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# Champion<sup>®</sup>

The Dishwashing Machine Specialists

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*For machines beginning with Serial no. S-1000 thru S-1045  
and for machines beginning with Serial no. S-1046 and above.*

## Technical Manual

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**Taskmaster  
Power Wash Sink System**

**Model**

**PP-3**

**Machine Serial No.**

**September, 2003**

**Manual P/N 113071** Rev. G

P. O. Box 4149  
Winston-Salem, North Carolina 27115-4149  
336/661-1556 Fax: 336/661-1660

2674 N. Service Road  
Jordan Station, Ontario, Canada L0R 1S0  
905/562-4195 Fax: 905/562-4618

[www.championindustries.com](http://www.championindustries.com)

**Complete the information below for quick reference.**

Model Number \_\_\_\_\_ Serial Number \_\_\_\_\_

Voltage and Phase \_\_\_\_\_

Champion Parts Supplier \_\_\_\_\_ Phone \_\_\_\_\_

Champion Service Agency \_\_\_\_\_ Phone \_\_\_\_\_

**Champion (USA)  
National Service Department**

Phone: 1(336) 661-1556

1(800) 858-4477

Fax: 1(336) 661-1660

**Champion (Canada)  
National Service Department**

Phone: 1(905) 562-4195

1(800) 263-5798

Fax: 1(905) 562-4618

**Note:** When calling to order parts, be sure to have the model number, serial number, voltage and phase of your machine.



Machine Data Plate with  
model & serial number  
located on the front of the  
lower panel.

## REVISION RECORD

Revision Date	Revised Pages	Serial Number Effectivity	Comments
8/30/99	All	—	First issue of manual and replacement parts lists
10/29/99	13-14	—	Added single phase part numbers to parts lists
12/12/00	All	S1046	Revised operating instructions and service parts lists for "Delay Off" selector switch, pump, and water heater
3/7/01	21	—	Changed P/N 111826 to 105514
3/12/01	2	—	Changed dimensions to specs
3/12/01	23	—	Add P/N 113290 pump motor, 3 HP for 1 ph machines in place of 2 HP pump motor for machines after serial number S1060.
7/31/01	26-27	—	Added bracket for drain assembly
9/8/03	19	—	Replaced P/N 111686 with 112818
9/8/03	21	—	Replaced Furnace (Siemens) overloads with Telemecanique (Square D) overloads.

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# SAFETY SUMMARY

## Safety Symbols

- The following symbols appear throughout this manual alerting you to potential hazards. Statements associated with each symbol are printed in *italics*.



### **WARNING:**

*Warning statements indicate any condition or practice that could result in personal injury or possible loss of life.*



### **CAUTION:**

*Caution statements indicate any condition or practice which, if not strictly observed or remedied, could result in damage to or destruction of the dishwasher.*



### **NOTE:**

*Note statements indicate any condition or practice which, if observed, will help in the safe completion of a task.*

## General Safety Rules

- **The following general safety rules must be observed in addition to the specific cautions and warnings presented in this manual.**
- **Your Champion machine uses hot water** to clean and sanitize a variety of wares. (Some models use chemicals to sanitize wares.)  
Machine surfaces and wares become hot during and immediately following normal operations. Operators should use caution when loading and unloading wares from the machine.
- **Operators must NOT bypass a safety interlock or control to operate the machine.**
- **The service and maintenance instructions contained in this manual are intended for qualified service personnel.** These instructions assume that you are trained in basic electricity and mechanical theory. If you are not a trained technician, then do not attempt to adjust or repair the machine as serious personal injury or damage to the machine may result.

## LIMITED WARRANTY

Champion Industries Inc. (herein referred to as Champion), P.O. Box 4149, Winston-Salem, North Carolina 27115, and P.O. Box 301, 2674 N. Service Road, Jordan Station, Canada, L0R 1S0, warrants machines, and parts, as set out below.

**Warranty of Machines:** Champion warrants all new machines of its manufacture bearing the name "Champion" 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 Champion, whichever occurs first. [See below for special provisions relating to glasswashers.] The warranty registration card must be returned to Champion within ten (10) days after installation. If warranty card is not returned to Champion within such period, the warranty will expire after one year from the date of shipment.

Champion 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, Champion, at its election, will either repair or replace the defective machine or accept return of the machine for full credit; provided, however, as to glasswashers, Champion's obligation with respect to labor associated with any repairs shall end (a) 120 days after shipment, or (b) 90 days after installation, whichever occurs first. In the event that Champion elects to repair, the labor and work to be performed in connection with the warranty shall be done during regular working hours by a Champion authorized service technician. Defective parts become the property of Champion. Use of replacement parts not authorized by Champion will relieve Champion of all further liability in connection with its warranty. In no event will Champion's warranty obligation exceed Champion's charge for the machine. The following are not covered by Champion's warranty:

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

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

**Warranty of Parts:** Champion warrants all new machine parts produced or authorized by Champion 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 Champion will replace the defective part without charge.

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

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

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# PART 1: GENERAL SPECIFICATIONS

## 1.1 About this Manual

All information, illustrations and specifications contained in this manual are based upon the latest product information available at the time of publication. Champion constantly improves its products and reserves the right to make changes at any time or to change specifications or design without notice and without incurring any obligation.

### Manual Organization

This manual is divided into five parts:

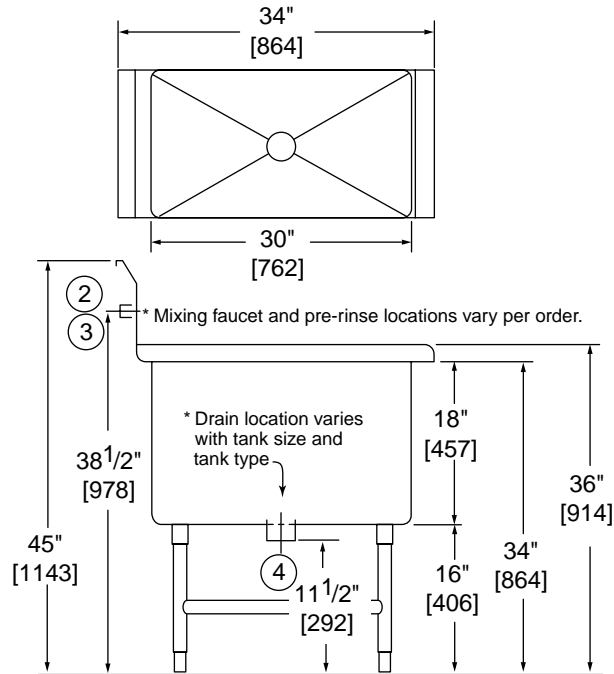
- ◆ Part 1, General Specifications, introduces this manual.
- ◆ Part 2, Installation, explains the installation of the unit and describes the connection of utilities.
- ◆ Part 3, contains basic operating instructions.
- ◆ Part 4, contains replacement parts list.
- ◆ Part 5, contains electrical schematics.



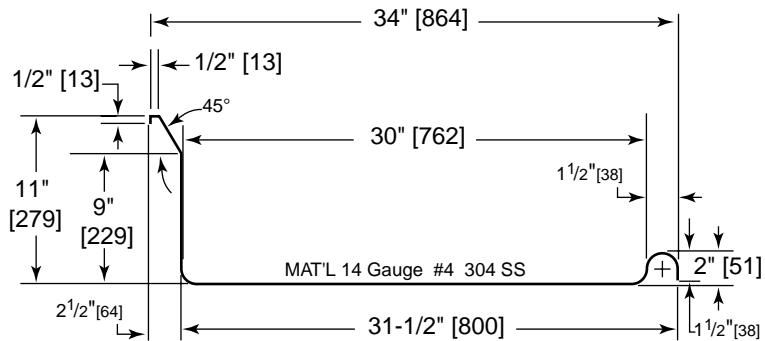
### **NOTE:**

*Unless noted otherwise, dimensions, capacities, temperatures, etc., given in this manual are **U.S. Customary Measures** and the **Metric Equivalents** of the U.S. customary measures.*

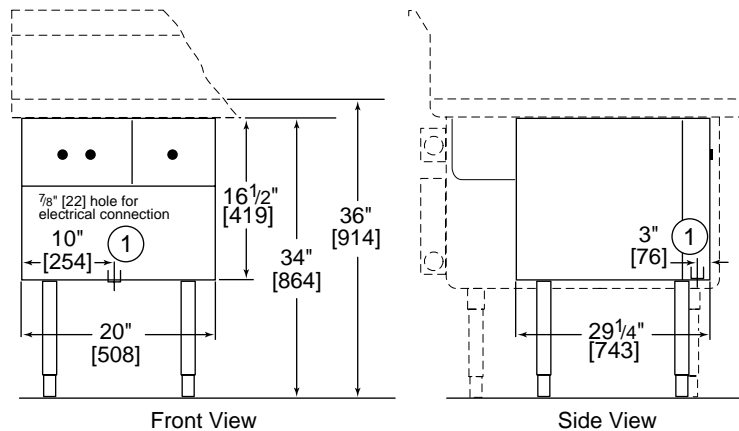
## 1.2 Dimensions



**Sink Side View**



**Rolled Table Side View**



**Control Cabinet  
(freestanding unit shown)**

## 1.2 Dimensions

<b>Utilities</b>	
<b>1</b>	<b>Electrical</b> (See box below)
<b>2</b>	<b>Hot water:</b> 3/4" NPT 120°F/49°C connection for mixing faucet. 1/2" NPT 120°F/49°C connection for pre-rinse sprayer.
<b>3</b>	<b>Cold Water:</b> 3/4" NPT connection for mixing faucet. 1/2" NPT connection for pre-rinse sprayer.
<b>4</b>	<b>Drain:</b> 1-1/2" NPT lever drain w/o overflow.

<b>PP-3 with Water Heater</b>			
<b>Elec. Specs.</b>	<b>Rated Amps</b>	<b>Minimum Supply Ckt. Conductor Ampacity</b>	<b>Maximum Overcurrent Protective Device</b>
208/60/1	28	35	35
230/60/1	28	35	35
208/60/3	17	25	25
230/60/3	18	25	25
460/60/3	9	15	15
575/60/3	8	15	15

<b>PP-3 without Water Heater</b>			
<b>Elec. Specs.</b>	<b>Rated Amps</b>	<b>Minimum Supply Ckt. Conductor Ampacity</b>	<b>Maximum Overcurrent Protective Device</b>
208/60/1	15	20	20
230/60/1	15	20	20
208/60/3	9	15	15
230/60/3	9	15	15
460/60/3	5	15	15
575/60/3	4	15	15

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## PART 2: INSTALLATION

### 2.1 Introduction

In This Part—

- Unpacking the sink
- Permanent Placement
- Making Utility Connections
- Chemical Connections

### 2.2 Unpack the Unit

Your Taskmaster was completely assembled, inspected, and thoroughly tested at our factory before shipment to your installation site.

- The unit is shipped on a single pallet.
- Optional components may have been shipped separately.
- Check your packing list thoroughly.



#### **NOTE:**

*Immediately after unpacking your machine, inspect for any shipping damage. If damage is found, save the packing material and contact the carrier immediately.*

***BE SURE TO COMPLETE AND RETURN THE  
WARRANTY CARD  
INCLUDED WITH YOUR MACHINE.***



#### **NOTE:**

*The installation of your Taskmaster must meet all applicable health and safety codes and conform to good trade practice.*

#### **Perform the following steps to unpack the unit:**

1. Remove protective wrap and hold downs from the pallet.
2. Inspect for any shipping damage. If damage is found, save the packing material and contact the carrier immediately.
3. Check the interior of the sink for the following items stowed inside:
  - Warranty information packet
4. Remove the unit from the skid.
5. Move the unit to its permanent location.

## 2.3 Permanent Placement

### Special Tools —

- Bubble level (6 ft.)

**Perform the following steps to place the Taskmaster in its permanent location.**

1. Before moving the unit into position, inspect the location site to ensure the electrical, plumbing, and ventilation services (if required) are provided in the correct locations. Compare the site connections with the unit to ensure they will match when the machine is set in its permanent location.
2. Lift the Taskmaster and adjust the leveling feet out.
3. Position unit in its permanent location.
4. Place a 6 ft. level on top of the unit to level front to back. Adjust level by turning the adjustable feet. Level side to side with the level placed on the top of the unit.

## 2.4 Water Connections

**The following warning and attention statements apply to all models.**



### **WARNING:**

*The installation of this unit must conform to local codes or, in the absence of local codes, to all National Codes governing plumbing, sanitation, safety and good trade practices.*

**!! ATTENTION INSTALLER !!**

**Carefully check the location and size of faucets and pre-rinse assemblies shipped with this unit.**

**Your Taskmaster system may be equipped with options not listed in this general manual.**

## 2.5 Drain Connections

The following instructions apply to all models.



### **WARNING:**

*The installation of this unit must conform to local codes or, in the absence of local codes, to all National Codes governing plumbing, sanitation, safety and good trade practices.*

### **!! ATTENTION INSTALLER !!**

**Carefully check the location and size of drains on this unit.**

**Your Taskmaster system may be equipped with multiple sink compartments which require drain connections.**

## 2.6 Electrical Connections (Single Phase or Three Phase )



**WARNING:**

*The installation of electrical supplies and controls must conform to local codes or, in the absence of local codes, the National Electrical Code and good trade practices.*



**WARNING:**

*When working on the Taskmaster, disconnect the electrical service and place a red tag at the disconnect switch to indicate work is being done on that circuit.*

### **!! ATTENTION INSTALLER !!**

Service enters at the main control cabinet mounted on either the right or left side of the machine. The main connection block is located inside the control cabinet.

1. **A qualified electrician** must compare the electrical power supply with the machine electrical specifications stamped on the MACHINE ELECTRICAL CONNECTION PLATE before connecting to the incoming service through a fused disconnect switch or circuit breaker (supplied by others). The plate is located near the main terminal block.



## 2.7 Chemical Connections

### !! ATTENTION TASKMASTER OWNER !!

Your Taskmaster is designed to work best with **potwashing detergents**. Champion strongly recommends that you contact a qualified chemical supplier to supply these products and to setup your machine for the first time.

Champion is not able to advise you on the proper dispenser settings for any particular product nor can we recommend one supplier over another. You may wish to consult your equipment dealer or your Champion authorized service agent for help in contacting a chemical supplier in your area.

### !! ATTENTION CHEMICAL SUPPLIER !!

1. Power for chemical dispensing equipment is available in the main control cabinet mounted on either the right or left side of the unit.



#### **WARNING:**

*The installation of electrical supplies and controls must conform to local codes or, in the absence of local codes, the National Electrical Code and good trade practices.*



#### **WARNING:**

*When working on the Taskmaster, disconnect the electrical service and place a red tag at the disconnect switch to indicate work is being done on that circuit.*

*Refer to the Control Cabinet Components drawing, page 19 and the Electrical Schematic at rear of this manual for location of components listed below.*

**Maximum amperage load for chemical equipment is limited to one (1) ampere max load.**

### !! FOR 120VAC POWER REQUIREMENTS !!

1. Connect to secondary of control transformer wires #6 and #2. Transformer is located at left bottom side of control cabinet.

### !! FOR 208-240VAC POWER REQUIREMENTS !!

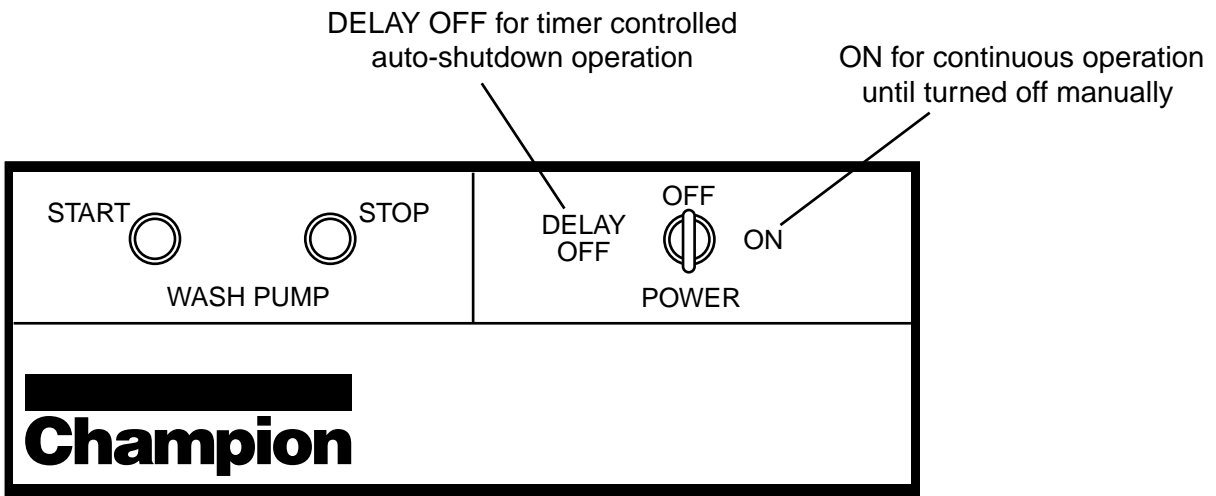
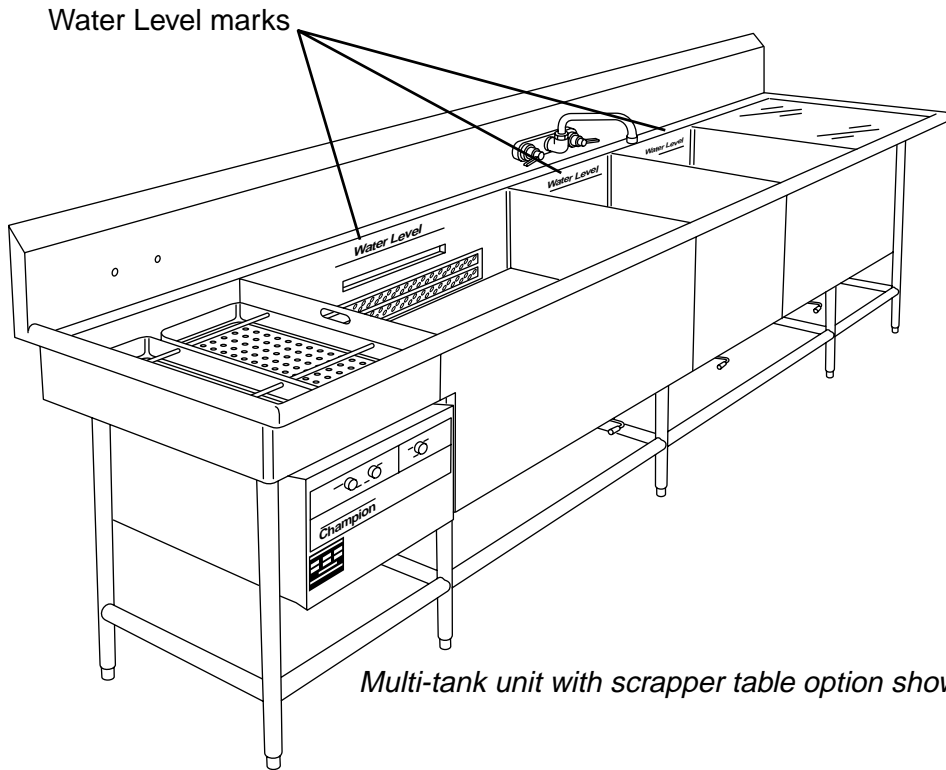
1. Connect to main incoming terminal block located near bottom of control cabinet.

### !! FOR SWITCHED 208-240VAC POWER REQUIREMENTS !!

1. Connect to output side of wash motor contactor.

### !! FOR SWITCHED 120VAC POWER REQUIREMENTS !!

1. Connect to contactor coil terminals of wash motor contactor.



Control panel for machines beginning with S/N S-1046 and above



**NOTE:**

The auto-shutdown timer begins timing down as soon as the selector switch is placed in the DELAY OFF position. Be sure to press the START button soon after setting the selector switch to the DELAY OFF position. This will ensure the complete use of the preset wash time cycle.

## Part 3: OPERATION

The power wash sink system should be installed and inspected as explained in the previous section. Also, any detergent and/or sanitizing system being used should be installed and inspected properly by the chemical supplier. The following are the steps for operating the PP-3 power wash sink system.

### 3.1 Prepare Unit to Soak Wares

1. Be sure all scrap baskets, strainers, and screens are clean and placed correctly.
2. Be sure the drain valves are closed on all sinks installed - the wash sink, rinse sink, or sanitizer sink.
  - The drain valve handles for all the sinks should be at the 9 o'clock position.
3. Fill each sink with water and any needed solution:
  - a. *For wash sink* -
    - Fill the wash sink with hot water (Min. 115°F/46°C - Max. 125°F/52°C ) to the water level mark.
    - Add detergent to the wash sink, following the chemical supplier's recommendations.
  - b. *For rinse sink* -
    - Fill the rinse sink with hot water (Min. 115°F/46°C - Max. 125°F/52°C ) to the water level mark.
  - c. *For sanitizer sink* -
    - Fill the sanitizer sink with hot water (Min. 115°F/46°C - Max. 125°F/52°C ) to the water level mark.
    - Add sanitizer to the sanitizer sink, following the chemical supplier's recommendations to meet the local health codes for sanitation.
4. Make sure the main power breaker is on.



**Note:** If you are using a commercial dishwasher to wash the wares after soaking them in the wash sink, then the following steps for the rinse sink and sanitizer sink are optional.

#### *For continuous operation:*

- Turn the power switch to the ON position.  
The red light on the knob illuminates.
- Wait 15 seconds.  
The water heater turns on, if installed.
- Push the green start button.  
The pump begins to run, and the water in the wash sink begins agitating.

#### *For DELAY OFF timed auto-shutdown operation:*

- Turn the power switch to the DELAY OFF position.  
The red light on the knob illuminates.
- Wait 15 seconds. The water heater turns on, if installed.  
**Timer begins timing down immediately.**
- Push the green start button. The pump runs, and the water in the wash sink begins to agitate.  
**Unit operates until remaining time on timer expires or unit is manually turned off.**
- Shutdown timer is adjustable from 10 minutes to 4 hours. Factory setting is 4 hours.  
After 4 hours, the pump stops.  
**Turn power switch to OFF, then back to DELAY OFF to reset the timer or turn to ON for continuous operation if desired.**

## 3.2 Soak the Wares

1. Scrap and flush the large particles from the wares into the scrap sink or trough.
2. Place the wares in the wash sink so that each is immersed and there is room for water to circulate around each.  
The following are tips on placing the wares in the wash sink:
  - a. Load sheet pans in the tray holder.
  - b. Load pots on their sides.
  - c. Stagger pans and sheet pans to increase water circulation.
  - d. **Be sure no rags, cloths, or scrub pads are placed in the sink with the wares.**
3. Let the wares soak in the agitation until they are cleaned to your desired level of cleanliness.

### *For continuous operation:*

- Turn the power switch to the ON position.  
The red light on the knob illuminates.
- Wait 15 seconds.  
The water heater turns on, if installed.
- Push the green start button.  
The pump begins to run, and the water in the wash sink begins agitating.

### *For DELAY OFF timed shutdown operation*

- Turn the power switch to the DELAY OFF position.  
The red light on the knob illuminates.
- Wait 15 seconds. The shutdown timer resets and the water heater turns on, if installed.  
The timer begins to count-down the preset time.
- Push the green start button.  
The pump begins to run, and the water in the wash sink begins agitating.

The soak cycle timer located in the control cabinet was preset at the factory to 4 hours. Its setting can be a minimum run time of 10 minutes to a maximum of 4 hours. The cycle runs until that timer automatically shuts off the system or you manually shut off the system by turning the selector switch to OFF. To adjust the timer, refer to the section, “3.6 Set Timers and Controls (If Necessary).”

4. Push the red stop button to manually stop the pump.  
NOTE: The timer will continue to count-down the preset time.
5. Remove wares from the wash sink, checking for cleanliness. Wipe the wares to remove any remaining softened soils.
6. ***If you are using a commercial dishwasher to wash the wares after soaking them in the wash sink***, then place the wares in the dishwasher and complete the process for that dish washer.

### ***If you are not using a commercial dishwasher to further wash the wares, then -***

- a. Immerse each ware in the rinse sink, rinsing each so that all suds are rinsed off.
  - b. Immerse each ware in the sanitizer sink, immersing for a minimum of 7 seconds or the recommended time, per your chemical supplier’s recommendation in order to meet the local health codes.
  - c. Remove wares for drying.
7. Repeat steps 1-6 for another set of wares.

### 3.3 Maintain Water and Chemical Levels During Soaking

Your Taskmaster works more efficiently with proper levels of clean water and solutions. The following conditions should be maintained:

1. Be sure the water levels do not fall below the water level marked for each sink.
 

*Specifically, for the wash sink* - the wash sink has a water level sensor. If the water becomes low, then the system automatically shuts down the pump and heater. To restart -

  - a. Fill the wash sink to the water level mark.
  - b. Press the green start button.
2. Maintain clean water and clear water flow for each sink.
 

At a minimum, each of the sinks should be drained and refilled every 2 hours of use during multiple loads of wares (refilled as explained above in the section, “3.1 Prepare Taskmaster to Soak Wares”). Also at this time, the wash sink suction strainer should be cleaned and rinsed.
3. Maintain the sanitizer chemical level.
 

The chemical supplier may have placed a sensor in the sanitizer sink to monitor the sanitizer concentration, or you may be required to check the concentration manually. Follow the directions of your chemical supplier.

### 3.4 Reset the Timer to Its Maximum Preset Cycle Time

If during operation the system shuts off, you can reset the timer:

1. Be sure the reason that the system shut off has been solved. For example, if the water level was low, be sure you have filled the sink to the correct water level.



**Note:** You can simply push the green start button, and the system restarts. However, the system continues only for the remaining time of the cycle.

2. To reset the timer to begin from the maximum preset time -
  - a. Turn the power switch to OFF.
  - b. Wait 15 seconds to allow the timer to reset.
  - c. Turn the power switch to DELAY OFF.
 

The auto-shutdown timer begins to count-down.
  - d. Push the green start button.

The system will now run for the remaining preset time.



**NOTE:**

The auto-shutdown timer begins timing down as soon as the selector switch is placed in the DELAY OFF position. Be sure to press the START button soon after setting the selector switch to the DELAY OFF position. This will ensure the complete use of the preset wash time cycle.

### 3.5 Shut Down and Clean the Unit

The following steps are completed after the system has been turned off (either by your pressing the red stop button or the soak cycle having timed out) and you have removed all wares from the sinks.

1. Turn the power switch to OFF.
2. Open the drain valves for each of the sinks, opening the valves to the 3 o'clock position to drain the sinks. The maximum drain flow rate is 15 US gpm, 13 imp. gpm, 57 Lpm.
3. Clean each sink:
  - a. *For scrap sink* -
    - Remove the scrap basket, and dump the food particles into the waste receptacle.
    - Replace the scrap basket; and flush the sides of the scrap sink (or trough) to rinse remaining soils.
  - b. *For wash sink* -
    - Flush the sides of the wash sink.
    - Remove and clean the sink strainer.
    - Remove and clean the wash sink suction strainer.
    - Replace the strainers.
  - c. *For rinse and sanitizer sinks* -
    - Flush the sides of the sinks.
    - Remove and clean the sink strainers.
4. Wipe down the surfaces with a soft cloth:
  - a. Do not hose the exterior with water.
  - b. Do not use metal pads, scrub pads, or brushes. Do not use the dishwashing detergent.

## 3.6 Set Timers and Controls (If Necessary)

### 3.6.1 The "DELAY OFF" soak cycle timer

The soak cycle timer allows you to set a cycle of time for the system to run. After that time, the system automatically shuts itself off. The limits on the timer are a minimum of 10 minutes and a maximum of 4 hours. The timer is configured during the installation, but you can adjust the timer. To adjust the timer -

1. Turn the power switch to OFF.
2. Turn the main power breaker to OFF.  
Even though the power switch has been turned off, there is still power running to the switch itself. Therefore, turn the main power breaker off as well.
3. Remove the front panel by unscrewing the panel screws.
4. Locate the solid-state timer, identified by the adjusting screw graduated from 0 to 10.  
The scale is given as 0 to 10, with 0 being the minimum and 10 being the maximum, and 0 to 10 being equivalent to 4 hours. 1/2 of full scale is approximately 2 hours run time.
5. Adjust the timer:
  - a. *To adjust for a shorter cycle* - turn the screw towards 0 (counter clockwise).
  - b. *To adjust for a longer cycle* - turn the screw towards 10 (clockwise).
6. Replace the front panel.

### 3.6.2 The thermostat for the water heater (if installed).

The system can have a water heater included that maintains the water temperature for the wash sink. The heater is controlled by a thermostat that was set during the installation, but you can adjust the thermostat. To adjust the thermostat -

1. Turn the power switch to OFF.
2. Turn the main power breaker to OFF.  
Even though the power switch has been turned off, there is still power running to the switch itself. Therefore, turn the main power breaker off as well.
3. Remove the front panel by unscrewing the panel screws.  
The thermostat has been set at the factory to be 120°F/49°C . The minimum temperature of the thermostat is 105°F, and the maximum is 195°F/91°C.  
Proper thermostat setting should maintain the water temperature in the wash sink between 115°F/46°C and 125°F/52°C.
4. Adjust the thermostat:
  - a. *To adjust to a higher temperature* - turn the adjusting screw clockwise.
  - b. *To adjust to a lower temperature* - turn the adjusting screw counter-clockwise.
5. Replace the front control panel.
6. Check the setting by operating the machine and testing the water temperature in the wash tank. Readjust as needed.

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# REPLACEMENT PARTS

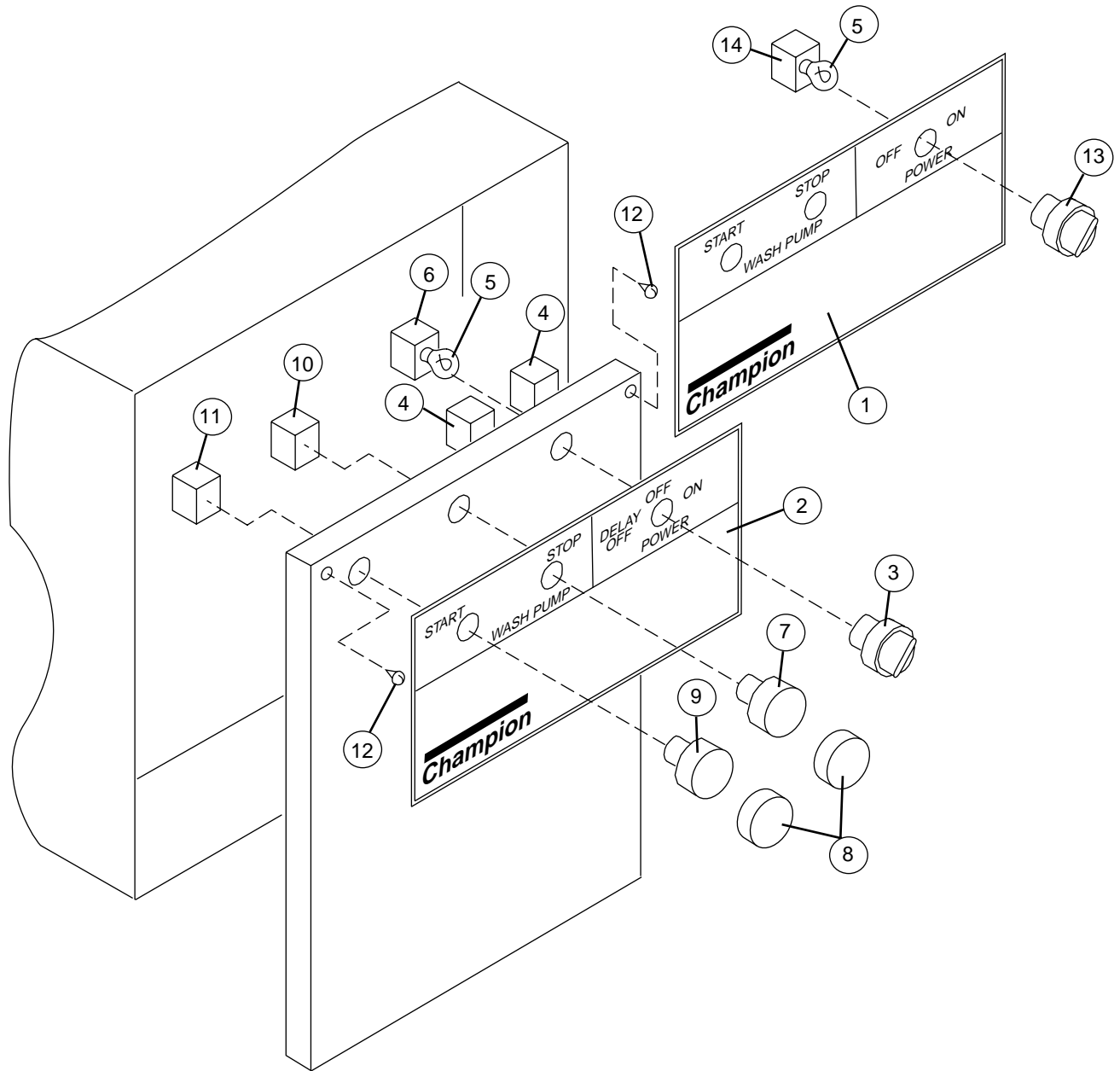
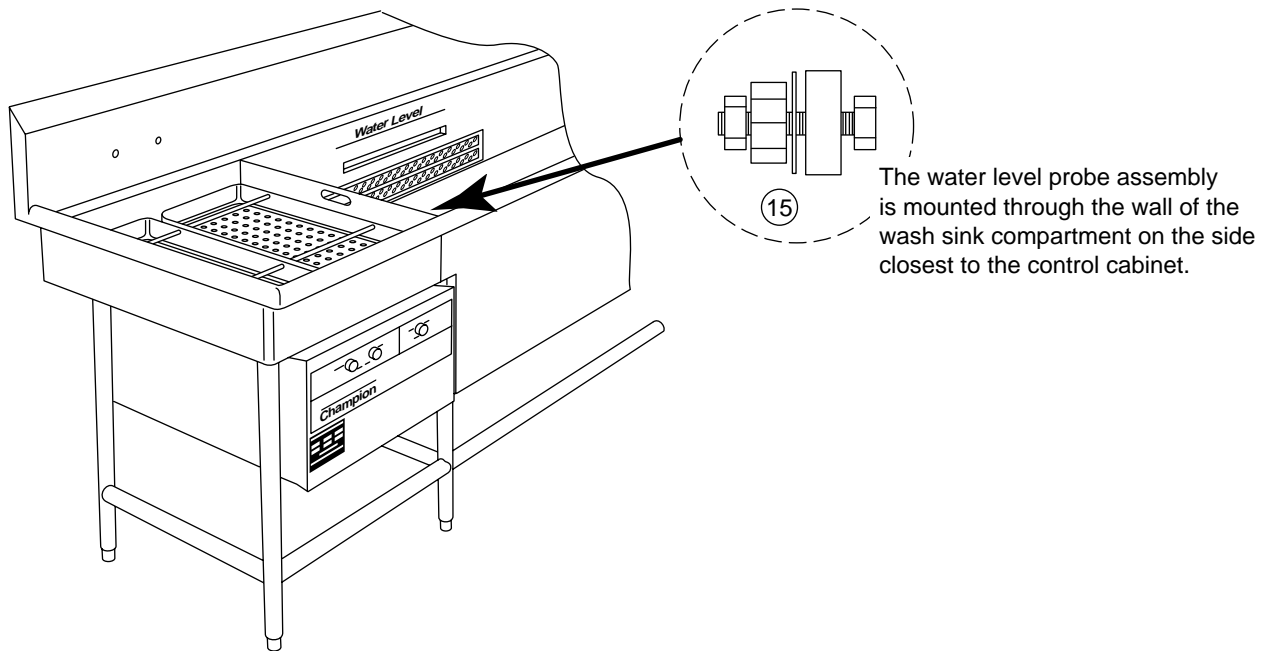


Figure 4.1-  
Control Panel

## CONTROL PANEL

<b>Fig. 4.1 Item No.</b>	<b>Part No.</b>	<b>Part Description</b>	<b>Qty.</b>
1	0509771	LABEL, CONTROL- ON/OFF, (S/N S-1000 thru S-1045) .....	1
2	0510285	LABEL, CONTROL - DELAY OFF, (S/N S-1046 and above) .....	1
3	0510286	SWITCH, SELECTOR, 3 POSITON, (S/N S-1046 and above) .....	1
4	0509896	BLOCK, CONTACT (NO), (S/N S-1046 and above) .....	2
5	112818	BULB 120V (REPLACES 111686) .....	1
6	0509768	BLOCK, CONTACT LIGHTED, (S/N S-1046 and above) .....	1
7	111615	PUSHBUTTON, RED (STOP) .....	1
8	113140	COVER, PUSHBUTTON .....	2
9	111614	PUSHBUTTON, GREEN (START) .....	1
10	111616	BLOCK, CONTACT, STOP (NC) .....	1
11	111617	BLOCK, CONTACT, START (NO) .....	1
12	100779	SCREW (1/4-20 X 5/8") .....	2
13	0509764	SWITCH, SELECTOR, 2 POSITION, (S/N S-1000 thru S-1045) .	1
14	0509906	BLOCK, LIGHTED (NO), (S/N S-1000 thru S-1045) .....	1
—	900725	KIT, GREEN PUSHBUTTON (Includes items 8,9,11) .....	1
—	900726	KIT, RED PUSHBUTTON (Includes items 7,8,10) .....	1



The water level probe assembly is mounted through the wall of the wash sink compartment on the side closest to the control cabinet.

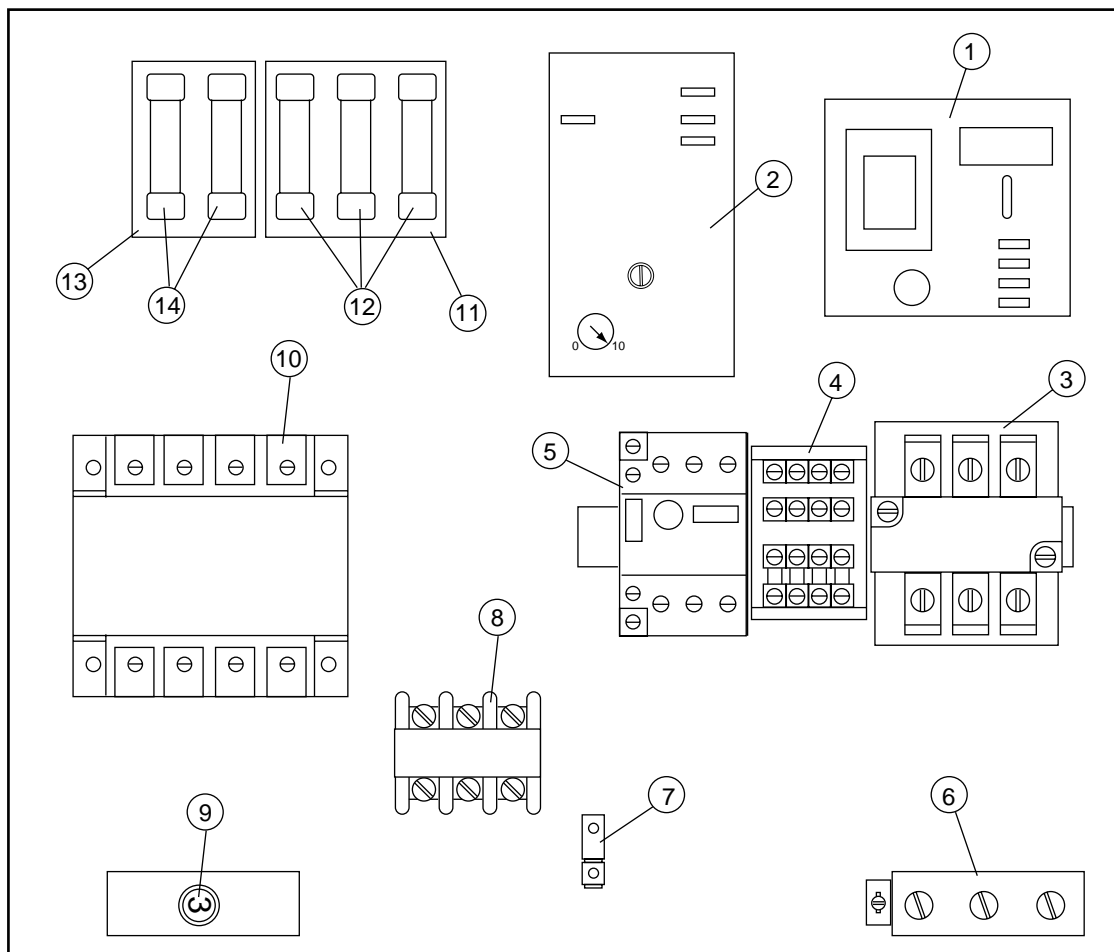


Figure 4.2-  
Control Cabinet & Water Level Probe

**CONTROL CABINET & WATER LEVEL PROBE**

<b>Fig. 4.2 Item No.</b>	<b>Part No.</b>	<b>Part Description</b>	<b>Qty.</b>
1	0510005	CONTROL BOARD, WATER LEVEL .....	1
2	0510025	TIMER,SHUTDOWN (DELAY OFF).....	1
3	105514	CONTACTOR, HEATER .....	1
4	108122	CONTACTOR, PUMP MOTOR.....	1
5	111630	OVERLOAD, MOTOR (208/240V, 1PH) .....	1
—	110807	STARTER, MTR OL 6V2-M-14 W/AUX .....	1
—	110806	STARTER, MTR OL 6V2-M10 W/AUX.....	1
—	110805	STARTER, MTR OL 6V2-M08 W/AUX .....	1
6	109069	THERMOSTAT .....	1
7	103310	LUG, GROUND.....	1
8	0504951	BLOCK, TERMINAL.....	1
9	108311	BREAKER, CIRCUIT .....	1
10	109064	TRANSFORMER, CONTROL (208/240/480V) .....	1
—	111521	TRANSFORMER, CONTROL (575V) .....	1
11	106925	BLOCK, FUSE.....	1
12	107384	FUSE, 20A (208-240V/1PH) .....	2
—	0508675	FUSE, 10A (208-240V/3PH) .....	3
—	100906	FUSE, 5A (480/575V/3PH).....	3
13	106402	BLOCK, FUSE.....	1
14	107289	FUSE, 2.5A (208-240V/1PH & 3PH) .....	2
—	0508707	FUSE, 1A (480V/3PH).....	2
—	0508708	FUSE, 2.5A (575V/3PH).....	2
15	0709773	PROBE, WATER LEVEL ASSEMBLY .....	1

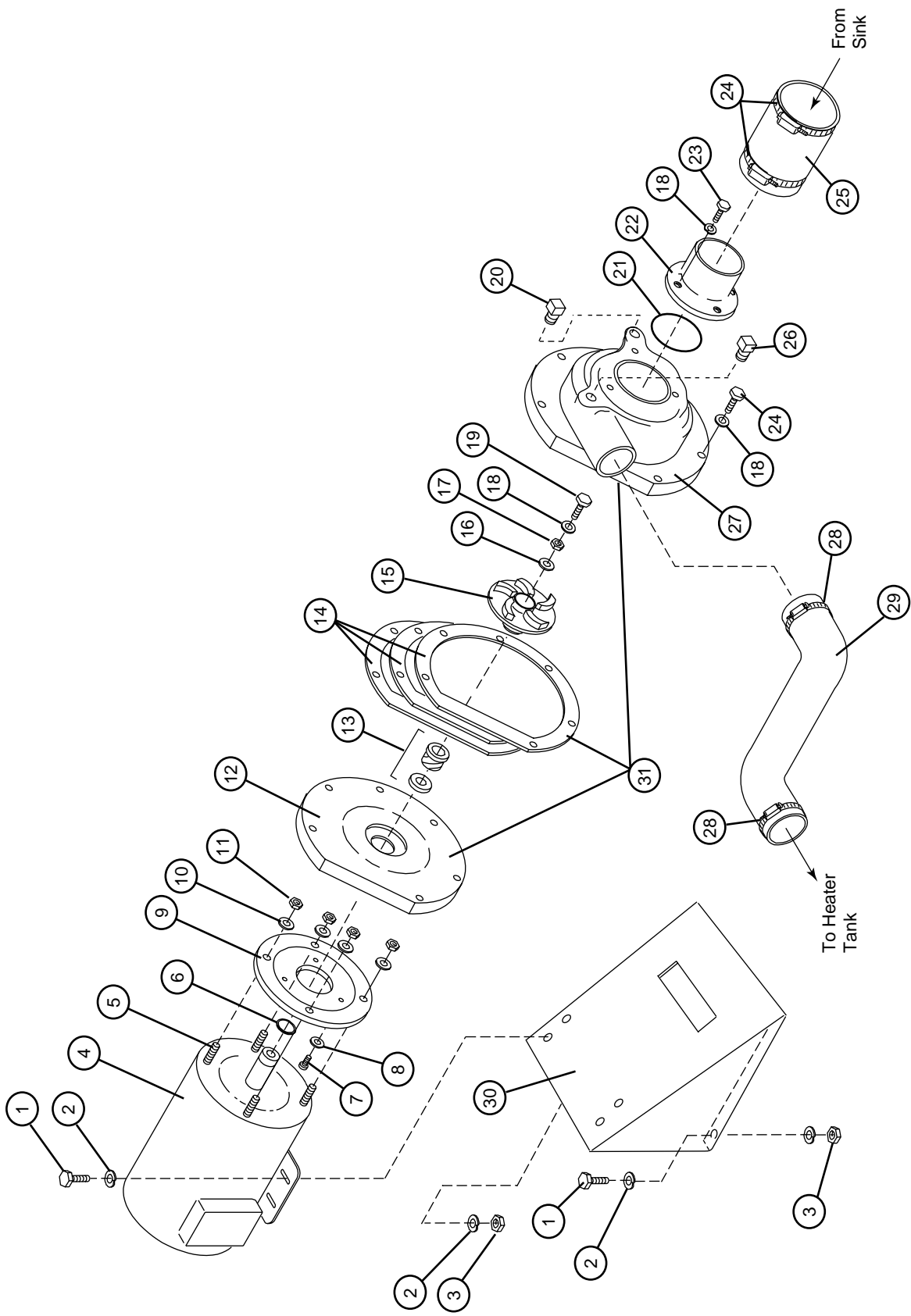


Figure 4.3-  
Pump/Motor Assembly

## PUMP/MOTOR ASSEMBLY

Fig. 4.3 Item No.	Part No.	Part Description	Qty.
1	100739	BOLT (5/16-18 X 3/4) HEX HD .....	4
2	102376	WASHER, FLAT (5/16") .....	8
3	100142	NUT, GRIP (5/16-18) .....	8
4	110421	MOTOR, 2-HP (208-240V/60HZ/1PH) (PRIOR TO SERIAL NO. S1060) .....	1
—	113290	MOTOR, 3-HP (208-240V/60 HZ/1 PH) (AFTER SERIAL NO. S1060) .....	1
—	110424	MOTOR, 3-HP (208-240V/460V/60HZ/3PH) .....	1
—	111741	MOTOR, 3-HP (575V/60HZ/3PH) .....	1
5	110734	STUD, MOTOR .....	4
6	109654	SLINGER, WATER .....	1
7	100754	SCREW (10-32 X 1/2") FLAT HD .....	3
8	110270	WASHER, STAR (COUNTERSUNK) .....	3
9	204460	PLATE, BACKING .....	1
10	106407	WASHER, LOCK (3/8") SPLIT .....	4
11	107690	NUT, JAM (3/8-16) .....	4
12	111681	FLANGE, PUMP .....	1
13	111111	SEAL, MECHANICAL (5/8") .....	1
14	900737	KIT, GASKET (Includes 1 each of gaskets listed below) .....	1
—	111941	GASKET (.0085") (1 NOTCH) .....	1
—	111942	GASKET (.015") (2 NOTCHES) .....	1
—	111943	GASKET (.032") (3 NOTCHES) .....	2
15	111756	IMPELLER, SST (2 HP FOR 1PH) (PRIOR TO SERIAL NO. S1060) .....	1
—	111687	IMPELLER, SST (3 HP FOR 3PH) .....	1
16	110248	WASHER, FLAT .....	1
17	110247	NUT, HEX JAM (7/16-20) .....	1
18	106482	WASHER, LOCK 1/4" SPLIT .....	11
19	100734	BOLT (1/4-20 X 1/2" HEX HEAD) .....	1
20	102500	PLUG (1/4" NPT) BRASS .....	2
21	112338	GASKET .....	1
22	112379	FLANGE, SUCTION .....	1
23	100736	BOLT (1/4-20 X 3/4" HEX HEAD) .....	10
24	105986	CLAMP, HOSE .....	2
25	0509767	HOSE, PUMP SUCTION .....	1
26	102504	PLUG, 1/2" .....	1
27	112380	VOLUTE, PUMP .....	1
28	110858	CLAMP, HOSE .....	2
29	110290	HOSE, PUMP DISCHARGE .....	1
30	0309762	SUPPORT, PUMP .....	1
31	900740	PUMP KIT, 2HP (Includes items 9, 12-23, 26, 27 and 2HP #15) (PRIOR TO SERIAL NO. 1060) .....	1
31	900741	PUMP KIT, 3HP (Includes items 9, 12-23, 26, 27 and 3HP #15) ..	1

\* Single phase machines previously had 2 HP motors, as of Serial Number S1060 all single phase machines are 3 HP, thus use a 3 HP pump kit or impeller instead of the 2 HP.

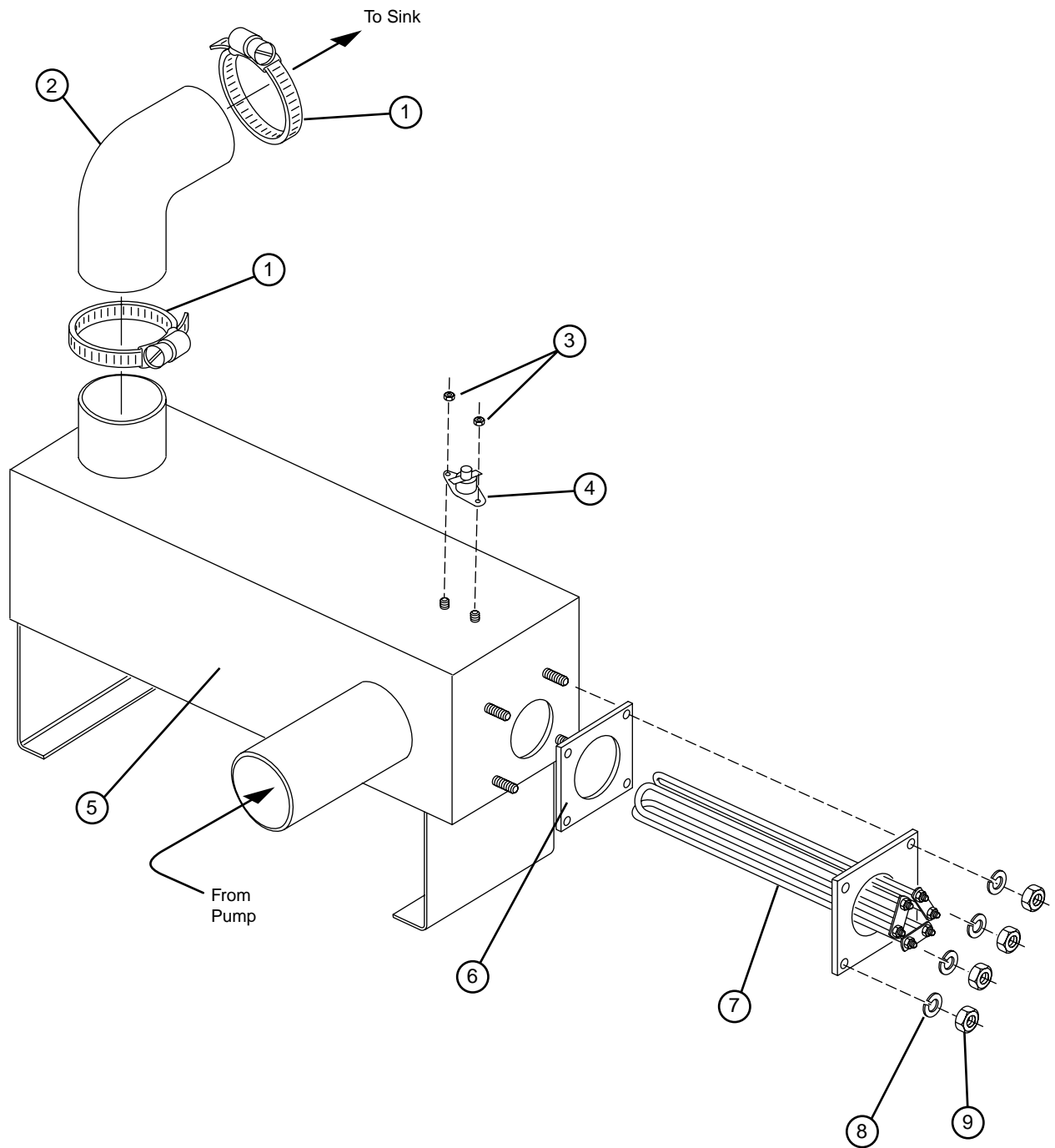


Figure 4.4-  
Water Heater Assrmbly



### WATER HEATER ASSEMBLY

Fig. 4.4 Item No.	Part No.	Part Description	Qty.
1	104165	CLAMP, HOSE .....	2
2	0508515	HOSE, DISCHARGE .....	1
3	108954	GRIP NUT, 6-32 .....	2
4	110562	THERMOSTAT, HI LIMIT .....	1
5	0709783	TANK, WATER HEATER .....	1
6	108345	GASKET .....	1
7	0509765	HEATER, 3KW (208/240V, 1 & 3PH) .....	1
—		HEATER, 3KW (480V, 3PH) .....	1
—		HEATER, 3KW (575V, 3PH) .....	1
8	106013	WASHER, LOCK .....	4
9	100154	NUT, 5/16" PLAIN .....	4

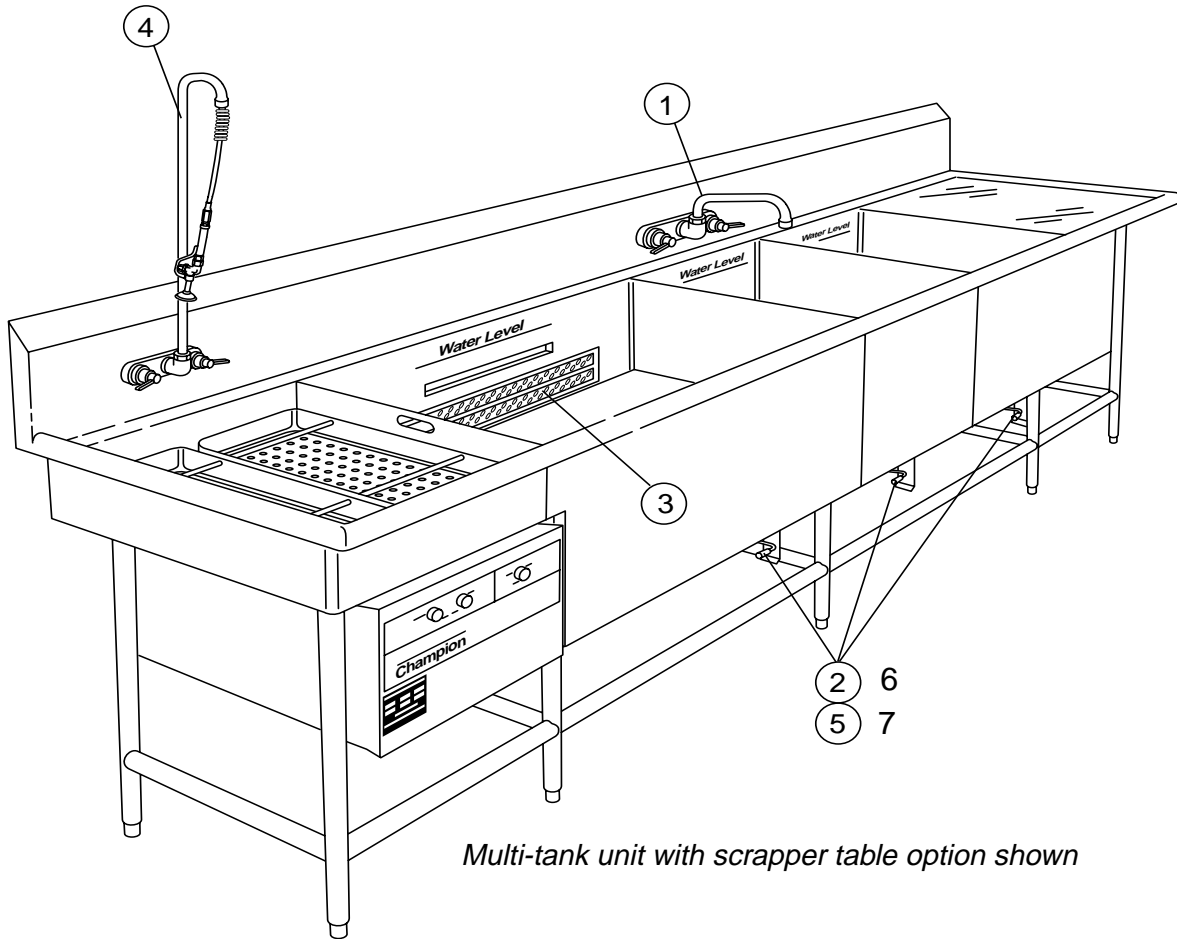


Figure 4.5-  
Screens, Drains, and Faucets

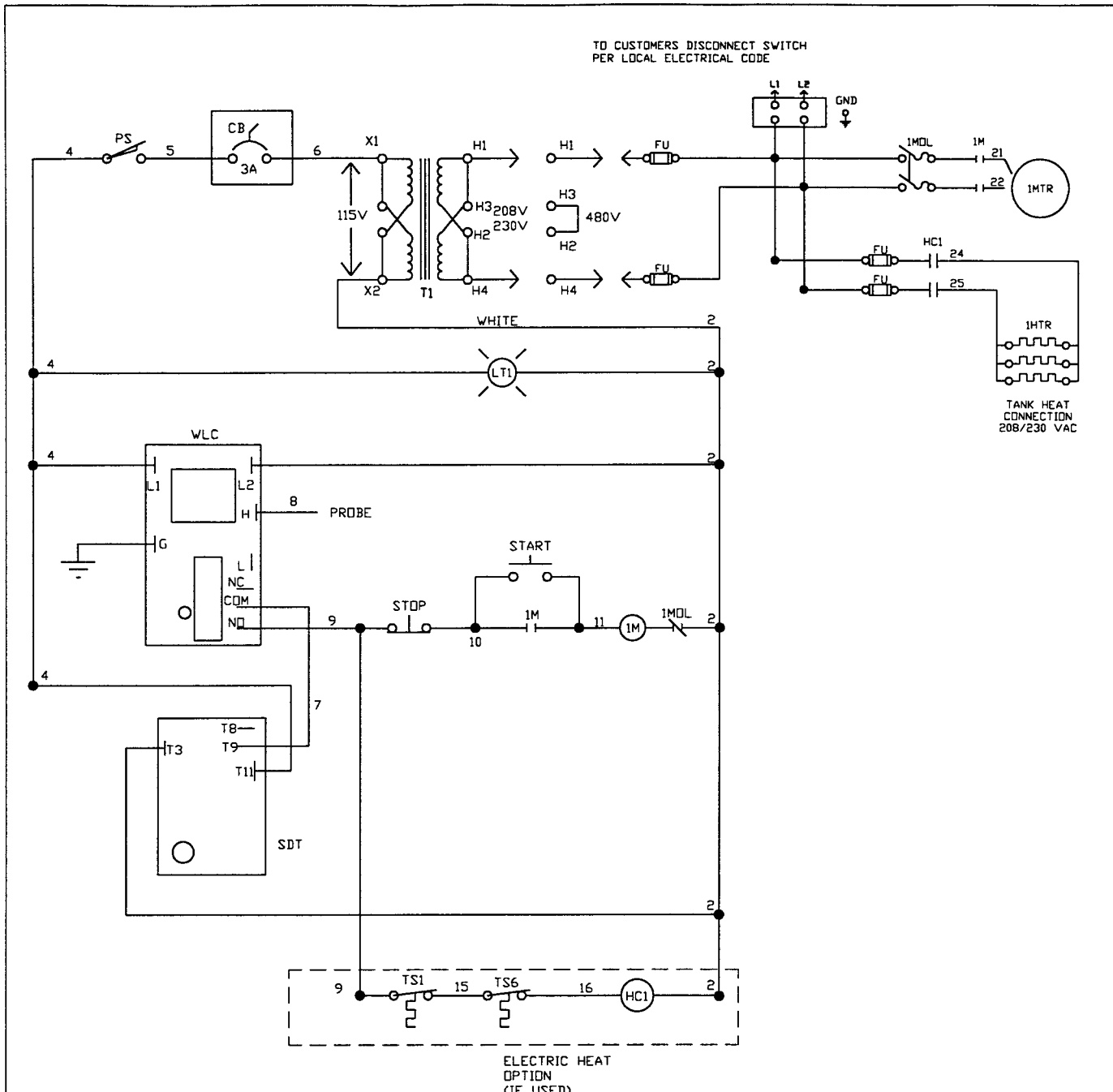
**SCREENS, DRAINS, AND FAUCETS**

<b>Fig. 4.5 Item No.</b>	<b>Part No.</b>	<b>Part Description</b>	<b>Qty.</b>
1	0510015	FAUCET SET, 3/4", WALL MOUNT (OPTIONAL) .....	1
2	110529	DRAIN ASSEMBLY W/TWIST LEVER .....	A/R
3	0709784	SCRAP SCREEN ASSEMBLY .....	1
4	0510016	PRE-RINSE SPRAY ASSEMBLY (OPTIONAL) .....	1
5	0310344	BRACKET PP3 DRAIN CONTROL .....	A/R
6	113790	DRAIN VALVE "O" RING, STOPPER ( NOT SHOWN )	
7	113779	DRAIN VALVE "O" RING, HANDLE ( NOT SHOWN )	

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# **ELECTRICAL SCHEMATICS**

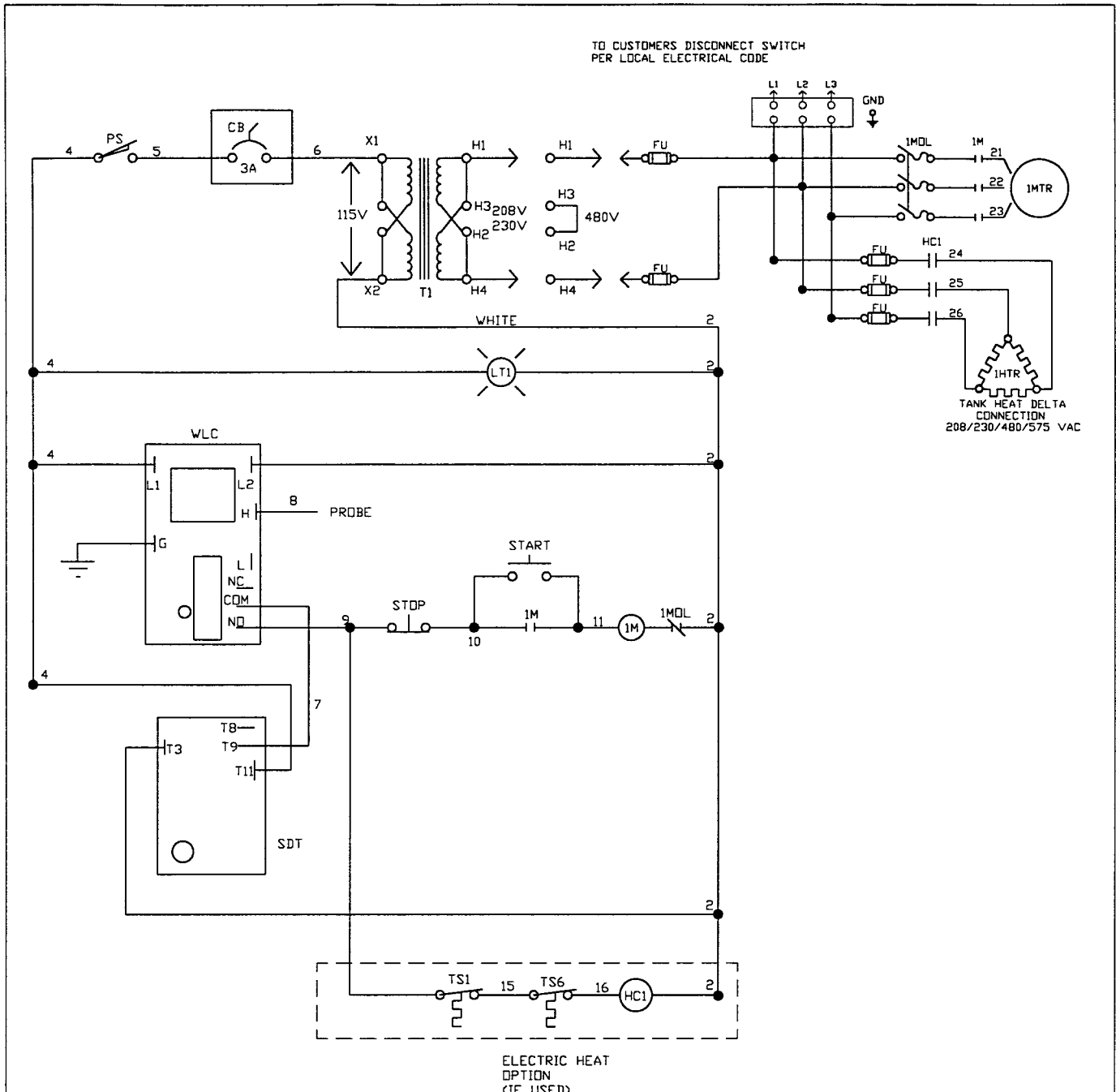
Part 5: ELECTRICAL SCHEMATICS



CB	CIRCUIT BREAKER
WLC	LOW WATER LEVEL CONTROL
FU	FUSE
GND	GROUND
HC1	WASH TANK CONTACTOR
1HTR	WASH TANK HEATER
LT1	POWER ON LIGHT
1M	PUMP MOTOR CONTACTOR
1MOL	PUMP MOTOR OVERLOAD
1MTR	PUMP MOTOR
START	PUSHBUTTON START SWITCH
PS	POWER ON SWITCH
T1	CONTROL TRANSFORMER
TS1	HEATER THERMISTAT
TS6	HEATER SAFETY THERMISTAT
SDT	SHUT DOWN TIMER

For machines beginning with  
S/N S-1000 through S-1045.

MODEL	DATE	NUMBER/REV
PP-3 1 PHASE	19/7/1999	0510022 REV A



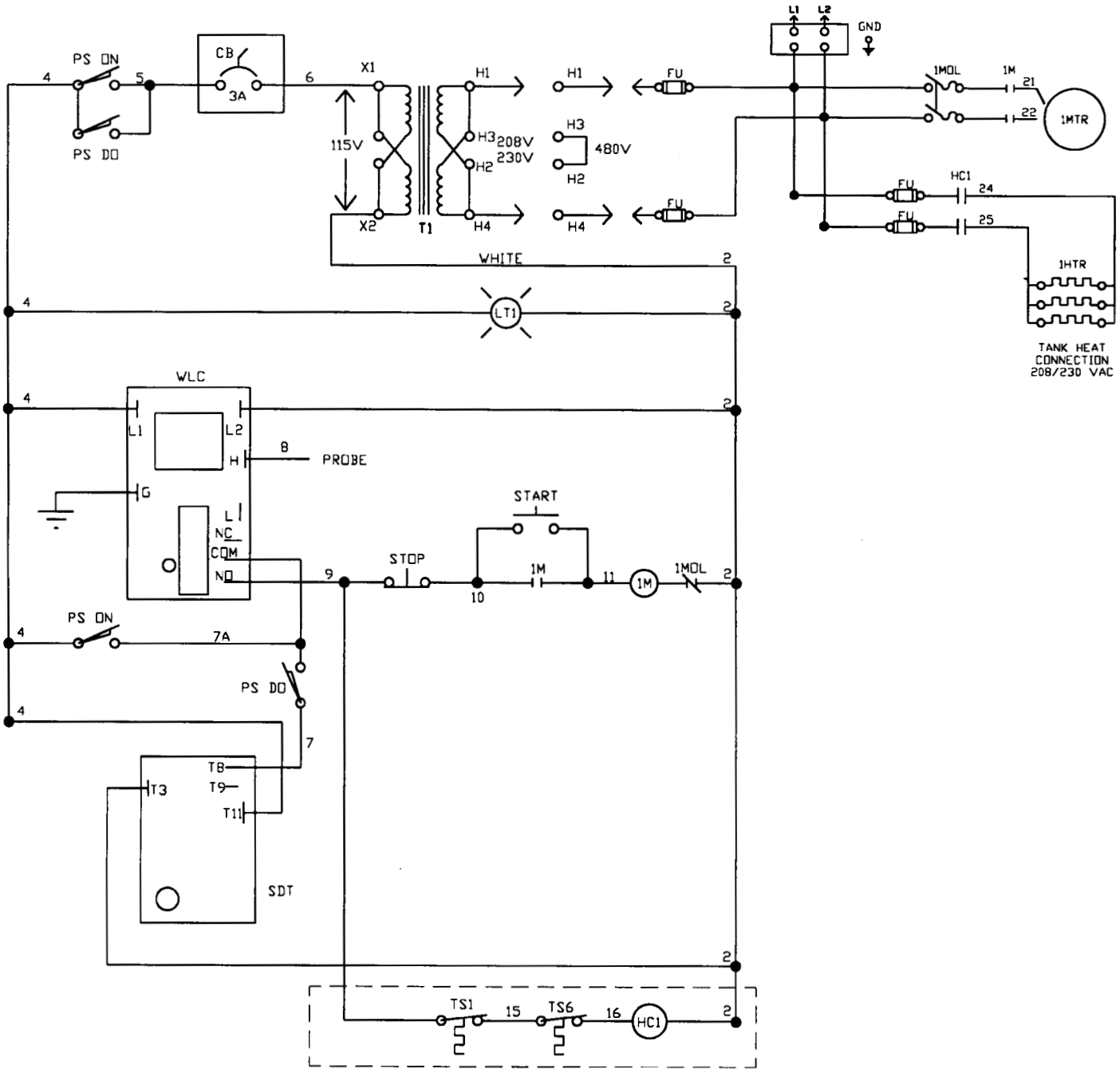
CB	CIRCUIT BREAKER
WLC	LOW WATER LEVEL CONTROL
FU	FUSE
GND	GROUND
HC1	WASH TANK CONTACTOR
1HTR	WASH TANK HEATER
LT1	POWER ON LIGHT
1M	PUMP MOTOR CONTACTOR
1MOL	PUMP MOTOR OVERLOAD
1MTR	PUMP MOTOR
START	PUSHBUTTON START SWITCH
PS	POWER ON SWITCH
T1	CONTROL TRANSFORMER
TS1	HEATER THERMOSTAT
TS6	HEATER SAFETY THERMOSTAT
SDT	SHUT DOWN TIMER

For machines beginning with S/N S-1000 through S-1045.

MODEL	DATE	NUMBER/REV
PP-3 3 PHASE	19/7/1999	0510021 REV A

# Part 5: ELECTRICAL SCHEMATICS

TO CUSTOMERS DISCONNECT SWITCH  
PER LOCAL ELECTRICAL CODE



CB	CIRCUIT BREAKER
WLC	LOW WATER LEVEL CONTROL
FU	FUSE
GND	GROUND
HC1	WASH TANK CONTACTOR
1HTR	WASH TANK HEATER
LT1	POWER ON LIGHT
1M	PUMP MOTOR CONTACTOR
1MOL	PUMP MOTOR OVERLOAD
1MTR	PUMP MOTOR
START	PUSHBUTTON START SWITCH
PS ON	POWER ON SWITCH
PS DO	POWER SWITCH DELAY OFF
T1	CONTROL TRANSFORMER
TS1	HEATER THERMOSTAT
TS6	HEATER SAFETY THERMOSTAT
SDT	SHUT DOWN TIMER

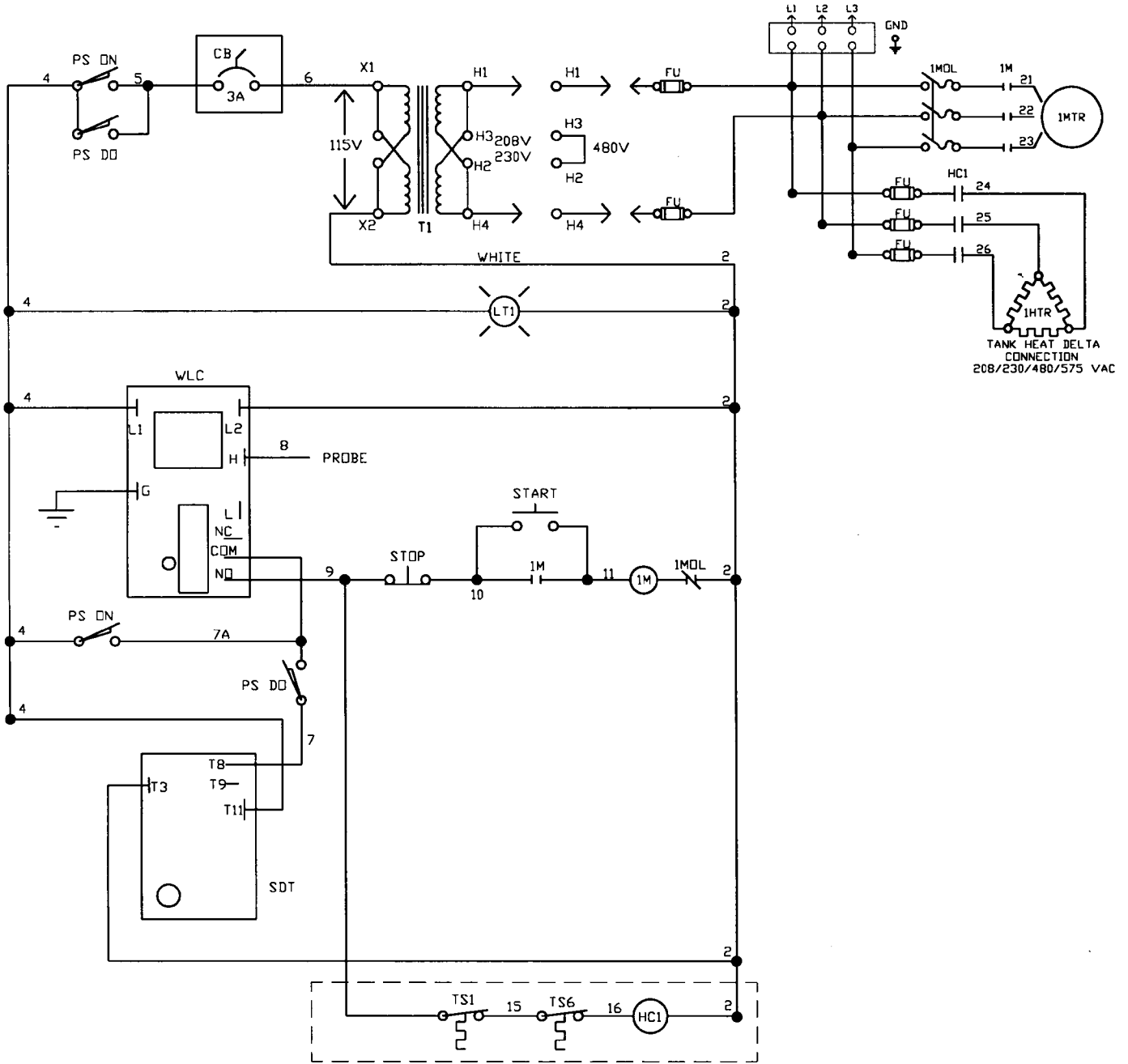
ELECTRIC HEAT  
OPTION  
(IF USED)

For machines beginning with  
S/N S-1046 and above.

MODEL	DATE	NUMBER/REV
PP-3 1 PHASE	30 NOV 00	0510022 REV B



TO CUSTOMERS DISCONNECT SWITCH  
PER LOCAL ELECTRICAL CODE



TANK HEAT DELTA  
CONNECTION  
208/230/480/575 VAC

ELECTRIC HEAT  
OPTION  
(IF USED)

CB	CIRCUIT BREAKER
WLC	LOW WATER LEVEL CONTROL
FU	FUSE
GND	GROUND
HC1	WASH TANK CONTACTOR
1HTR	WASH TANK HEATER
LT1	POWER ON LIGHT
1M	PUMP MOTOR CONTACTOR
1MDL	PUMP MOTOR OVERLOAD
1MTR	PUMP MOTOR
START	PUSHBUTTON START SWITCH
PSDN	POWER ON SWITCH
PSDO	POWER SWITCH DELAY OFF
T1	CONTROL TRANSFORMER
TS1	HEATER THERMOSTAT
TS6	HEATER SAFETY THERMOSTAT
SDT	SHUT DOWN TIMER

For machines beginning with  
S/N S-1046 and above.

MODEL	DATE	NUMBER/REV
PP-3 3 PHASE	30 NOV 00	0510021 REV B

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