TUBING	1

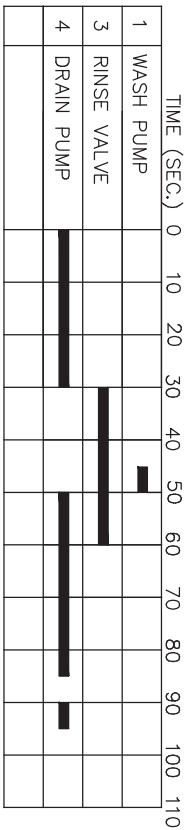
Dish Racks, PRV



Item No.	Part No.	Description	Qty.
1	101273	DISH RACK, FLAT-BOTTOM	A/R
2	101285	DISH RACK, PEG	A/R
3	108265	VALVE, PRESSURE. REGULATING 1/2" NPT BRONZE	1



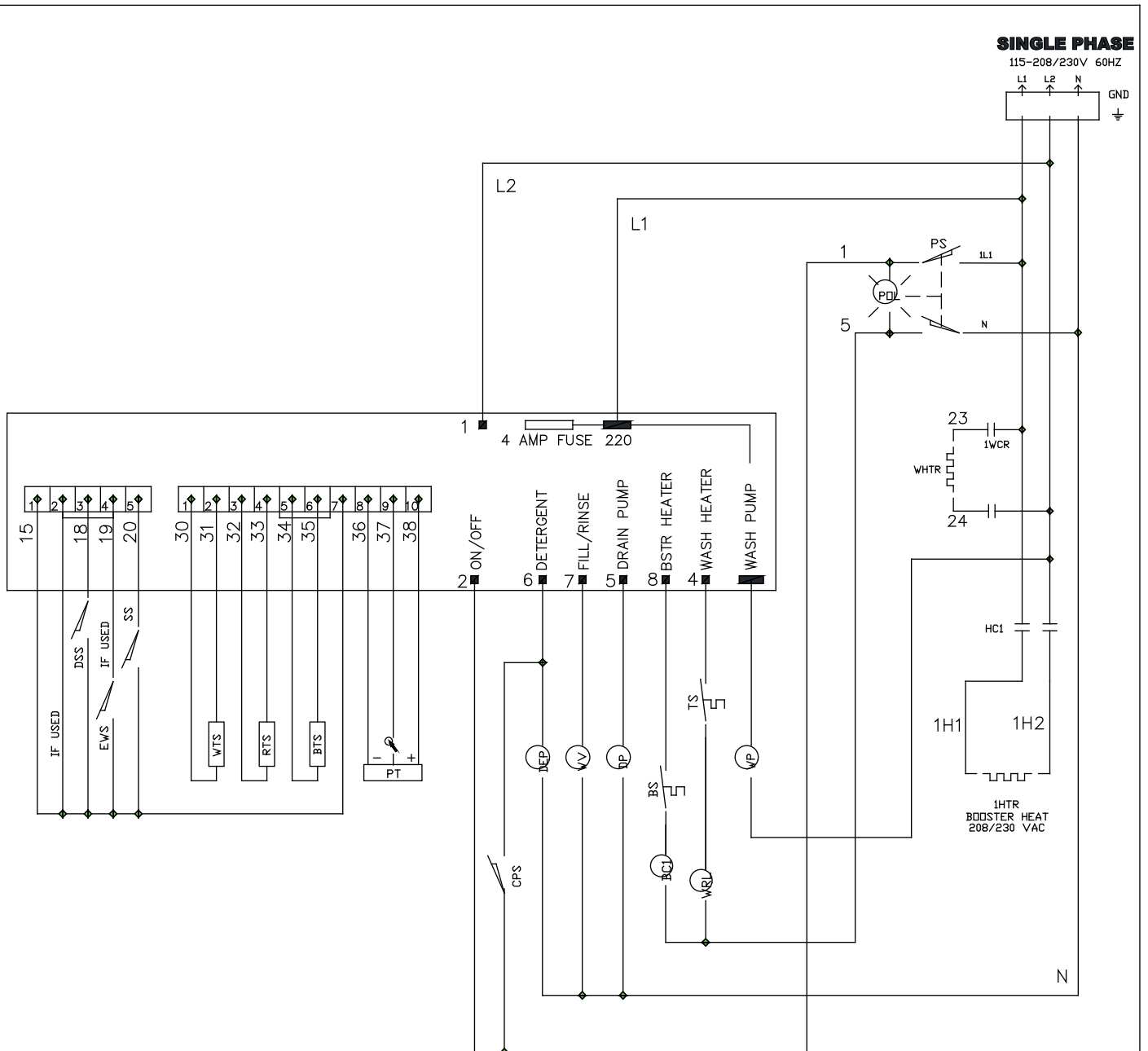
TIMING CHART FOR FWR DRAIN CYCLE
ACTIVATED 4 SEC. AFTER "POWER" SWITCH IS TURNED OFF



05CTIME

TOLERANCE		HOLE DIMENSIONS		ISSUED		MOYER DIEBEL LIMITED	
DECIMAL	A	F					
ANGLE	B	G					
SCALE	1:2						
DRAWING NO. UH110E		TIMING CHART		DRAINING NO.		05CTIME	
REVISED TO BEING THE		RTG.					
UNLESS OTHERWISE NOTED		J					

A	REV	ECN	RELEASED TO PRODUCTION	BY	DATE
			DESCRIPTION	CH	



PT	LEVEL SENSOR
WRL	RELAY, WASH TANK HEATER
BTS	BOOSTER TEMPERATURE SENSOR
RTS	RINSE TEMPERATURE SENSOR
WTS	WASH TEMPERATURE SENSOR
DP	DRAIN PUMP
CB	CIRCUIT BOARD
DSS	DOOR SAFETY SWITCH
FRV	FILL/RINSE VALVE
GND	GROUND
DEP	DETERGENT PUMP
BC1	BOOSTER CONTACTOR
1HTR	BOOSTER HEATER
WP	WASH PUMP
SS	START SWITCH
CPS	CHEMICAL PRIME SWITCH
PS	POWER ON SWITCH
TS	TANK HEAT SAFETY THERMOSTAT
BS	BOOSTER SAFETY THERMOSTAT
EWS	EXTENDED WASH SWITCH
WHTR	WASH TANK HEATER

DIAGRAM STATE
END OF CYCLE
POWER-OFF
DOOR-OPEN

DATE	NUMBER/REV D
04-19-2024	0514617

RACK STORAGE WARNING

*****WARNING*****

****STORING WET DISH RACKS DIRECTLY ON TOP OF THE MACHINE WITHOUT A DRIP TRAY KIT INSTALLED WILL VOID WARRANTY****



MDL PART NO. 0714208



***This Page
Intentionally
Left Blank***