



## Installation, Operation, Cleaning and Maintenance Manual



## High Temperature Undercounter Dishwasher

Model:  
383HT M2

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

Option:

6kW built-in electric stainless steel booster



Issue Date: 6.10.21

Manual P/N 0514616 rev. -A

For machines beginning with S/N W2110103481 and above

3765 Champion Boulevard  
Winston-Salem, NC 27105  
(336) 661-1992 Fax: (336) 661-1660  
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Printed in the USA



The Spirit of Excellence

National Service Department

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**ATTENTION**

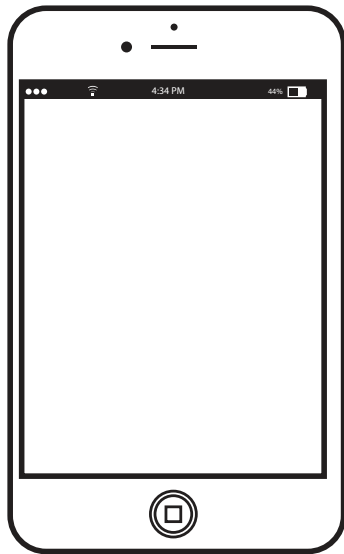
The model no., serial no., voltage, Hz and phase are needed to identify your machine and to answer questions.

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.



## 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://www.moyerdw.us/383HT>.
- Visit our website at:  
[www.moyerdiebel.com/warranty-registration](http://www.moyerdiebel.com/warranty-registration)
- 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 #: ( ) \_\_\_\_\_ -- \_\_\_\_\_

Contact: \_\_\_\_\_

Installation Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone #: \_\_\_\_\_

Contact: \_\_\_\_\_

**FAILURE TO REGISTER YOUR PRODUCT MAY VOID YOUR WARRANTY**

**IMPORTANT IMPORTANT**

## Revision History

Specifications are subject to change based on continual product improvement. 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	Revised Pages	Serial Number Effectivity	Revision Description
6.10.21	All	W2110103481	Released first edition

## Limited Warranty

*Moyer Diebel Limited (herein referred to as Moyer Diebel, 2674 North Service Road, Jordan Station, Ontario, L0R 1S0 and 3765 Champion Blvd., Winston-Salem, NC 27105) warrants machines, and parts, as set out below.*

**WARRANTY OF MACHINES:** Moyer Diebel warrants all new machines of its manufacture bearing the name Champion, Moyer Diebel and/or Nexus 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 Moyer Diebel, whichever occurs first. Products shipped outside of United States and Canada do not have warranty. The warranty registration card must be returned to Moyer Diebel within ten (10) days after installation. Warranty registration must be submitted to Moyer Diebel within ten (10) days after installation either online at: <https://www.championindustries.com/warranty-registration>, or by fax on the form provided in the front of this manual if warranty card is not returned to Moyer Diebel within such period, the warranty will expire after one year from the date of shipment. Moyer Diebel 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, Moyer Diebel, at its election, will either repair or replace the defective parts, machine or accept return of the machine for full credit. In the event that Moyer Diebel elects to repair, the labour and work to be performed in connection with the warranty shall be done by a Moyer Diebel "Authorized Service Agent" during regular working hours and will be covered at normal rates and any additional overtime rate will be at the responsibility of the equipment purchaser. Warranty is covered up to 50 miles or 80 km's of travel from a Moyer Diebel authorized service technician. If travel exceeds 50 miles or 80 km's, then the end user will be responsible for additional travel expense. Service calls initiated under warranty that are found to not contain any defects in materials or workmanship, will not be covered by Moyer Diebel. Defective parts become the property of Moyer Diebel. Use of non OEM replacement parts not authorized by Moyer Diebel will relieve Moyer Diebel of all liability in connection with its warranty. In no event will Moyer Diebel's warranty obligation exceed Moyer Diebel's charge for the machine. Models that come with a factory paid start-up will be limited to one visit. Machines found to have issues related to installation procedures, or delays of any kind, will not be covered by Moyer Diebel and the sole responsibility of the equipment purchaser.

**The following are not covered by Moyer Diebel's warranty:**

- a. Element tubes and/or squeeze tubes.
- b. Vacuum breakers.
- c. Replacement of fuses or resetting of overload breakers, or high limits.
- d. Adjustment of thermostats, or temperature controlling devices.
- e. Adjustment of clutches.
- f. Adjustments of water pressure(s).

- g. Adjustments of chemical pumps.
- h. Opening or closing of utility supply valves or switching of electrical supply current.
- i. Cleaning of valves, strainers, screens, nozzles, or spray pipes.
- j. Performance of regular maintenance and cleaning as outlined in operator's guide.
- k. 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.
- l. Wear on Pulper cutter blocks, pulse vanes, and auger brush.
- m. Damages due to improper storage.
- n. Special installations or applications, including remote locations, are limited in coverage by this warranty. Any installation that requires extra work, and/or travel, to gain access to the unit for service is the sole responsibility of the equipment purchaser.

**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 foreign materials, water supplies, improper chemicals, or 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 water quality, or the installer, including machine table connections or by connection of chemical dispensing equipment installed by others.
8. Failure to comply with all local building codes.
9. Damage caused by labor dispute.

**WARRANTY OF PARTS:** Moyer Diebel warrants all new machine parts produced or authorized by Moyer Diebel 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, Moyer Diebel will replace the defective part without charge.

DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITY. MOYER DIEBEL'S WARRANTY IS ONLY TO THE EXTENT REFLECTED ABOVE. MOYER DIEBEL 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 MOYER DIEBEL DISHWASHING MACHINES AND MOYER DIEBEL 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 Limited dishwashing machines.*

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## 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.



## Receiving



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. Register by fax using the form at the front of this manual or online at: [www.moyerdiebel.com/warranty-registration](http://www.moyerdiebel.com/warranty-registration).



**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.

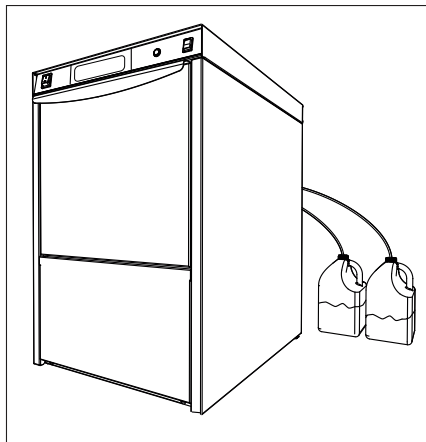


Fig. 1 -  
Do not elevate chemical containers

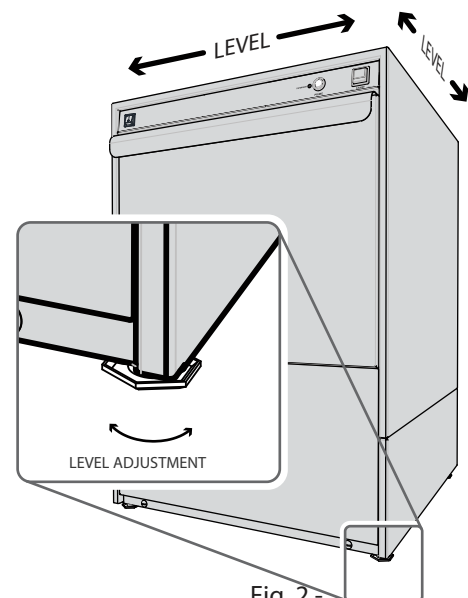


Fig. 2 -  
Level the machine.

## Installation

### 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. Problems due to improper installation are not covered by the Limited Warranty.

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.

DAMAGE DUE TO IMPROPER INSTALLATION IS NOT  
COVERED BY THE LIMITED WARRANTY.

## 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. Damage caused by improper installation is not covered by the limited warranty.



**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	MINIMUM/MAXIMUM OPERATING FLOWING PRESSURE
40° RISE	4kW	140°F/ 60°C	45 PSI/310 kPa	20-22 PSI 138-152 kPa
70° RISE	6kW	110°F/ 43°C	45 PSI/310 kPa	20-22 PSI 138-152 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. Damage caused by improper installation is not covered by the limited warranty



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.



### THE LIMITED WARRANTY IS VOID IF:

- an extension is added to the drain hose
- the syphon loop is modified or removed
- the supplied drain hose fitting is not used

## Drain Connection

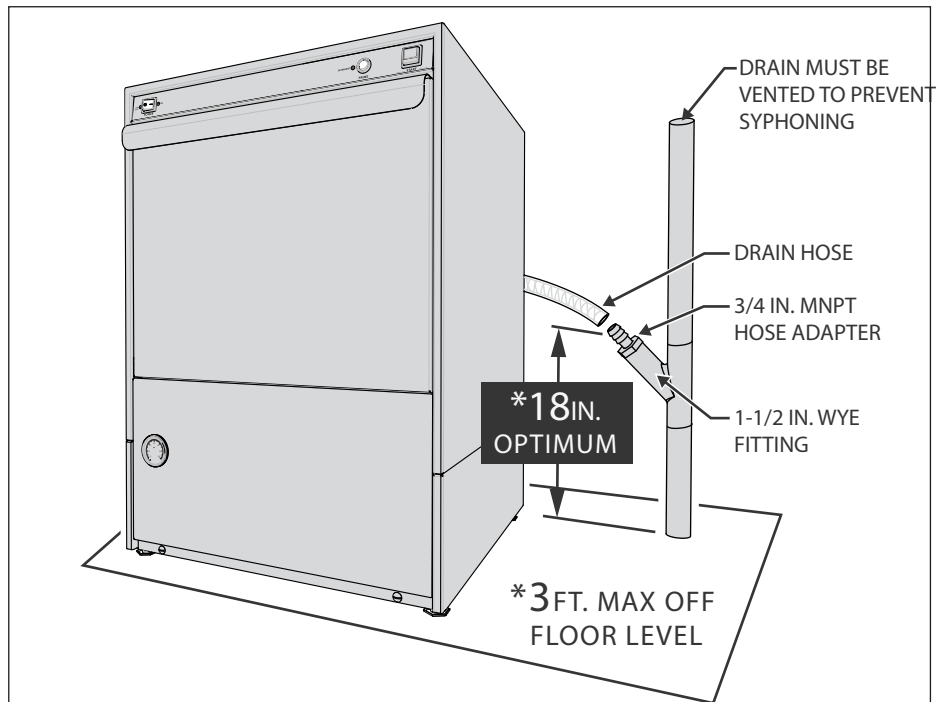


Fig. 3  
Configuring the drain line.

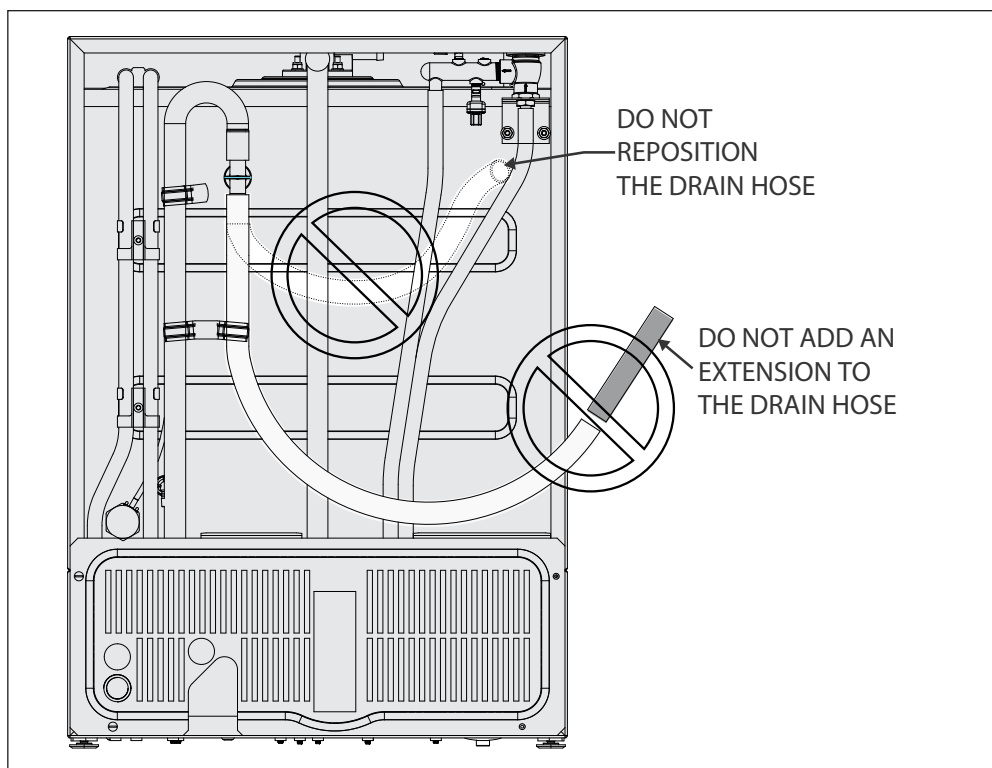


Fig. 4  
Do not void the limited warranty.

## Electrical Connection



**WARNING:** Electrocutation 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.

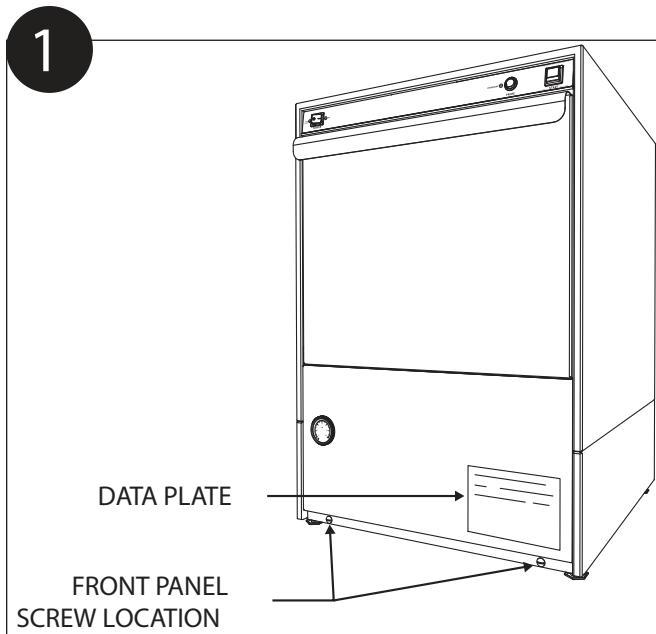


Fig. 5

- ! 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.

383HT 40 °F/22 °C Rise Electric Booster (4kW)

Ele c. Specs	Rated Amp s	Minimum Supply Circuit Amp acity	Maximum Overcurre nt Protective Device (Breaker Size)
208/60/1	22	30	30
240/60/1	24	30	30

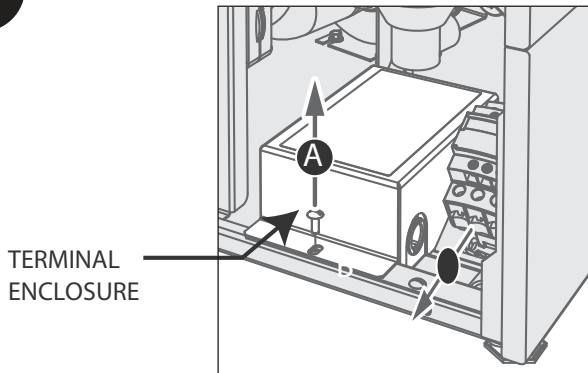
383HT 70 °F/39 °C Rise Electric Booster (6kW)

Ele c. Specs	Rated Amp s	Minimum Supply Circuit Ampacit y	Maximum Overcurre nt Protective Device (Breaker Size)
208/60/1	29	40	40
240/60/1	31	40	40

Table - 1  
Breaker (Service Disconnect Switch) Size

Electrical Connection (continued)

2



TERMINAL ENCLOSURE

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

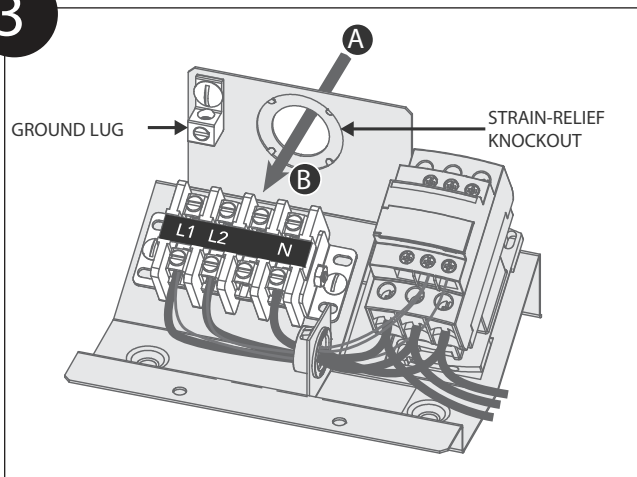



Fig. 7

**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

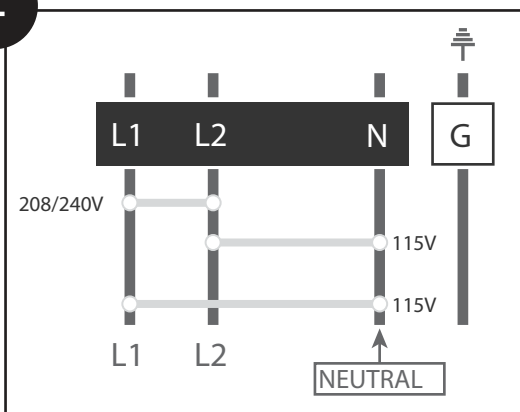


Fig. 8

**!** CONNECT THE INCOMING POWER AS SHOWN IN FIG. 8.

**!** 208-240V / 60Hz / 1 Ø  
 115V SPLIT CONNECTION  
 SINGLE PHASE - THREE WIRE PLUS GROUND WHICH INCLUDES A CURRENT CARRYING NEUTRAL WIRE RATED MIN 190 °F (88 °C).

# ! VERY IMPORTANT !

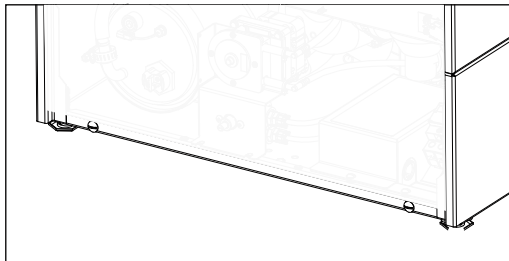
## MACHINE START-UP

*(Chemical Dispensing Pumps)*

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

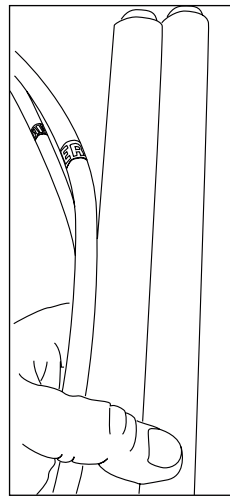
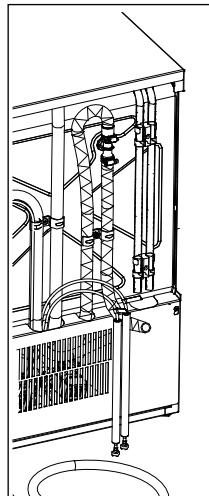
### ! VERY IMPORTANT !

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.

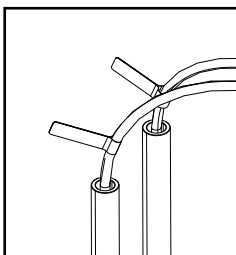


The detergent and rinse-aid pumps are located at the lower left-side of the machine behind the lower panel.

**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.

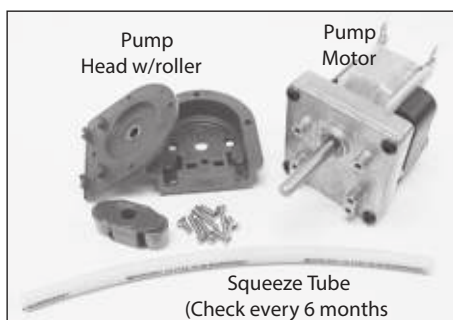


Fig. 9

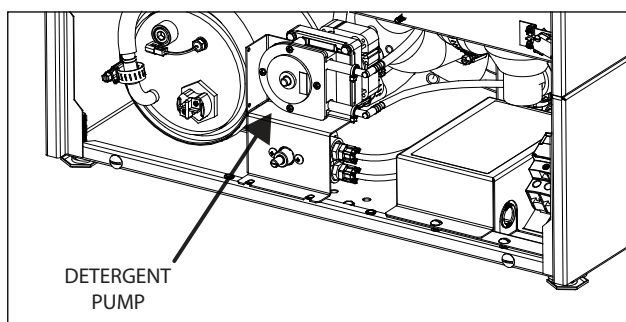


Fig. 10

## 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.

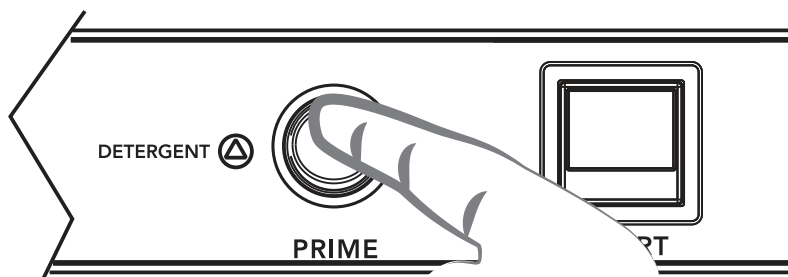


Fig.11

## Rinse-aid Set-up

R / A

! 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.

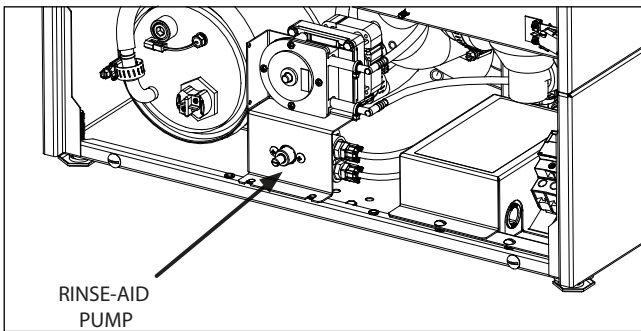


Fig. 13

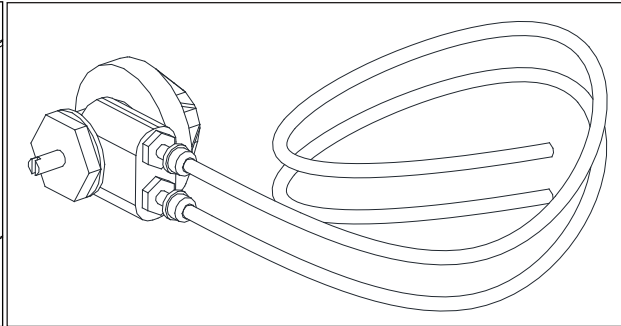


Fig. 14

## Prime the Rinse-aid Pump

1. Place the rinse-aid pick-up tube in a full container of rinse aid.
2. Push the dishwasher power switch ON. The dishwasher will automatically fill with water.
3. Wait twenty minutes or until the temperature display indicates a minimum of 150°F/66°C.
4. The rinse-aid pump will prime itself as the machine operates during the automatic cycles.



Fig.15

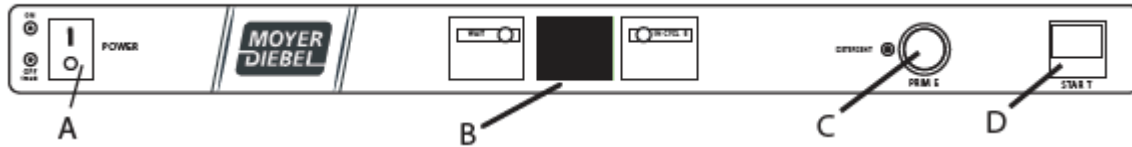
## Rinse-Aid Volume Adjustment

To adjust the rinse aid volume, turn dial. Turn counter-clockwise to increase volume and turn clockwise to decrease volume.



Fig. 16

## 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 indicates water temperature and 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.
- E - PRESSURE GAUGE indicates the final rinse water flowing pressure during the initial fill and the automatic final rinse cycle. The proper pressure reading is 20-22 PSI. The pressure gauge is located on the left side of the lower front panel.

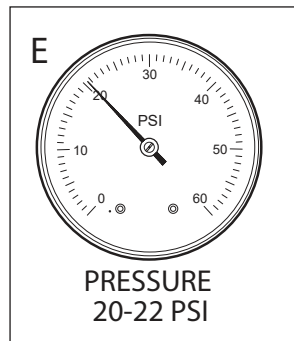


Fig. 18

## Operation - Loading Wares

- 1 REMOVE LARGE FOOD PARTICLES AND DEBRIS BEFORE LOADING WARES.
- 2 LOAD PLATES IN A PEG RACK. BOWLS AND GLASSES IN A FLAT-BOTTOM RACK.  
LOAD SILVERWARE IN A SINGLE LAYER IN A FLAT-BOTTOM RACK.  
LOAD POTS, PANS, AND UTENSILS UPSIDE DOWN IN A FLAT-BOTTOM RACK.
- 3 DO NOT OVERLOAD RACK AND ONLY WASH ONE RACK AT A TIME.
- 4 NEVER WASH FOREIGN OBJECTS SUCH AS DISH RAGS OR MOPS.



**CAUTION:** Ferrous metals in the form of metal scrub pads must not be used to clean wares or dishwasher surfaces. Avoid putting any type of ferrous\* metal in the machine. (\*ferrous metals rust.)

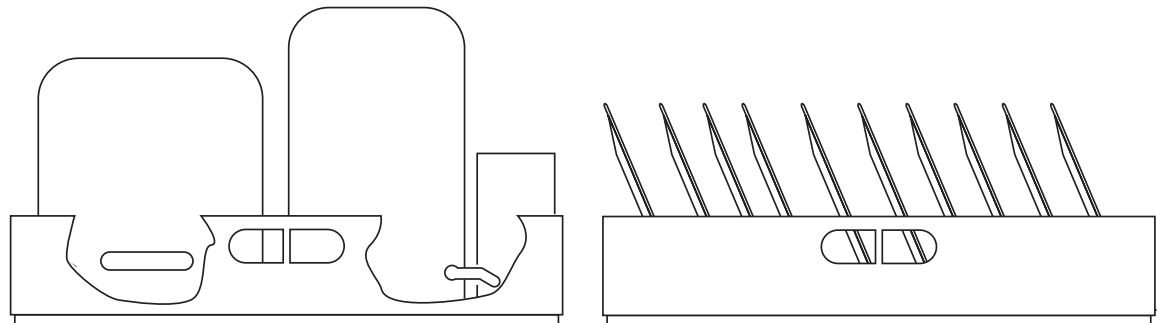


Fig. 19

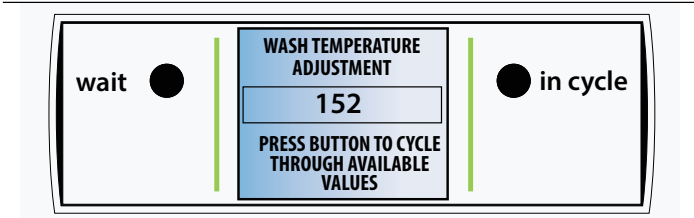
# PARAMETER SETTING INSTRUCTIONS

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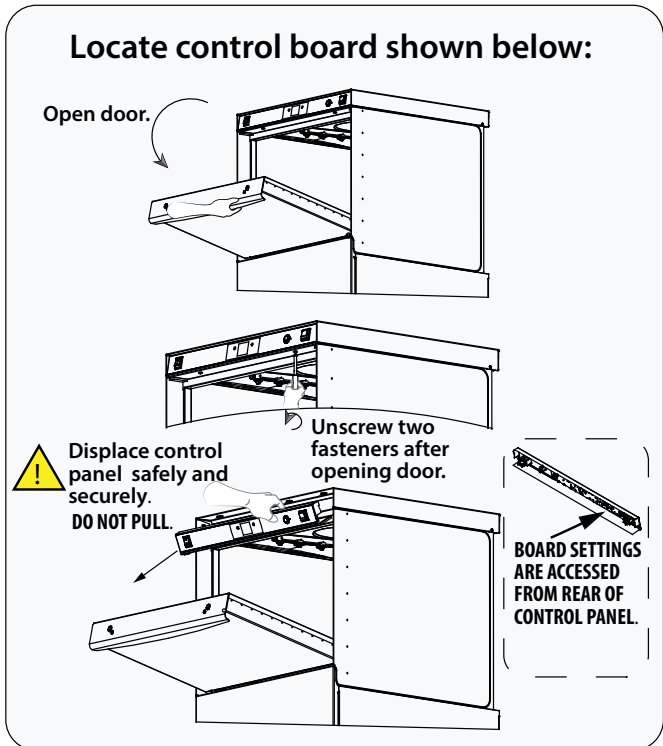
**CAUTION:** Parameter changes must be made by qualified personnel only.

(LCD SCREEN)



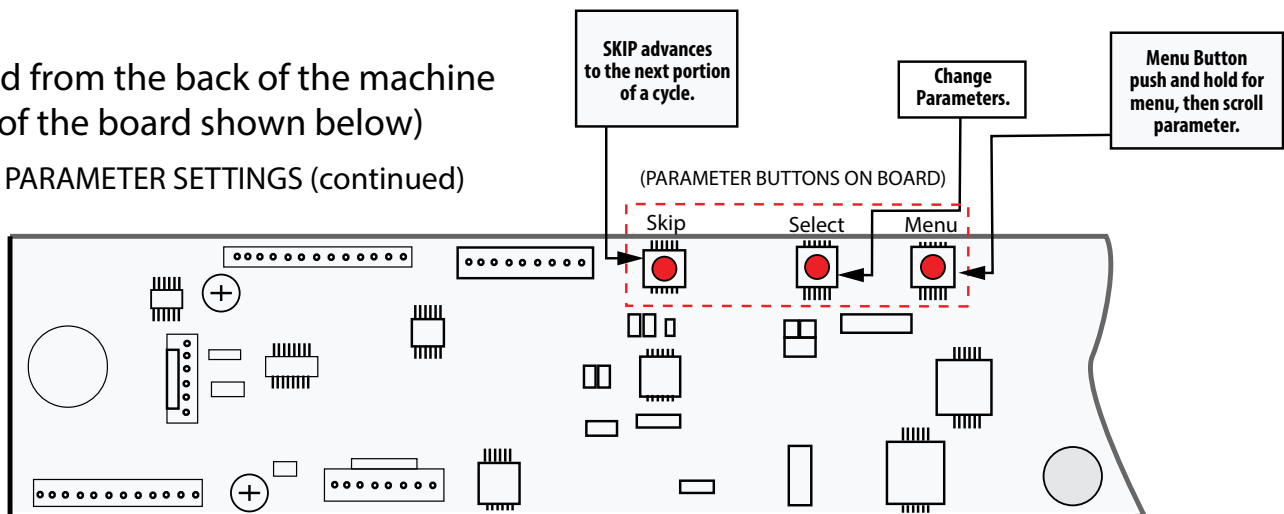
The following parameters may be changed depending on model:

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



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

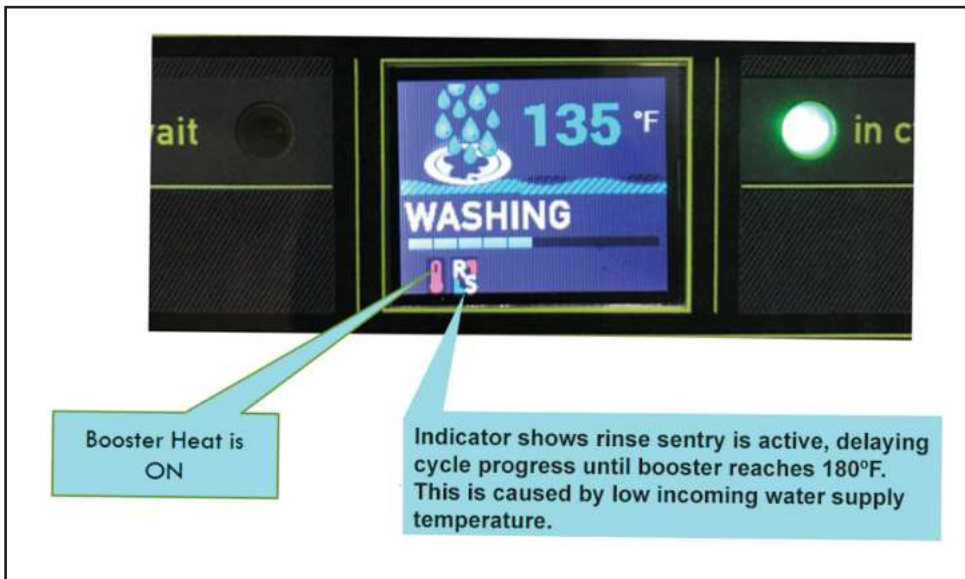
1. Display changes to red and indicates rinse temp.



## 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.**

1. Push the power button OFF, the light will go out.
2. The machine will enter the Auto-clean mode and then drain.
3. Remove the upper and lower wash and rinse spray arms. Flush with clean water in a sink.
4. Refer to Fig.18 below. Check the rinse spray arm nozzles. If necessary, remove the end plugs and clean the nozzles with a small paper clip to remove debris. Flush the arms thoroughly and replace the end plugs.
5. 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.
6. Wipe the sump clean with a soft cloth and clean the sump strainer.
7. Wipe the exterior of the machine with a soft cloth and mild detergent.
8. Reassemble the machine and leave the door open to aid overnight drying.

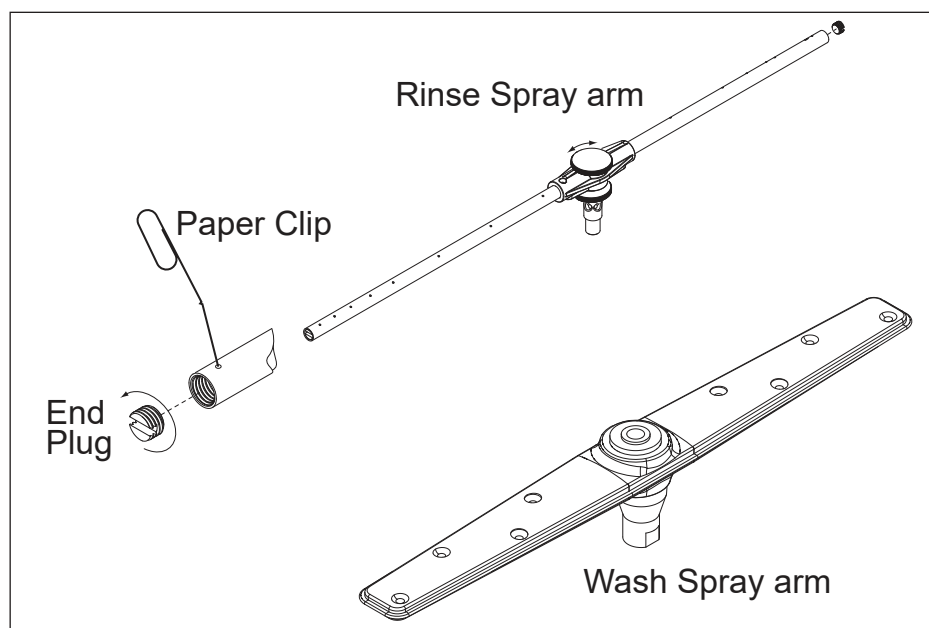


Fig. 20

## 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. Clean the rinse arm jets with a paper clip to ensure they are clear. 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 required.
6. Follow the cleaning procedures on pg.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

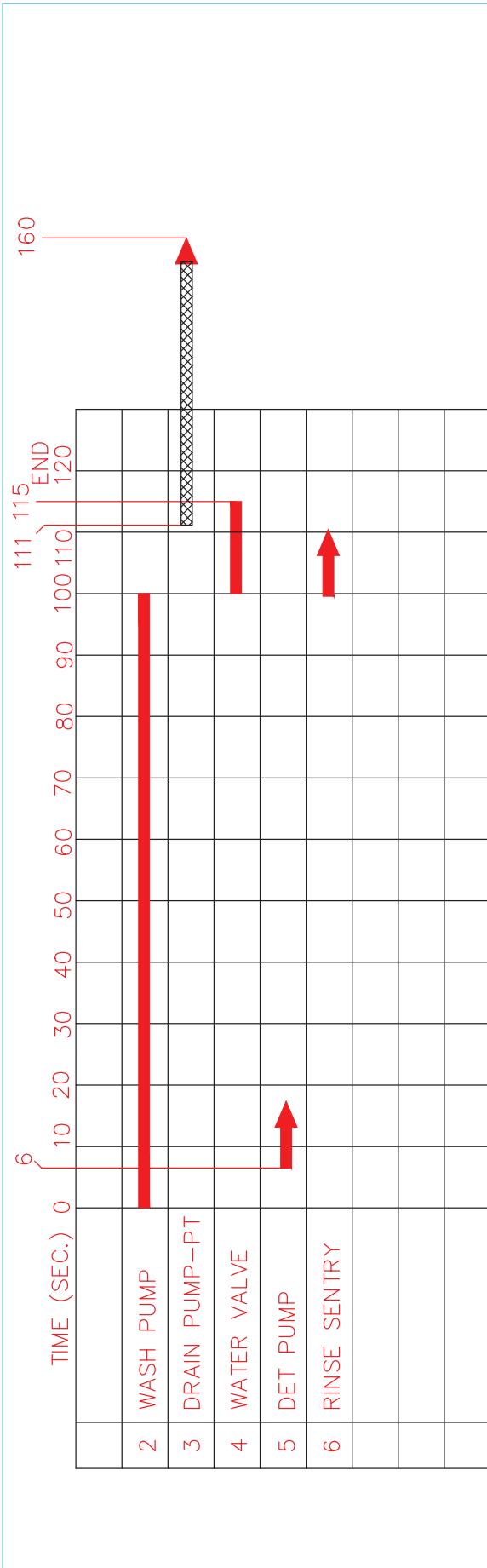
Contact your authorized service agent for a preventive maintenance inspection.

### Lubrication

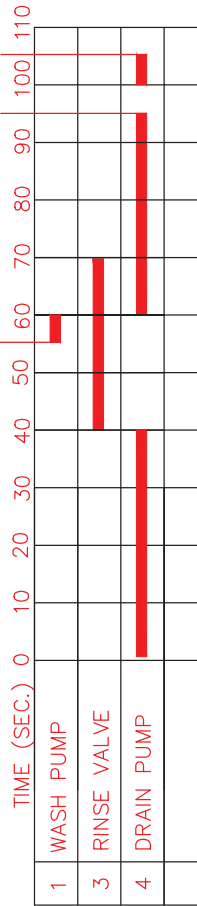
There are no lubrication points for this dishwasher.

## 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.	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.
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.  Rinse jets clogged	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.  Delime the rinse arms and clean the rinse jets with paper clip.
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.



TIMING CHART FOR 383 FWR DRAIN CYCLE  
ACTIVATED 4 SEC. AFTER "POWER" SWITCH IS TURNED OFF



05C TIME

REV	ECN	DESCRIPTION	DATE
A		RELEASED TO PRODUCTION	12/2019

MOYER DIEBEL LIMITED

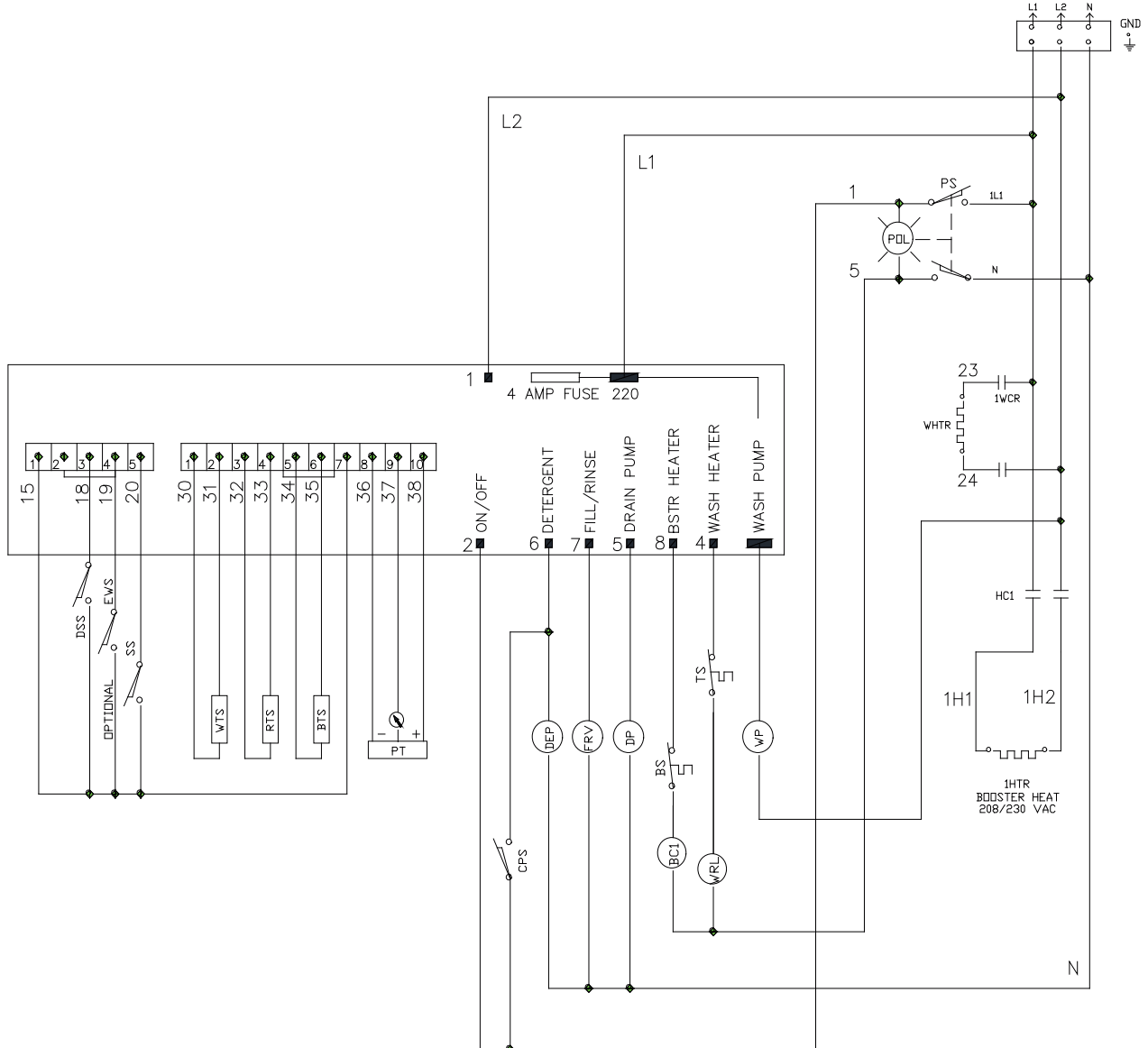
DRAWING NO.

TIMING CHART

05C TIME

TOLERANCE	HOLE DIMENSIONS					ISSUED
DECIMAL	A	F				
ANGLE	B	G				DR.
SCALE	C					CH.
FORMING DIMENSIONS ARE FROM DRAWING TO BRANFLINE UNLESS OTHERWISE NOTED	D	H				RTG.
	E	J				

**SINGLE PHASE**  
115-208/230V 60HZ



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

HIGH TEMP DIGITAL UNDERCOUNTER 383HT M2

DIAGRAM STATE  
END OF CYCLE  
POWER-OFF  
DOOR-OPEN

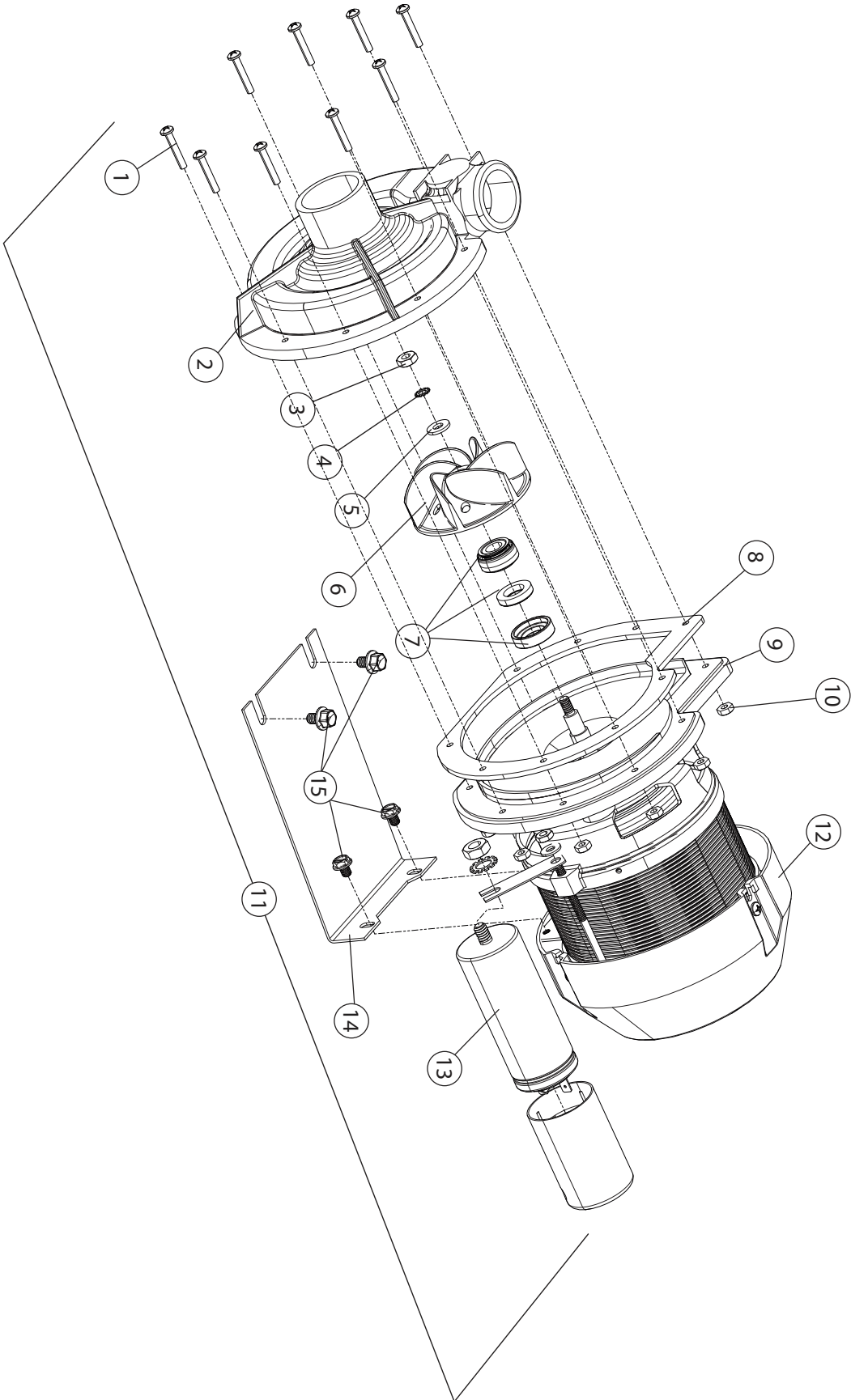
DATE	NUMBER/REV
18-2-2021	0513919

# Service Replacement Parts

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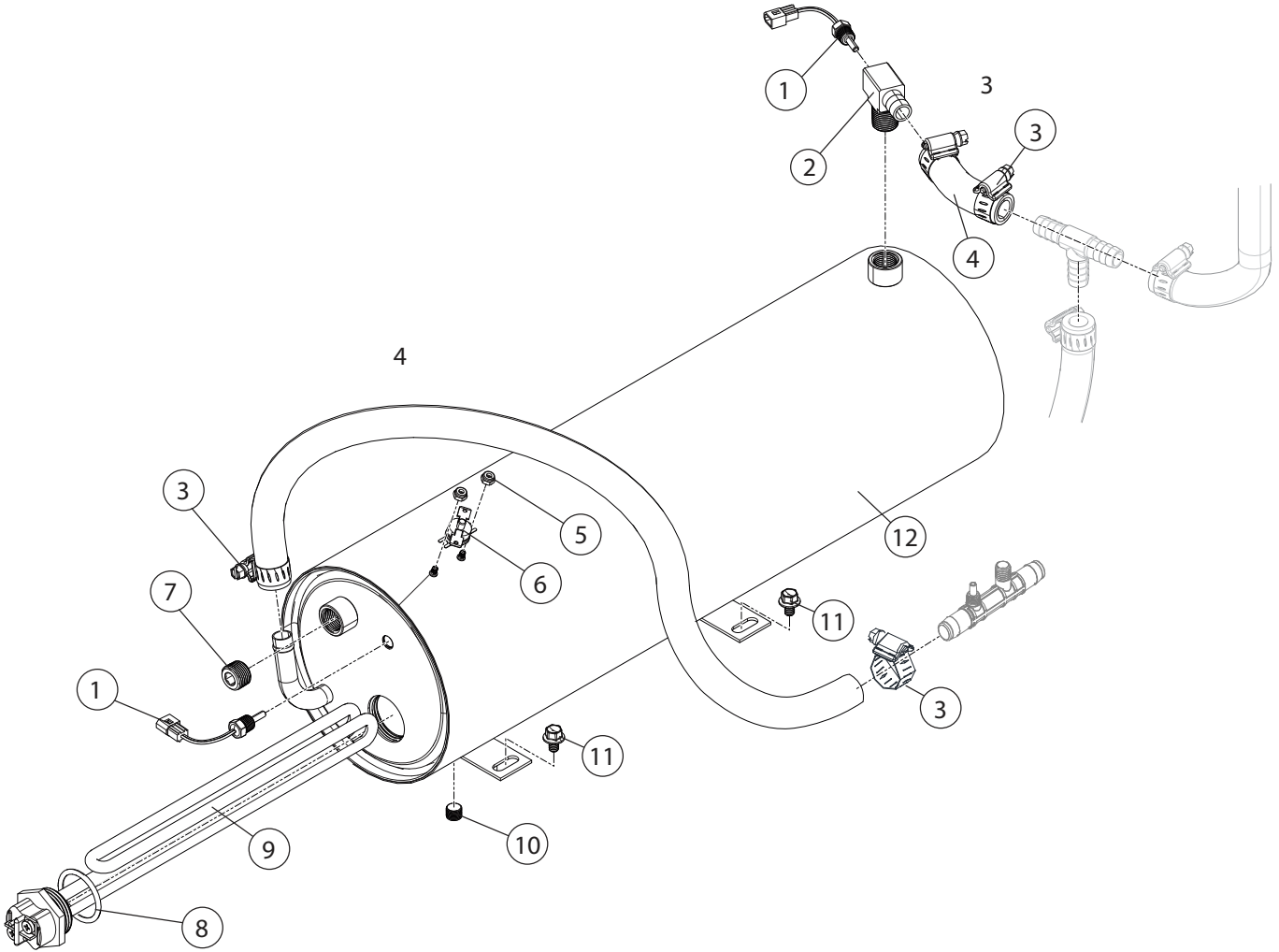
Pump/Motor



Item No.	Part No.	Description	Qty.
1	0512340	SCREW, M4, PHIL, PAN HD.	9
2	0512341	IMPELLER HOUSING COVER	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 $\mu$ F	1
14	0312144	BRACKET, WASH PUMP	1
15	0512185	BOLT, HEX FLANGE 1/4-20 X 3/8" SST	2

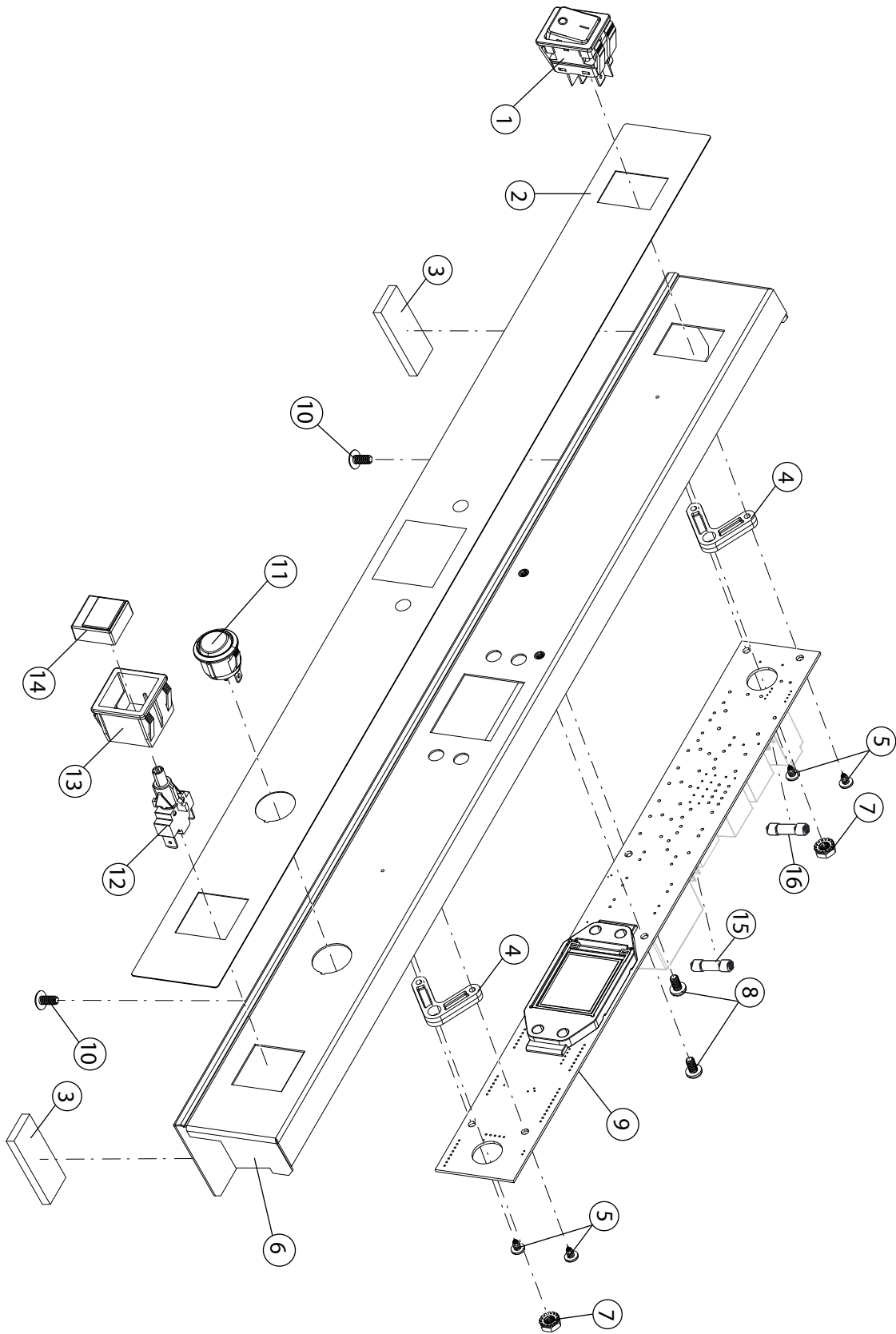
THE MOTOR IS NOT A SEPARATE PART

# Booster



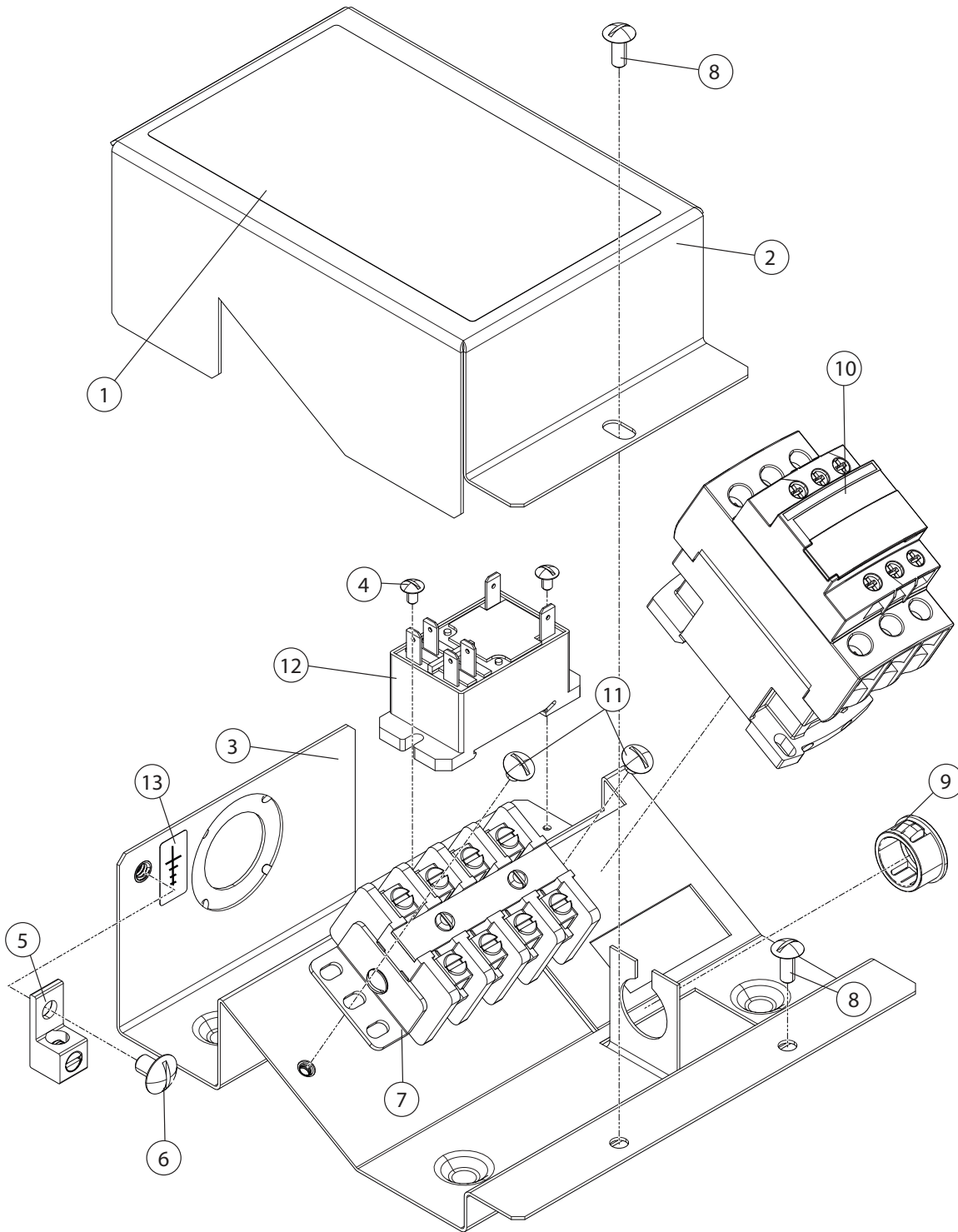
Item No.	Part No.	Description	Qty.
1	0513310	THERMISTOR	1
2	0513314	TEE, RINSE 1/2" HB X 3/8" NPT X 1/8" NPT BRASS	1
3	0512985	CLAMP, HOSE	4
4	107417	HOSE, RUBBER 1/2" ID X 0.84" OD	A/R
5	108954	NUT, GRIP, 6-32 W/NYLON INSERT SST	2
6	110562	THERMOSTAT, FIXED, SNAP, 240°F	1
7	0513880	PLUG, 3/8" NPT FACE	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	0513916	LABEL, FACIA 383HT M2	2
3	0512320	GASKET, STEAM	2
4	0512357	STANDOFF, LED DISPLAY BOARD	2
5	0512978	SCREW 6-18 X 1/4 PAN HEAD PHILLIPS SS	4
6	0513915	PANEL, FACIA 383HT M2	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
Harnesses Not Shown:			
-	0513837	HARNESS, SENSOR	1
-	0513836	HARNESS, SWITCH	1
-	0513918	HARNESS,WIRING 383HT M2	1

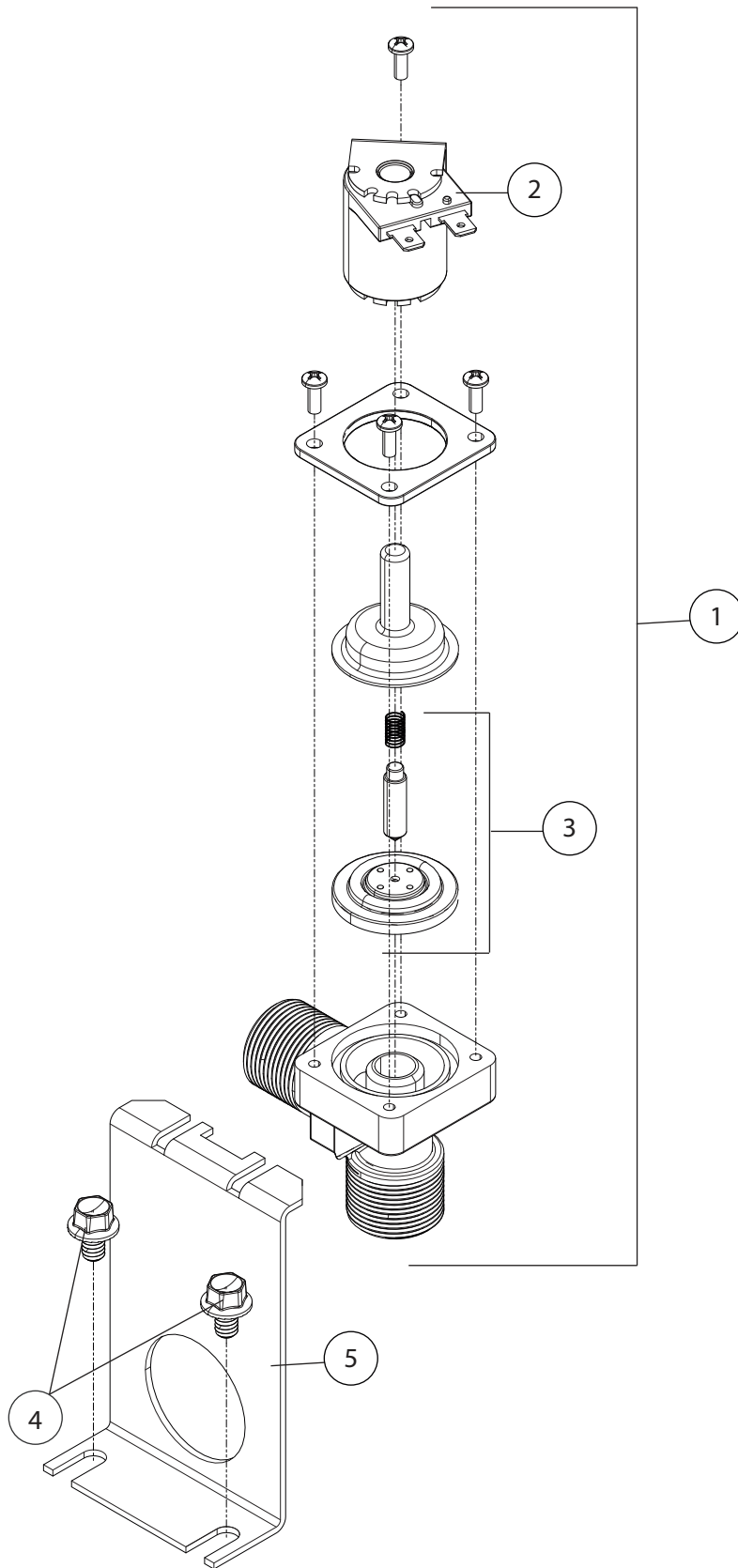
# Power Wiring Box



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	0512432	CONTACTOR, 3-POLE , 25/40A, 120VAC COIL	1
11	0512792	SCREW, 10-32 X 1/4"	2
12	0513106	RELAY, DPDT, 30A, 120VAC COIL	1
13	0503592	LABEL, GROUND	1
-----	0513838	MAIN WIRING HARNESS (NOT SHOWN)	1

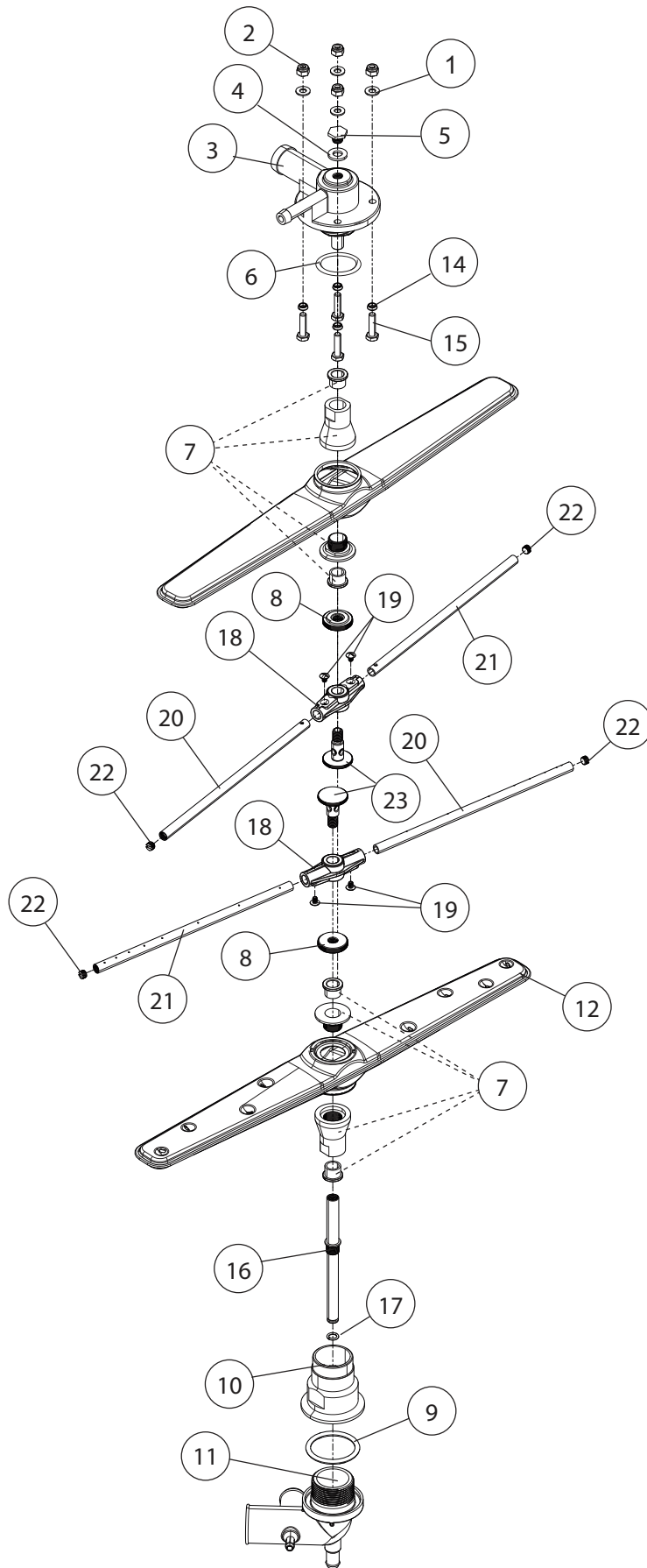


# Fill Valve



Item No.	Part No.	Description	Qty.
1	0512853	VALVE, WATER INLET 115VAC/60/1 (Includes Items 2 and 3)	1
2	0512861	COIL, 115VAC/60/1, 7W	1
3	0512860	KIT, REPAIR SOLENOID VALVE	A/R
4	0512185	BOLT, HEX FLANGE 1/4-20 X 3/8" SST	2
5	0313862	BRACKET, VALVE	1

# Wash and Rinse Spray Arms

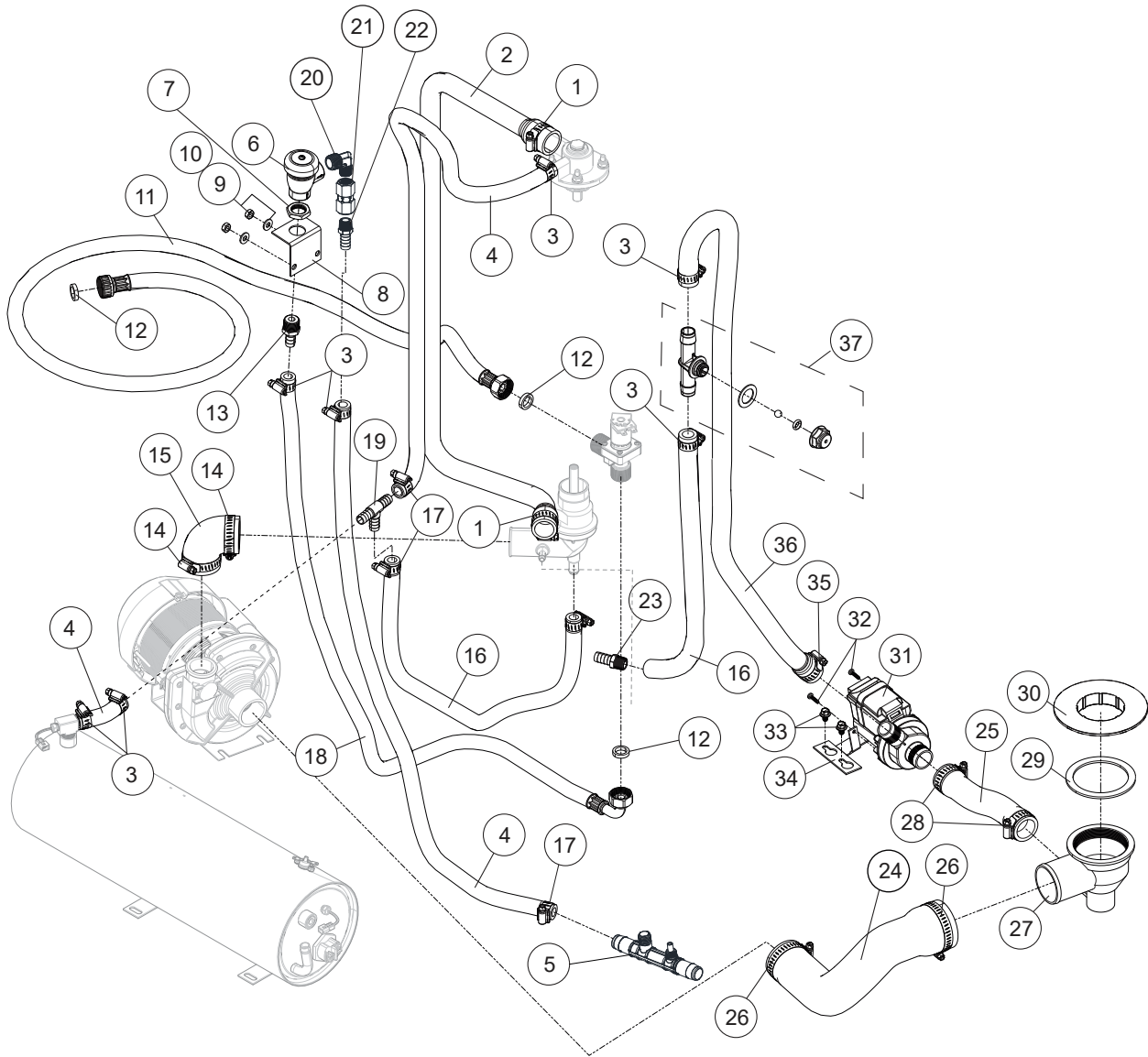


Item No.	Part No.	Description	Qty.
1	0501478	WASHER, 17/64 id X 9/16" OD SST	4
2	107967	NUT, GRIP 1/40-20 NYLON INSERT SST	4
3	0514251-1	HUB, UPPER SPRAY ARM	1
4	107873	WASHER, PACKING	1
5	110215	PLUG, UPPER MANIFOLD	1
6	0512133	O-RING, 2-1/8" OD X 1-3/4" ID X 3/16"	1
7*	0712749	BEARING ASSEMBLY	2
8	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 (Includes Item 7)	2
14	0501481	WASHER, NYLITE	4
15	100738	BOLT, 1/4-20 X 1" SST	4
16	0512124	SHAFT, LOWER	1
17	0512239	O-RING	1
18	0312840	HUB, RINSE ARM, MOLDED	2
19	0501408	SCREW, TRUSS SLOTTED 8-32 X 1/4" SST	4
20	0512841	ARM, RIGHT-HAND RINSE (7 JETS)	2
21	0512842	ARM, LEFT-HAND RINSE (8 JETS)	2
22	0512843	CAP, RINSE ARM, 5/16-24	4
23	H36275	SPINDLE, RINSE ARM	2
---	0712834	RINSE ARM ASSEMBLY (Includes Items 8, 18-23)	2

**\* Note:**

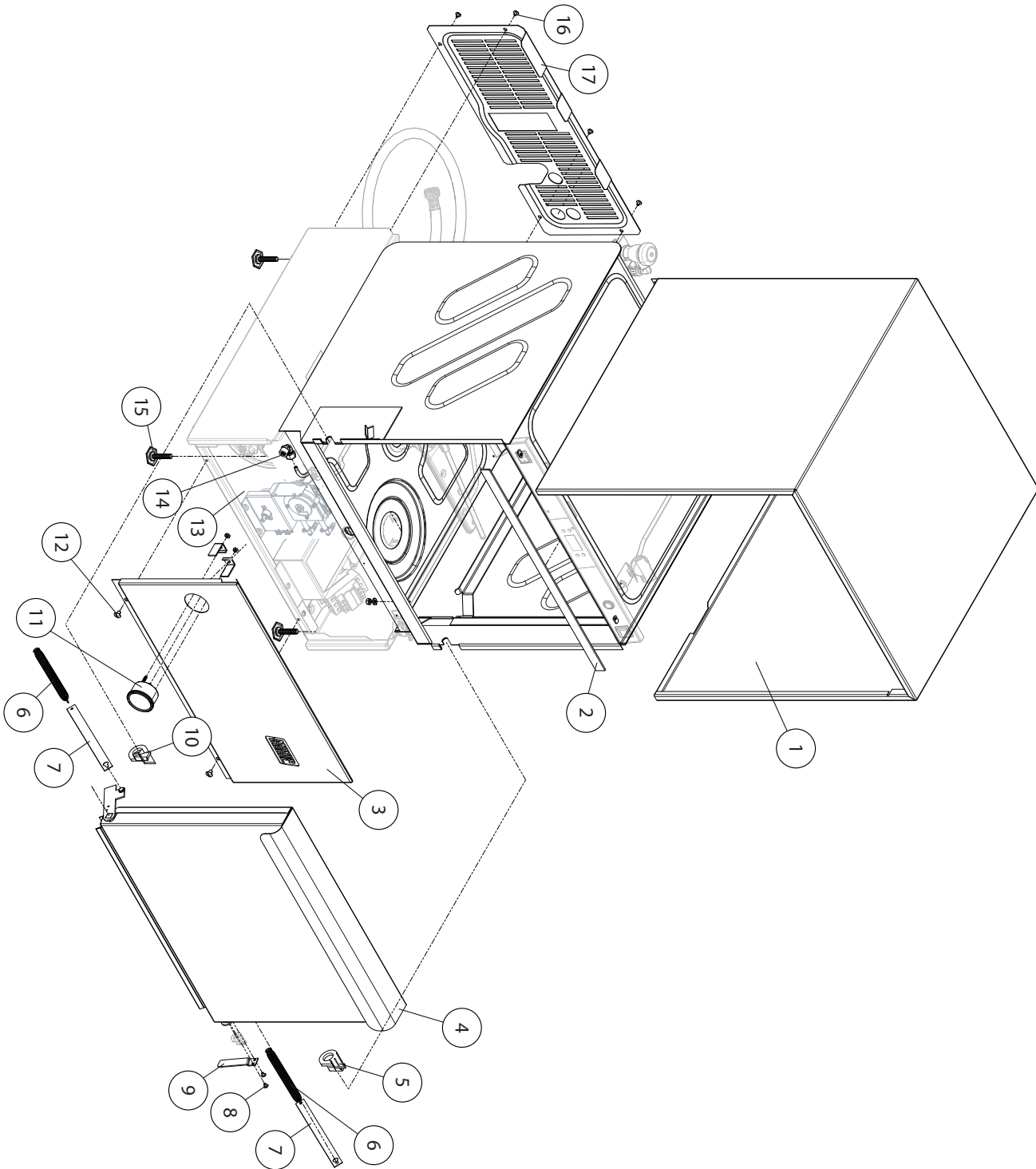
The bearing assembly, P/N 0712749 includes 2 bearings, 1 locknut, and 1 wash arm hub. The bearings, locknut and hub are not available as separate service replacement parts.

# Hoses and Drain Pump



Item No.	Part No.	Description	Qty.
1	0502571	CLAMP, HOSE	2
2	0512120	HOSE, UPPER WASH ARM	1
3	0503679	CLAMP, HOSE GEAR-TYPE SST	8
4	107417	HOSE, RUBBER 1/2" 1D X .84" OD	A/R
5	0514615	FITTING, MOLDED RINSE	1
6	100500	BREAKER, VACUUM 1/2"	1
—	0508366	KIT, REPAIR VACUUM BREAKER	A/R
7	201029-1	NUT, LOCK 1/2" NP	1
8	0312190	BRACKET, VACUUM BREAKER	1
9	0501501	WASHER, SPLIT 1/4" SST	2
10	0501539	NUT, HEX 1/4-20 SST	2
11	0512925	HOSE, FILL	1
12	0512936	WASHER, SILICON 5/8" ID X 7/8" OD	3
13	0502618	BARB, HOSE 1/2" X 3/8 MPT	2
14	0502571	CLAMP, HOSE GEAR-TYPE	2
15	0512119	HOSE, DISCHARGE	1
16	0509302	HOSE, 5/8" ID X 1" OD	A/R
17	0508808	CLAMP, HOSE	2
18	0512926	HOSE, BOOSTER FILL	1
19	0512134	TEE, 3/4" POLY.	1
20	0509606	ELBOW, 1/2MPTX3/8MPT REDUC.90DE	1
21	0507324	VALVE, CHECK 3/8i	1
22	0502618	HOSE BARB, 1/2 X 3/8 MPT	1
23	0512231	COUPLER, 3/4" MPT X 3/4" HOSE BARB	1
24	0512855	HOSE, SUCTION WASH PUMP	1
25	0502668	HOSE, DRAIN PUMP SUCTION	1
26	0512322	CLAMP, HOSE	2
27	D500605	ELBOW, PUMP SUCTION	1
28	0502563	CLAMP, HOSE GEAR-TYPE	2
29	D80208	GASKET, PUMP SUCTION	1
30	D540088	FLANGE, PUMP SUCTION	1
31	0512227	PUMP, DRAIN	1
32	109835	SCREW, #8 X 1/2" SELF-TAPPING	2
33	0512185	BOLT, HEX FLANGE, 1/4-20 X 3/8" SST	2
34	0312145-2	BRACKET, DRAIN PUMP	1
35	0512322	CLAMP, HOSE GEAR-TYPE 1-13/16"- 2-3/4" MAX SST	1
36	0513849	HOSE, DRAIN MOLDED	1
37	0714052	ASSEMBLY, ANTI-SIPHON VALVE KIT	1

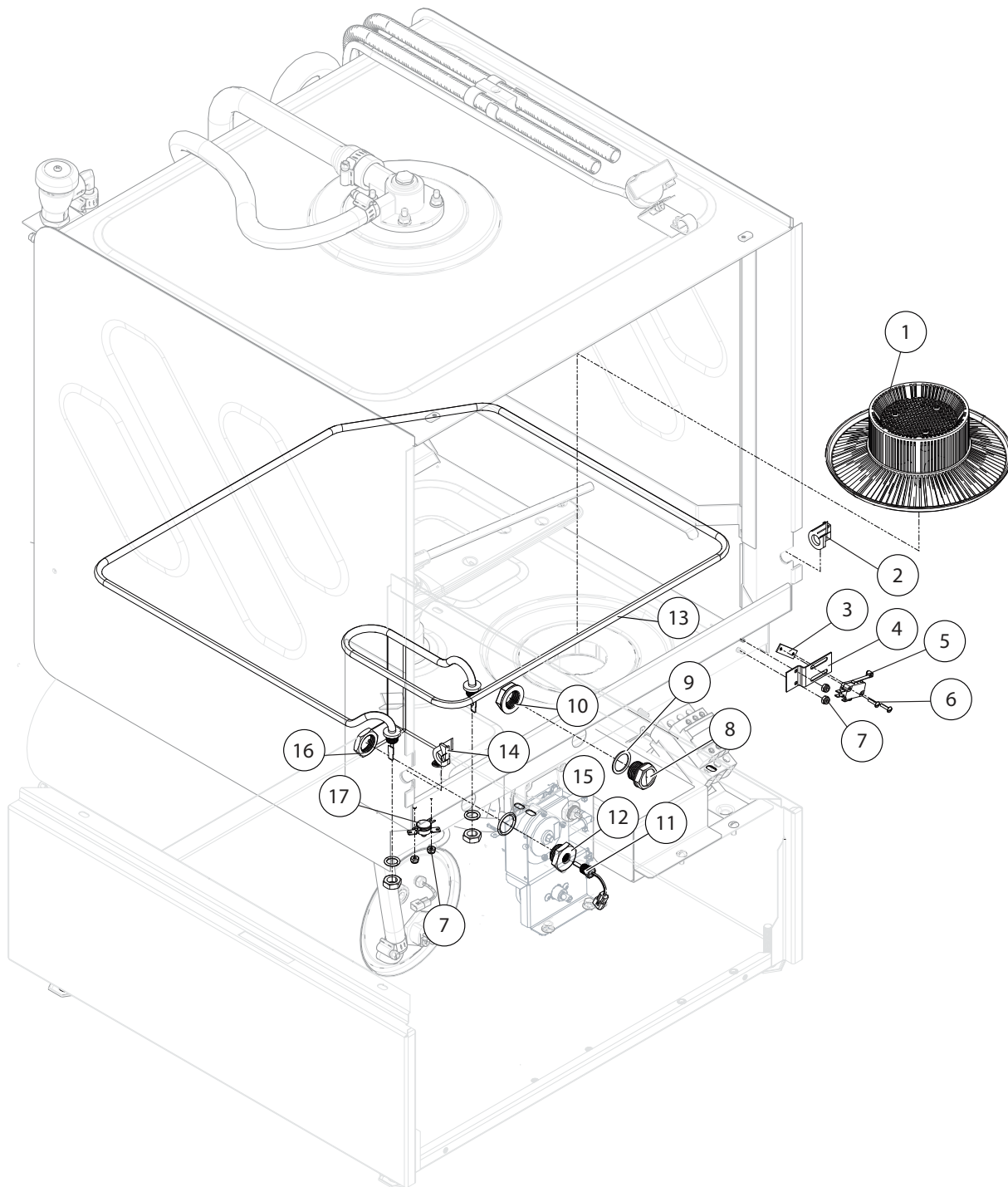
# Panels and Door



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	0313863	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	109812	GAUGE, PRESSURE 0-60PSI	1
12	0501412	SCREW, 10-32 X 3/8" TRUSS HD. PHIL. SST	2
13	107928	TUBING, 1/4" NATURAL	A/R
14	111100	ADAPTOR, 1/4" X 1/8" NPT FEMALE PLASTIC	1
15	0503718	FOOT, ADJUSTING	4
16	0501412	SCREW TRUSS PHIL.10-32 X 3/8" SST	5
17	0313867	PANEL, REAR	1

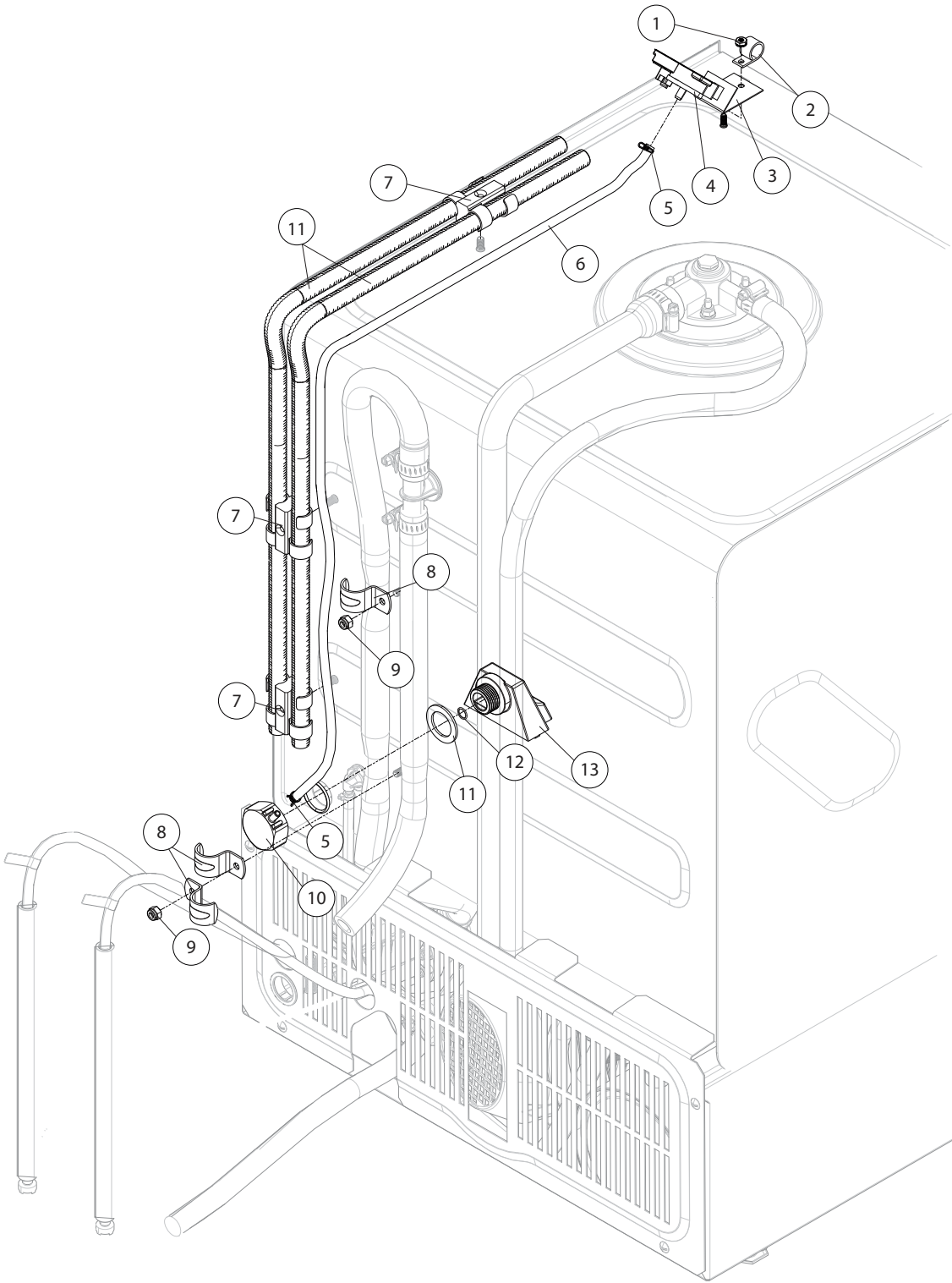


# Upper Tank



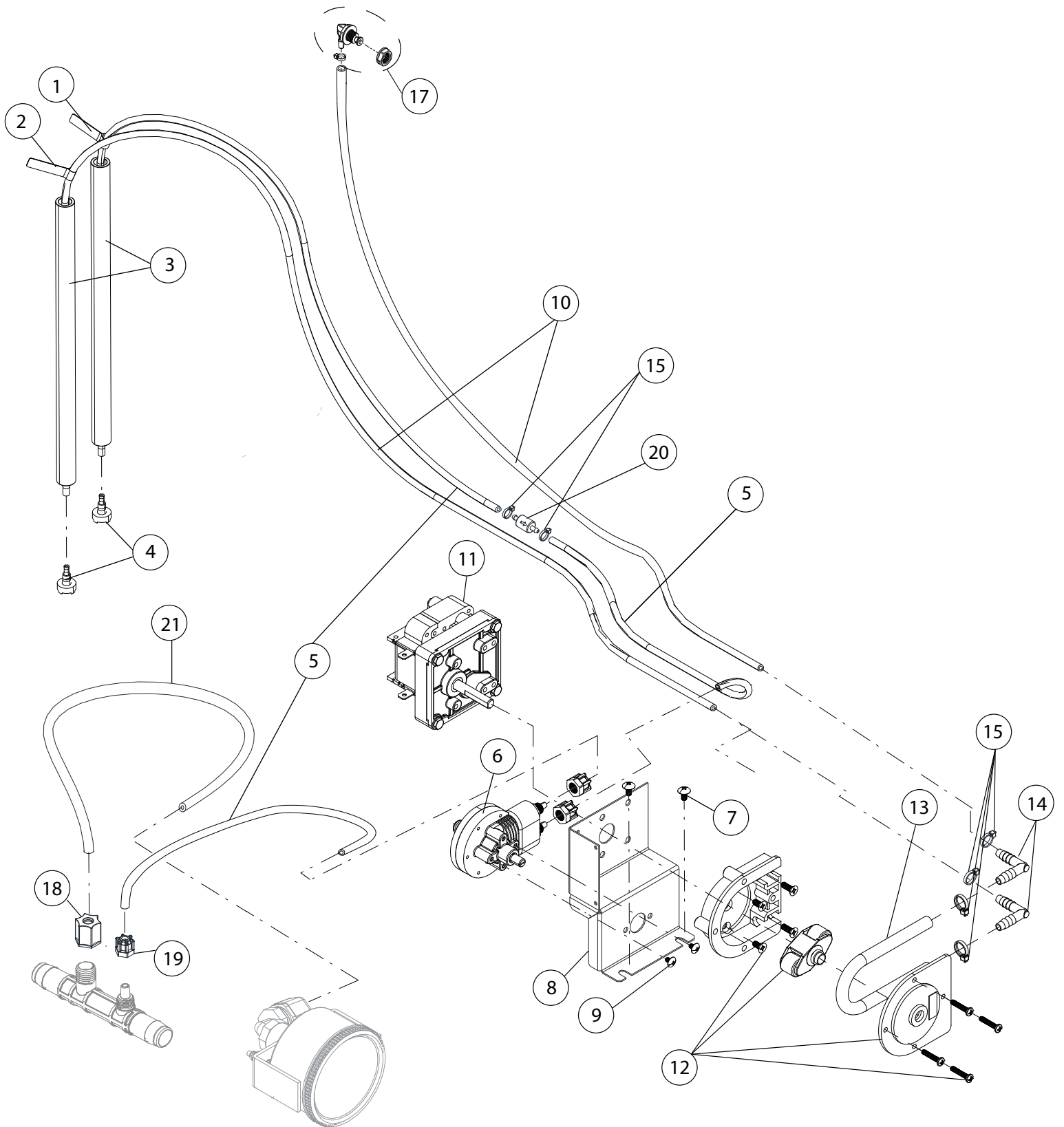
Item No.	Part No.	Description	Qty.
1	0713871	SCREEN, SCRAP	1
2	0512953	GASKET, RH DOOR HINGE	1
3	0307369	PLATE, NUT 4-40	1
4	0312948	BRACKET, SWITCH DOOR	1
5	0501379	SWITCH, DOOR 15A	1
6	0501437	SCREW, 4-40 X 1/2" PAN HEAD PHILS. SST	2
7	108954	NUT, GRIP 6-32 W/NYLON INSERT SST	2
8	108418	PLUG, 1/2"	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	0512594	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

# Tank Rear



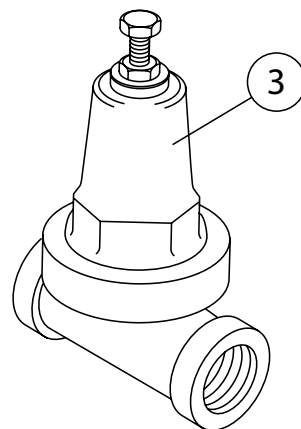
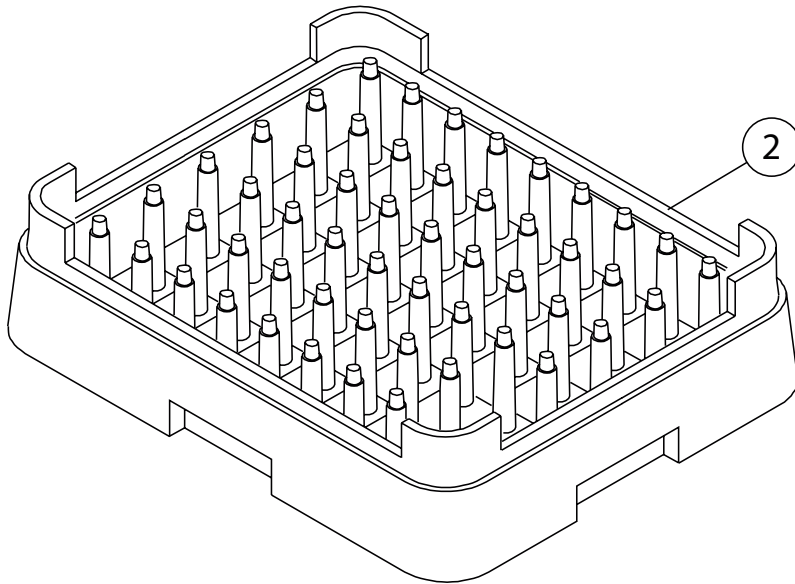
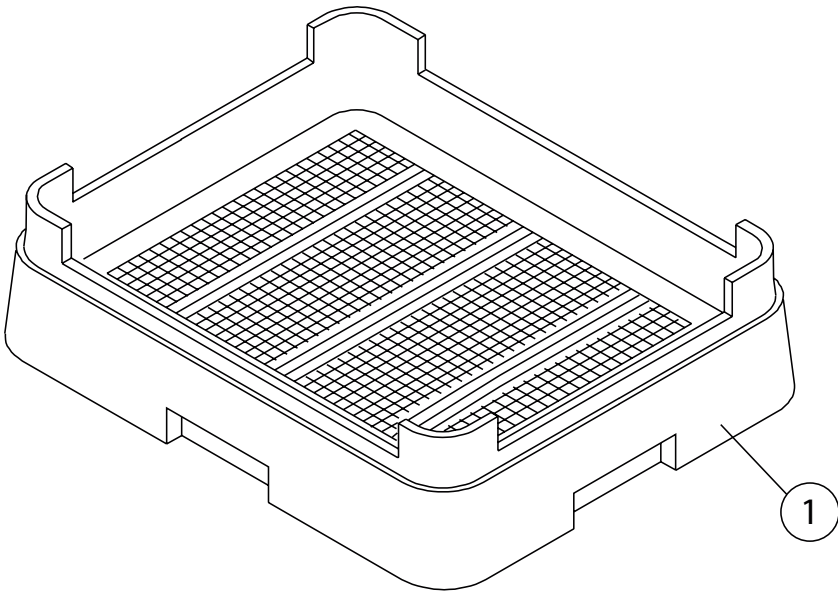
Item No.	Part No.	Description	Qty.
1	0503580	NUT, 10-32 SST	1
2	0513645	CLIP	1
3	0313865	BRACKET, SENSOR	1
4	0513831	SENSOR, LEVEL	1
5	H450134	CLAMP, HOSE	2
6	H160121	HOSE, AIR	A/R
7	0512761	CLAMP, DOUBLE CONDUIT	3
8	B502523	CLAMP, 3/4" PLATED STRAP	3
9	107967	NUT, GRIP, 1/4-20 W/NYLON INSERT SST	3
10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

# 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 KIT, PERISTALIC	1
13	114202	TUBE ASY,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



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