



Warewashing Systems

INSTALLATION, OPERATION, AND SERVICE MANUAL



TEMPSTAR® SERIES DOOR-TYPE DISHMACHINES

TempStar® Manual • 07610-003-61-42-U

TEMPSTAR®

MANUFACTURER'S WARRANTY

ONE YEAR LIMITED PARTS AND LABOR WARRANTY

ALL NEW JACKSON DISHWASHERS ARE WARRANTED TO THE ORIGINAL PURCHASER TO BE FREE FROM DEFECTS IN MATERIAL OR WORKMANSHIP, UNDER NORMAL USE AND OPERATION, FOR A PERIOD OF (1) ONE YEAR FROM DATE OF PURCHASE, BUT IN NO EVENT TO EXCEED (18) EIGHTEEN MONTHS FROM DATE OF SHIPMENT FROM THE FACTORY.

Jackson WWS agrees under this warranty to repair or replace, at its discretion, any original part which fails under normal use due to faulty material or workmanship during the warranty period, providing the equipment has been unaltered, and has been properly installed, maintained, and operated in accordance with the applicable factory instruction manual and failure is reported to an authorized service agency within the warranty period. This includes the use of factory-specified genuine replacement parts, purchased directly from a Jackson-authorized parts distributor or service agency. Use of generic replacement parts may create a hazard and void warranty certification.

The labor to repair or replace such failed part will be paid by Jackson WWS, within the continental United States, Hawaii, and Canada, during the warranty period provided a Jackson WWS authorized service agency, or those having prior authorization from the factory, performs the service. Any repair work by persons other than a Jackson WWS authorized service agency is the sole responsibility of the customer. Labor coverage is limited to regular hourly rates; overtime premiums and emergency service charges will not be paid by Jackson WWS.

Accessory components not installed by the factory carry a (1) one year parts warranty only. Accessory components such as table limit switches, pre-rinse units, etc. that are shipped with the unit and installed at the site are included. Labor to repair or replace these components is not covered by Jackson WWS.

This warranty is void if failure is a direct result from shipping, handling, fire, water, accident, misuse, acts of God, attempted repair by unauthorized persons, improper installation, if serial number has been removed or altered, or if unit is used for a purpose other than originally intended.

TRAVEL LIMITATIONS

Jackson WWS limits warranty travel time to (2) two hours and mileage to (100) one-hundred miles. Jackson WWS will not pay for travel time and mileage that exceeds this, or any additional fees—such as those for air or boat travel—without prior authorization.

WARRANTY REGISTRATION

To register your product, go to www.jacksonwws.com or call 1-888-800-5672. Failure to register your product will void the warranty.

REPLACEMENT PARTS WARRANTY

Jackson replacement parts are warranted for a period of (90) ninety days from date of installation or (180) one-hundred-eighty days from the date of shipment from the factory, whichever occurs first.

PRODUCT CHANGES AND UPDATES

Jackson WWS reserves the right to make changes in the design and specification of any equipment as engineering or necessity requires.

THIS IS THE ENTIRE AND ONLY WARRANTY OF JACKSON WWS. JACKSON'S LIABILITY ON ANY CLAIM OF ANY KIND, INCLUDING NEGLIGENCE, WITH RESPECT TO THE GOODS OR SERVICES COVERED HEREUNDER, SHALL IN NO CASE EXCEED THE PRICE OF THE GOODS OR SERVICES OR PART THEREOF WHICH GIVES RISE TO THE CLAIM.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING FOR FITNESS OR MERCHANTABILITY, THAT ARE NOT SET FORTH HEREIN, OR THAT EXTEND BEYOND THE DURATION HEREOF. UNDER NO CIRCUMSTANCES WILL JACKSON WWS BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, OR FOR DAMAGES IN THE NATURE OF PENALTIES, ARISING OUT OF THE USE OR INABILITY TO USE ANY OF ITS PRODUCTS.

ITEMS NOT COVERED

THIS WARRANTY DOES NOT COVER CLEANING OR DELIMING OF THE UNIT OR ANY COMPONENT SUCH AS, BUT NOT LIMITED TO, WASH ARMS, RINSE ARMS, OR STRAINERS AT ANYTIME. NOR DOES IT COVER ADJUSTMENTS SUCH AS, BUT NOT LIMITED TO, TIMER CAMS, THERMOSTATS, OR DOORS BEYOND (30) THIRTY DAYS FROM THE DATE OF INSTALLATION. IN ADDITION, THE WARRANTY WILL ONLY COVER REPLACEMENT WEAR ITEMS SUCH AS CURTAINS, DRAIN BALLS, DOOR GUIDES, OR GASKETS DURING THE FIRST (30) THIRTY DAYS AFTER INSTALLATION. ALSO, NOT COVERED ARE CONDITIONS CAUSED BY THE USE OF INCORRECT (NON-COMMERICAL) GRADE DETERGENTS, INCORRECT WATER TEMPERATURE OR PRESSURE, OR HARD WATER CONDITIONS.

REVISION HISTORY

Revision Letter	Revision Date	Made by	Applicable ECNs	Details
A	11/11/08	ARL	8045	Release to Production.
B	4/22/09	ARL	8094	Added new NSF rating.
C	6/22/09	JC	8114	Removed NSF Rating from steam heated unit.
D	7/24/09	ARL	8104	Added information regarding electrical field conversion.
E	2/2/10	RLC	N/A	Added information about Fused Universal Timer pg. 19.
F	1/10/13	RLC	8252	Updated schematic and control box assembly for rotary switch/Removed EnergyStar Logo.
G	3/7/13	RLC	QOF NDB-219	Updated Jackson logo and company name.
H	12/17/13	MHH	N/A	Corrected part number for "right false panel kit," pg. 43. Removed "STOP" warning page, pg. 3.
I	5/28/14	MHH	8287	New bearing and P/N on rinse arm assy, pg. 41.
J	11/17/14	KAP	N/A	Updated Drain Quench Image on pg. 45. Added Drain Quench Miscellaneous Parts on pg. 55.
K	1/6/15	KAP	N/A	Updated part number for O-ring and Diaphragm on pg. 39. P/N 06401-003-07-42 was replaced by P/N 4810-200-03-18.
L	1/14/15	KAP	QOF-386	Removed regulator and added Y-Strainer to the assemblies on pgs. 4, 36, and 38. Paragraph content was changed on pg. 7. Changed the PSI flow on pg. 15
M	3/2/15	KAP	QOF-386	Updated wire colors on schematic pgs. 49, 50, 51, 52, and 53.
N	4/6/15	KAP	N/A	Inserted note pertaining to corner installation pg. 5.
P	5/8/15	KAP	N/A	Added Ventless Operating Capacities on pg. 2. Added Pressure Regulator Option Dimensions on pg. 5. Added Ventless Machine Dimensions on pg. 6. Added Ventless pipe line size on pg. 9. Added Door interlock items on pg. 23. Updated Tub and Tub Assembly Thermostats on pgs. 25-28. Added thermister to Rinse Tank Assembly on pg. 30. Added Ventless Plumbing pgs. 41 and 42. Added Ventless and Energy Recovery Assembly pg. 46. Updated Schematic pgs. 54 and 55. Added Solid State BB/LT Schematic on page 58 and 60.
Q	6/25/15	KAP	N/A	Updated Schematic on pgs. 65 and 67.
-	8/25/15	KAP	N/A	Updated P/N for item #5 on pg. 25.
-	10/13/15	KAP	N/A	Updated P/N for solenoid valve on pg. 40. Changed P/N from 04820-002-01-32 to 04820-002-01-56.
R	11/9/15	JH	N/A	Corrected P/N for item #33 on pg. 34.
S	11/30/15	JH	N/A	Added delime instructions.
T	1/11/16	JH	QOF-386 N/A	Changed item 12 on pg. 35 to 05700-003-07-76. Added 05700-004-23-78 and 05700-004-23-79 to view (pg. 31) and parts list (pg. 32).

REVISION HISTORY

Revision Letter	Revision Date	Made by	Applicable ECNs	Details
U	3/14/17	JH	N/A	<p>Added view showing dimensions for the notch cut into table on corner installations to pg. 4.</p> <p>Corrected total amps and typical electrical circuit for 230 V, 50 Hz, 1 Phase LT/NB machines on pg. 7 to 35 A and 40 A, respectively.</p> <p>Corrected P/N for item 6 on pgs. 36 and 39.</p> <p>Changed item 19 to item 17 in Tube Length Chart on pg. 51.</p> <p>Changed valve (item 15) view and P/N to 04810-003-71-56 on pgs. 51 and 52.</p> <p>Changed valve (item 7) view and P/N to 04810-003-71-56 on pg. 53.</p> <p>Removed views that showed pressure regulator in certain locations. Created Plumbing Options, pg. 54, with the pressure regulator and arrestor as options.</p> <p>Added wash arm end-cap as item #21 to pg. 58.</p> <p>Added external device wiring instructions.</p> <p>Added instructions for programming new exhaust fan timer.</p> <p>Added rinse arm bearing replacement instructions.</p> <p>Updated schematics.</p> <p>Changed name of delime switch throughout from NORMAL/DELIME to AUTO/MANUAL.</p> <p>Updated Delime Instructions and added instructions for low-temp machine.</p> <p>Added water level probe cleaning to the Shutdown and Cleaning section.</p> <p>Updated to new manual format.</p> <p>Audited and corrected all P/Ns in the manual.</p>

Jackson®

Warewashing Systems

TempStar®

Door-type dishmachine; electrically-heated,
high-temp, hot-water sanitizing,
with booster heater.

TempStar® LT

Door-type dishmachine; electrically-heated,
low-temp, chemical-sanitizing,
with no rinse booster.

TempStar® NB

Door-type dishmachine; electrically-heated,
high-temp, hot-water sanitizing,
with no rinse booster.

TempStar® S

Door-type dishmachine; steam-heated,
high-temp, hot-water sanitizing.

TempStar®

with Ventless and Energy Recovery

Door-type dishmachine; electrically-heated,
high-temp, hot-water sanitizing,
with booster heater and
ventless heat recovery system.

The manufacturer provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff.

Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is not available on holidays.

Contact technical support toll-free at 1-888-800-5672.

Technical support is available for service personnel only.

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SYMBOLS

- risk of injury to personnel.



- risk of damage to equipment.



- risk of electrical shock.



- caustic chemicals.



- reference data plate.



- lockout electrical power.

NOTICE - important note.

ABBREVIATIONS & ACRONYMS

ANSI - American National Standards Institute

CFM - Cubic Feet per Minute

GHT - Garden Hose Thread

GPH - Gallons per Hour

GPM - Gallons per Minute

GPG - Grains per Gallon

HP - Horse Power

Hz - Hertz

ID - Inside Diameter

kW - Kilowatts

NFPA - National Fire Protection Association

NPT - National Pipe Thread

PSI - Pounds per Square Inch

V - Volts

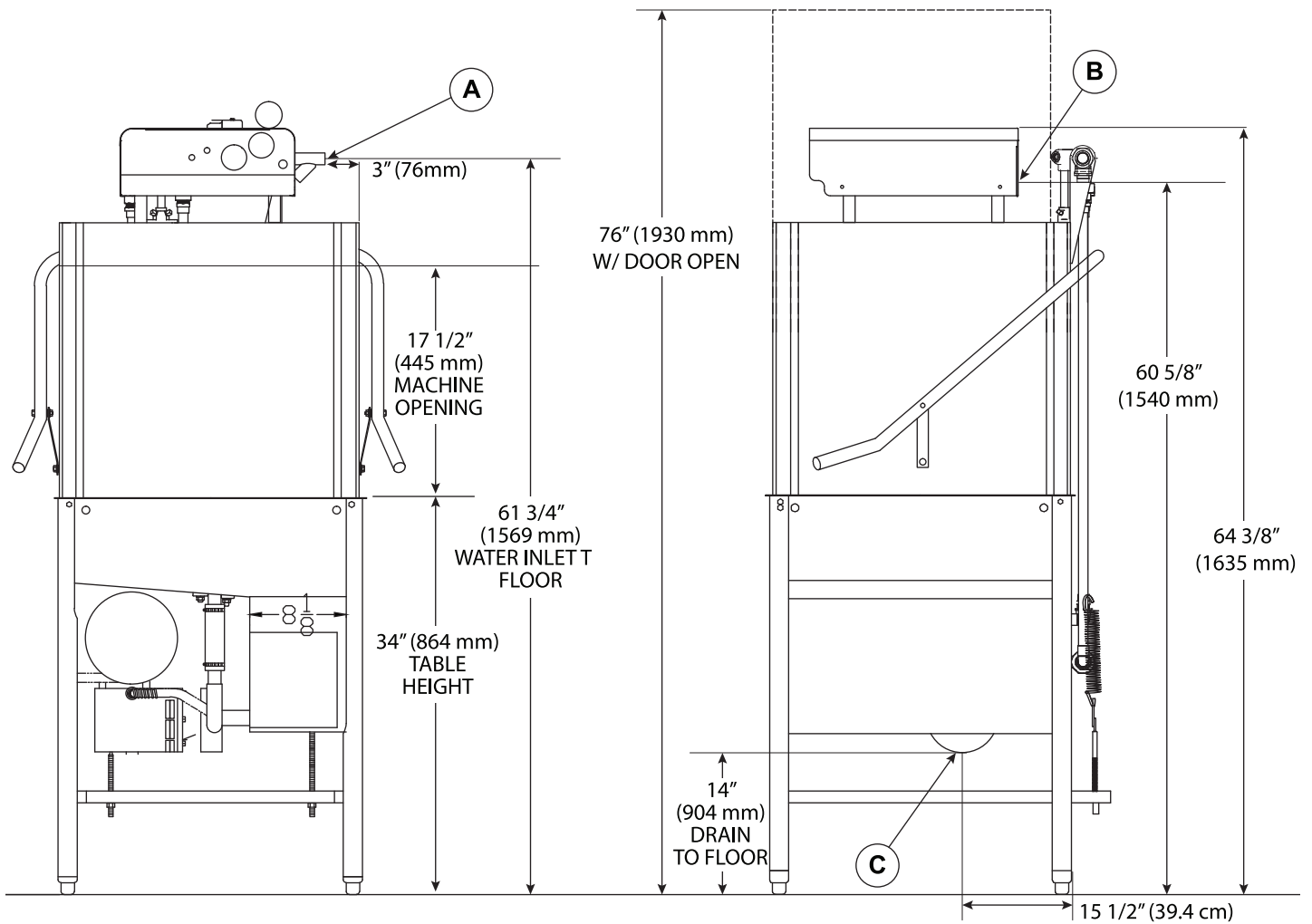
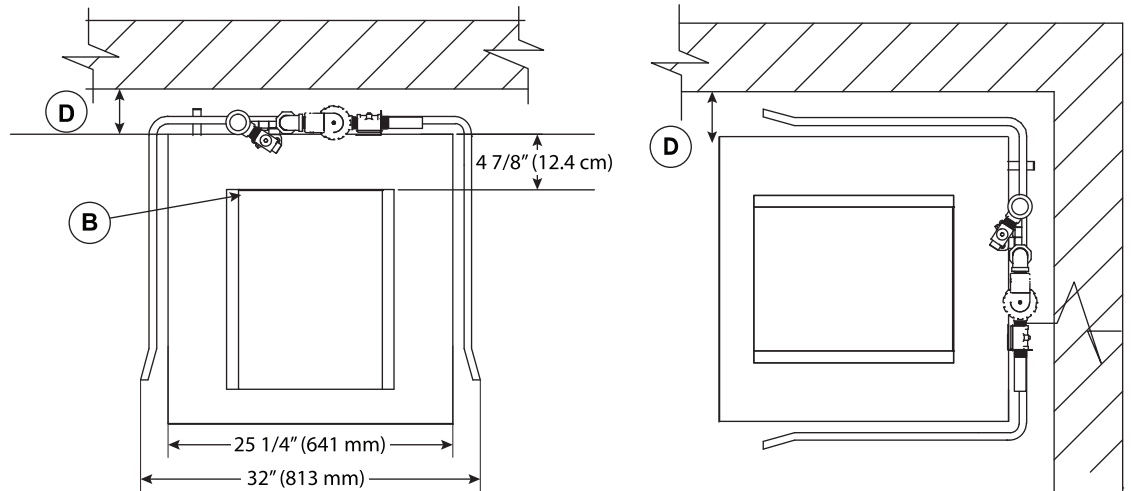
SPECIFICATIONS

TEMPSTAR/LT/NB/S DIMENSIONS

LEGEND

- A - Water Inlet (1/2" NPT)
- B - Electrical Connection Point
- C - Drain (1 1/2" NPT)
- D - Standard clearance between machine and wall is 4" (10.2 cm)

All dimensions from the floor can be increased 2" using the machine's adjustable feet.



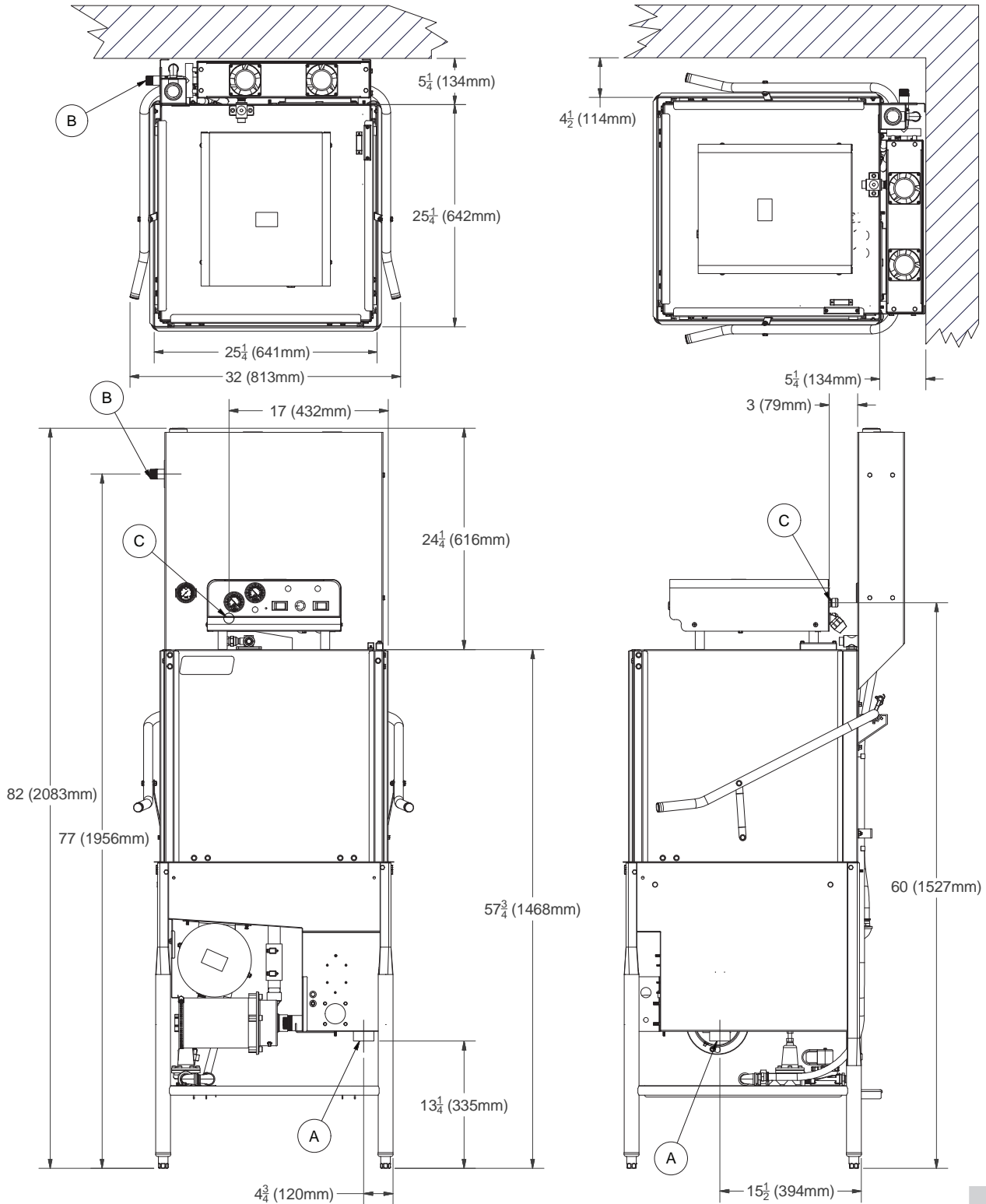
SPECIFICATIONS

VENTLESS DIMENSIONS

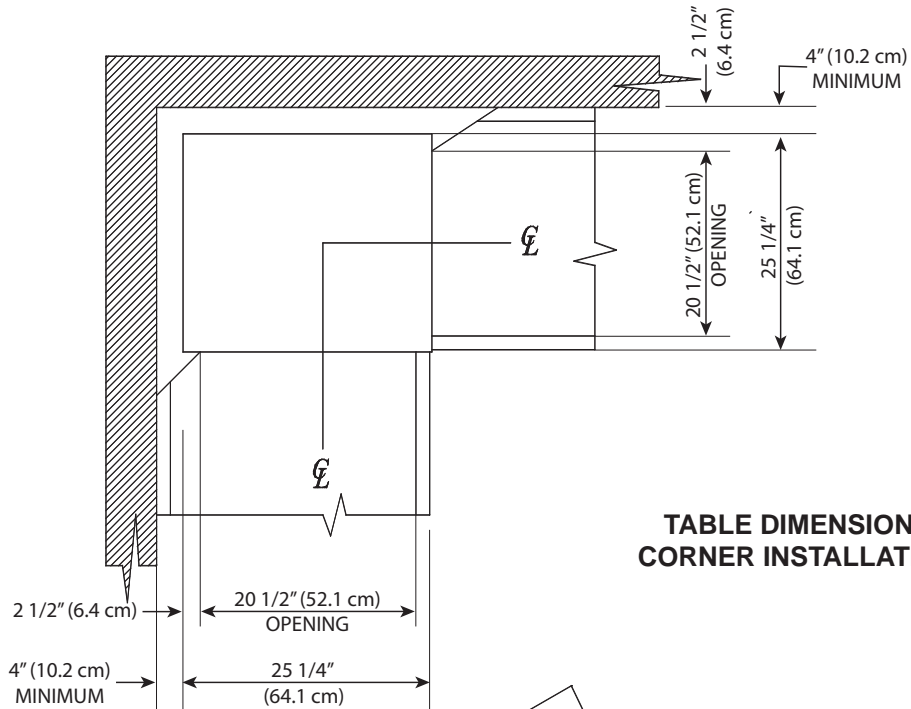
LEGEND

- A - Drain (1 1/2" NPT)
- B - Water Inlet (3/4" NPT)
- C - Electrical Connection Point

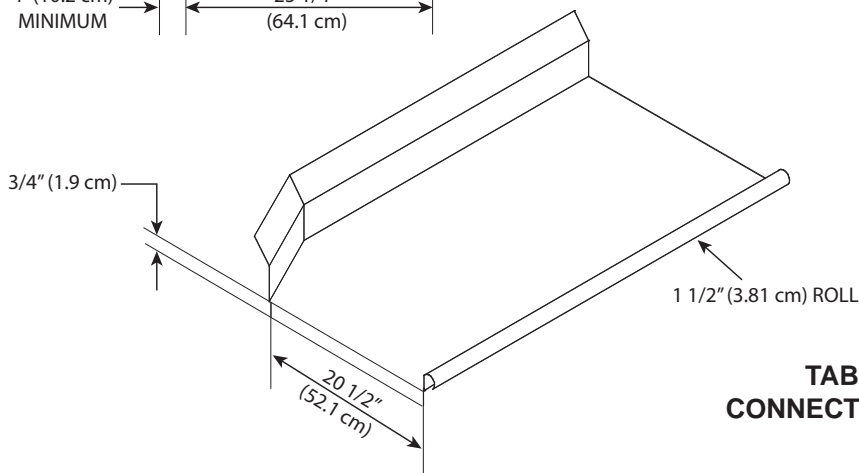
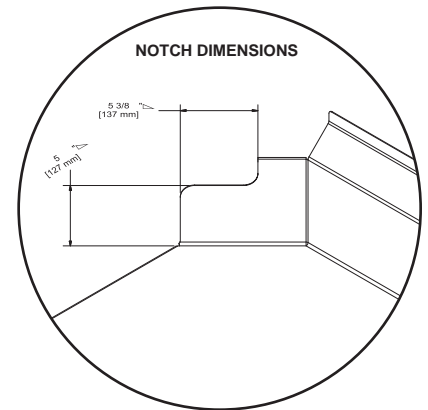
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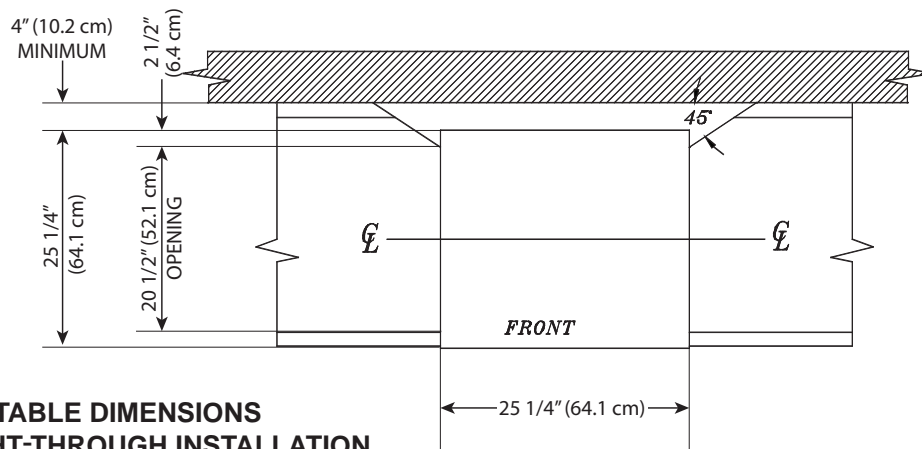
NOTE: Remove the front dress panel from the dishwasher if mounting the dishwasher in a corner installation with side tables. Corner installation will trap the panel, making it difficult to remove.



**TABLE DIMENSIONS
CORNER INSTALLATION**



**TABLE DIMENSIONS
CONNECTION TO DISHWASHER**



**TABLE DIMENSIONS
STRAIGHT-THROUGH INSTALLATION**

PERFORMANCE/CAPABILITIES

Operating Capacity:

TempStar/NB/S

Racks per Hour	58
Dishes per Hour	1450
Glasses per Hour	2088

LT

Racks per Hour	50
Dishes per Hour	1250
Glasses per Hour	1800

Ventless

Racks per Hour	39
Dishes per Hour	975
Glasses per Hour	1404

Minimum Operating Cycle (seconds):

TempStar/NB/S

Wash Time	40
Rinse Time	13
Dwell Time	4
Total Cycle Time	57

LT

Wash Time	45
Rinse Time	11
Dwell Time	10
Total Cycle Time	66

Ventless

Wash Time	40
Rinse Time	13
Dwell Time	4
Condensate Removal	30
Total Cycle Time	87

Tank Capacity (Gallons/Liters):

Wash Tank	8.0/30.3
Rinse Tank	3.0/11.4

Steam Requirements:

Coil Size	3/4"
Steam Flow Pressure (PSI)	10-20
Consumption at 15 PSI (lbs/hr)	45

WATER REQUIREMENTS

TempStar/Ventless

Minimum Wash Temperature (°F/°C)	150/66
Minimum Rinse Temperature (°F/°C)	180/83
Inlet Water Temperature:	
12 kW Rinse Heater (°F/°C)	140/60
14 kW Rinse Heater (°F/°C)	110/44
Ventless (°F/°C)	40-90/4.4-32.2
Flow Pressure (PSI)	10 ± 2
Water Line Size (NPT) (Vented)	1/2"
Water Line Size (Ventless)	3/4"
Drain Line Size (NPT)	1 1/2"

LT

Minimum Wash Temperature (°F/°C)	130/55
Minimum Rinse Temperature (°F/°C)	130/55
Inlet Water Temperature (°F/°C)	130/55
Flow Pressure (PSI)	10 ± 2
Water Line Size (NPT)	1/2"
Drain Line Size (NPT)	1 1/2"
Minimum Chlorine Required (PPM)	50

NB/S

Minimum Wash Temperature (°F/°C)	150/66
Minimum Rinse Temperature (°F/°C)	180/83
Inlet Water Temperature (°F/°C)	180/83
Flow Pressure (PSI)	10 ± 2
Water Line Size (NPT)	1/2"
Drain Line Size (NPT)	1 1/2"

NOTICE NOTE: Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and is subject to change without notice.



NOTICE NOTE: Typical Electrical Circuit is based on:



1. 125% of the full amperage load of the machine.
2. Typical fixed-trip circuit breaker sizes as listed in the NEC (Latest Edition).

Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. Numbers in this manual are for reference and may change without notice.

TempStar

Volts	Phase	Hz	Rinse Heater Rating	Total Amps	Typical Electrical Circuit
208	1	50	12 kW at 240 V	71 A	90 A
208	1	50	14 kW at 240 V	78 A	100 A
230	1	50	12 kW at 240 V	78 A	100 A
230	1	50	14 kW at 240 V	86 A	110 A

208	3	50	12 kW at 240 V	45 A	60 A
208	3	50	14 kW at 240 V	49 A	70 A
230	3	50	12 kW at 240 V	48 A	60 A
230	3	50	14 kW at 240 V	53 A	70 A
380	3	50	12 kW at 380 V	29A	40 A
380*	3	50	14 kW at 380 V	34A	45 A
415	3	50	12 kW at 415 V	26 A	35 A
415	3	50	14 kW at 415 V	29 A	40 A
440	3	50	12 kW at 460 V	21 A	30 A
440	3	50	14 kW at 460 V	25 A	35 A

NOTICE
Imbalanced
wild leg goes
to L3.

208	1	60	12 kW at 240 V	69 A	90 A
208	1	60	14 kW at 240 V	76 A	100 A
230	1	60	12 kW at 240 V	76 A	100 A
230	1	60	14 kW at 240 V	84 A	110 A

208	3	60	12 kW at 240 V	43 A	60 AP
208	3	60	14 kW at 240 V	47 A	60 A
230	3	60	12 kW at 240 V	46 A	60 A
230	3	60	14 kW at 240 V	51 A	70 A
460	3	60	12 kW at 480 V	22 A	30 A
460	3	60	14 kW at 480 V	25 A	35 A

NOTICE
Imbalanced
wild leg goes
to L3.

* This model is wired in a wye configuration for the heaters.

LT/NB



Volts	Phase	Hz	Rinse Heater Rating	Total Amps	Typical Electrical Circuit
208	1	50	N/A	28 A	35 A
230	1	50	N/A	35 A	40 A

208	3	50	N/A	20 A	25 A
230	3	50	N/A	21 A	30 A
380	3	50	N/A	10 A	15 A
415	3	50	N/A	10 A	15 A
440	3	50	N/A	8 A	15 A

NOTICE
Imbalanced wild leg goes to L3.

208	1	60	N/A	26 A	35 A
230	1	60	N/A	28 A	35 A

208	1	60	N/A	26 A	35 A
230	1	60	N/A	28 A	35 A

208	3	60	N/A	18 A	25 A
230	3	60	N/A	28 A	35 A
460	3	60	N/A	8 A	15 A

NOTICE
Imbalanced wild leg goes to L3.

S



Volts	Phase	Hz	Rinse Heater Rating	Total Amps	Typical Electrical Circuit
208	1	60	N/A	6 A	15 A
230	1	60	N/A	6 A	15 A

208	3	60	N/A	6 A	15 A
230	3	60	N/A	6 A	15 A

NOTICE
Imbalanced wild leg goes to L3.

INSPECTION

Do not throw away packaging if damage is evident.

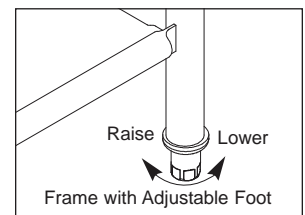
Before installing the unit, check the packaging and machine for damage. If the packaging is damaged, the machine might also be damaged. If there is damage to both the packaging and machine, do not throw away the packaging. The dishmachine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others might result in damage to the unit while in transit. If so, do not return the unit to the manufacturer; instead, contact the carrier and ask them to send a representative to the site to inspect the damage and complete an inspection report. You must contact the carrier and dealer that sold you the unit within 48 hours of receiving the machine.

UNPACKING

While unpacking the machine, ensure that there are no missing parts. If an item is missing, contact the manufacturer immediately.

LEVELING

The dishmachine must be level in its operating location to prevent damage to the machine during operation and to ensure the best results. The unit comes with four adjustable bullet feet, which can be turned using a pair of channel locks (or by hand if the unit can be raised safely). Ensure that the unit is level from side-to-side and front-to-back before making any connections.

**PLUMBING**

The plumber MUST flush the incoming water line!

Plumbing connections must comply with all applicable local, state, and national plumbing codes. The plumber is responsible for ensuring that the incoming water line is thoroughly flushed before connecting it to any component of the dishmachine. It is very important to remove all foreign debris from the water line that might potentially get trapped in the valves or cause an obstruction. Any valves that are fouled as a result of foreign matter left in the water line—and any expenses resulting from this fouling—are not the responsibility of the manufacturer.

CONNECTING THE DRAIN LINE

The drains for the models covered in this manual are gravity discharge drains. All piping from the 1 1/2" NPT connection on the wash tank must be pitched 1/4" per foot to the floor or sink drain. All piping from the machine to the drain must be a minimum 1 1/2" NPT and must not be reduced. There must also be an air gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 5 GPM. For units equipped with the Drain Quench Option, see the Drain Quench Assembly section of this manual.

WATER SUPPLY CONNECTIONS

NOTICE NOTE: Ensure that you've read the Plumbing section before proceeding.

Install the water supply line (1/2" ID minimum) to the dishmachine line strainer using copper pipe. A water shut-off valve should be installed in the water line between the main supply and the machine to allow access for service. For units equipped with the Drain Quench Option, see the Drain Quench Assembly section of this manual.



The water supply line is to be capable of 10 ± 2 pounds per square inch (PSI) "flow" pressure at the recommended temperature indicated on the data plate.

The manufacturer recommends the installation of a water pressure regulator* in the incoming water line of all TempStar models to ensure proper flowrate at all times and offers these devices as options.

Do not confuse static pressure with flow pressure. Static pressure is the line pressure in a "no flow" condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the fill valve is opened during the cycle.

Take care not to confuse static pressure with flow pressure!

The manufacturer also recommends the installation of a shock absorber* in the incoming water line of all models and offers these devices as options. This prevents line hammer/hydraulic shock—induced by the solenoid valve as it operates—from causing damage to the equipment.

**See the Plumbing Options page and contact your dealer with any questions you might have.*

STEAM LINE CONNECTION

The steam machines come with lines to connect the source steam. Connect all steam lines to the machine as all applicable codes provide. See machine data plate for information concerning steam flow pressure.



CHEMICAL DISPENSING EQUIPMENT

The LT machine requires that a separate chemical feeder be connected to it to provide the required detergent and sanitizer. This feeder needs to be able to operate against a head of 25 PSI and provide 1.79 ml of a 10% Chlorine sanitizer per minute.

PLUMBING CHECK

Slowly turn on the water supply to the machine after the incoming fill line and the drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired before operating the machine.

ELECTRICAL POWER CONNECTIONS



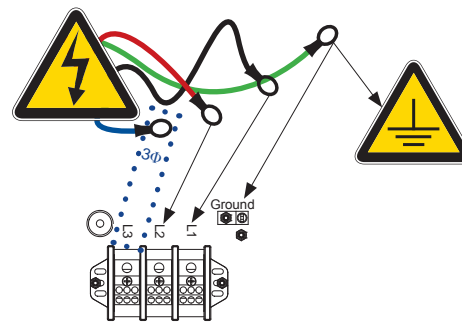
Disconnect electrical power supplies and tag out in accordance with appropriate procedures/ codes at the disconnect switch.

Electrical and grounding connections must comply with the applicable portions of the National Electrical Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

The dishmachine data plate is located on the right side and to the front of the machine. Refer to the data plate for machine operating requirements, machine voltage, total amperage load, and serial number.

1. Open the control box. This will require taking a phillips screwdriver and removing the four screws on the front cover of the control box.
2. Install 3/4" conduit into the pre-punched holes in the back of the control box.
3. Route power wires and connect to power block and grounding lug.
4. Install the service wires (L3 for 3-Phase only) to the appropriate terminals as they are marked on the terminal block.



NOTICE
Imbalanced wild leg goes to L3.

5. Install the grounding wire into the lug provided.
6. Tighten the connections.

NOTICE NOTE: It is recommended that "DE-OX" or similar anti-oxidation agent be used on all power connections.

CAUTION: Improperly connecting external devices can cause damage to the machine and/or electrical infrastructure! See Addendum for a wiring guide.



VOLTAGE CHECK

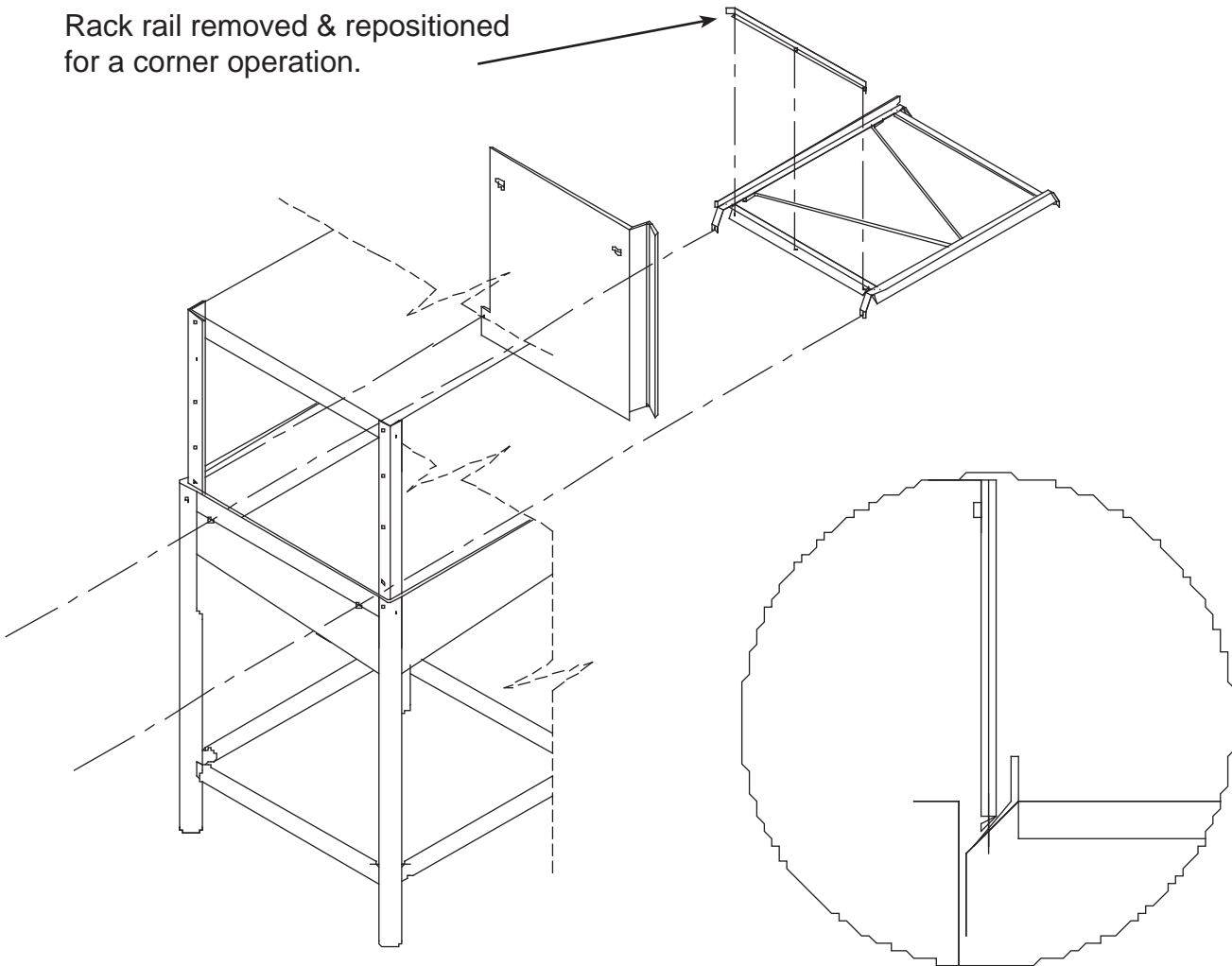


1. Ensure that the power switch is in the OFF position and apply power to the dishmachine.
2. Check the incoming power at the terminal block and ensure it corresponds to the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem.

CAUTION: Do not run the dishmachine if the voltage is too high or too low (refer to applicable electrical codes).

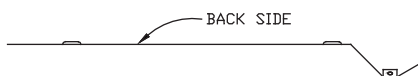
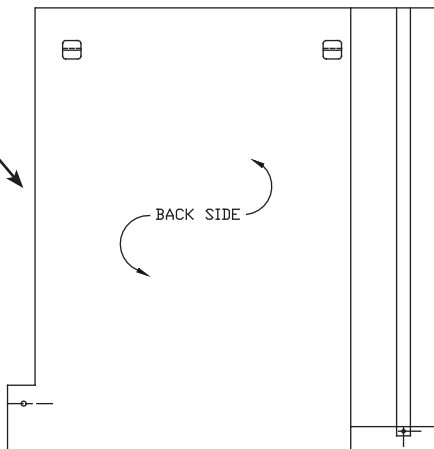
3. Shut the service breaker off and mark it as being for the dishmachine.
4. Advise all proper personnel of any problems and of the location of the service breaker. Replace the control box cover and tighten-down the screws.

Rack rail removed & repositioned for a corner operation.



False panel positioned in unit.

Insert this side first.



1. Remove the rack assembly from the unit.
2. False panel will mount inside the dishmachine.
3. Position panel in unit on side to be closed.
4. Hold panel against side of dishmachine and push up.
5. Panel will clip in at the top, inside unit.
6. Holes in false panel will line up with rack assembly holes.
7. Re-install screws for rack assembly which will secure false panel to unit.
8. Re-assemble the rack track in an “L” shape for a corner operation.

1. Apply power (120, 208, or 240 VAC) to the A1 & A2 terminals.

Timer Wiring with Correct Wire Colors



2. Hold down the SET and ADJ buttons for at least 3 seconds.
3. Repeatedly press the ADJ button until the letter E appears on the left-hand side.
4. Press the SET button.
5. Press the ADJ button until the letters M S appear.
6. Press the SET button.
7. Press the ADJ button to adjust the first digit to 2.
8. Press the SET button.
9. Press the ADJ button to adjust the second digit to 3.
10. Press the SET button.
11. Press the ADJ button to adjust the third digit to 0.
12. Press the SET button.
13. Press the ADJ button so there is an arrow facing downward.
14. Press the SET button.

STEP	ACTION	RESULT
1.	Apply power (120, 208, or 240 VAC) to the A1 & A2 terminals.	Idle state.
2.	Make control signal connection at B1. No control signal is applied.	Remains in idle state.
3.	Apply control signal (logic high).	Relay closes (ports 15-18).
4.	Remove control signal (logic low).	Relay remains closed for 2.5 minutes.

NOTE: In Step 4, if control signal is reapplied while the relay is still closed, Step 3 will restart.

PREPARATION Before operating the unit, verify the following:

1. The tank is clean and free of debris.
2. The wash arms, rinse arms, sump strainer, and scrap screen are all installed correctly.
3. The standpipe is installed.



Wash & Rinse Arms, Scrap Screen



Sump Strainer



Standpipe

POWER UP To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified.

FILLING THE WASH TUB Ensure that the mode switch is in the AUTO position, and place the power switch into the ON position. The machine will fill automatically and shut-off when the appropriate level is reached (just below the scrap screen). The wash tub must be completely filled before operating the wash pump to prevent damage to the component. Once the wash tub is filled, the unit is ready for operation.

WARE PREPARATION Proper preparation of ware will help ensure good results and fewer re-washes. If not done properly, ware might not come out clean and the efficiency of the dishmachine will be reduced. Putting unscrapped dishes into the machine affects its performance, so scraps should always be removed from ware before being loaded into a rack. Pre-rinsing and pre-soaking are good ideas, especially for silverware and casserole dishes.

Place cups and glasses upside-down in racks so they don't hold water during the cycle. The dishmachine sanitizes as well as cleans. To do this, ware must be properly prepared before being placed in the machine.

DAILY MACHINE PREPARATION Refer to the "Preparation" section and follow the instructions there. Afterward, ensure that chemicals are supplied to the machine. If not, contact your chemical supplier.

WARM-UP CYCLES For the first operation of each day, it might be necessary to run the machine through three cycles to ensure that all of the cold water is out of the system and to verify that the unit is operating correctly. To cycle the machine, ensure that the power is on and that the tub has filled to the correct level. Lift the doors and the cycle light will illuminate. When the light goes out, close the doors, the unit will start, run through the cycle, and shut-off automatically. Repeat this two more times. The unit should now be ready to proceed with the washing of ware.

WASHING A RACK OF WARE To wash a rack, open the doors completely (avoiding hot water that might drip from the door) and slide the rack into the unit.

Close the door and the unit will start automatically. Once the cycle is complete, open the door (again watching for the dripping hot water) and remove the rack of clean ware. Replace with a rack of soiled ware and close the door. The process will repeat itself.

OPERATIONAL INSPECTION Based upon usage, the scrap screen may become clogged with soil and debris as the workday progresses. Operators should regularly inspect the scrap screen to ensure it has not become clogged. If clogged, it will reduce the washing capability of the machine. Instruct operators to clean-out the scrap screen at regular intervals or as required by workload.

SHUTDOWN & CLEANING 1. Turn machine off by flipping the “Power On/Power Off” switch to “OFF.”



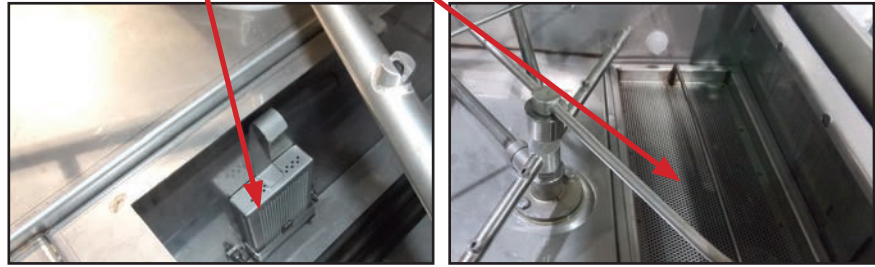
2. Open the door and allow steam/heat to escape.
3. Remove the standpipe and allow tub to drain.



WARNING: Wash tank water will be hot!

**SHUTDOWN &
CLEANING**

4. Remove the sump strainer and scrap screen.



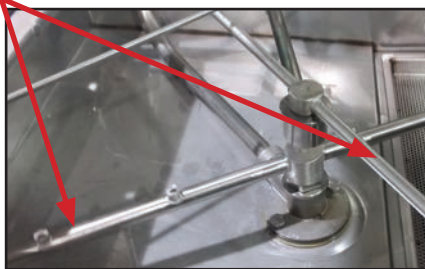
5. Use a hand-scraper to scrape foodsoil into trash basket.



6. Rinse with pre-rinse hose and replace.



7. Remove all wash and rinse arms.



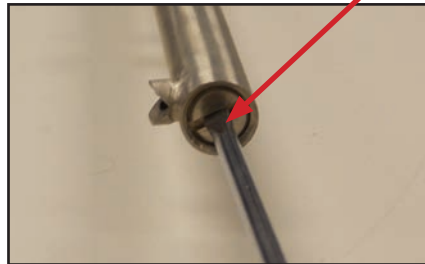
8. Remove the end-caps from the arms.



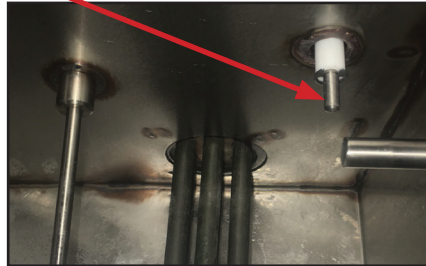
9. Clean nozzles with a brush.

**SHUTDOWN &
CLEANING**

10. Use a small wire or toothpick to remove remaining debris or lime deposits from the nozzles.
11. Flush the arms with water.
12. Replace end-caps and ensure they have been tightened.



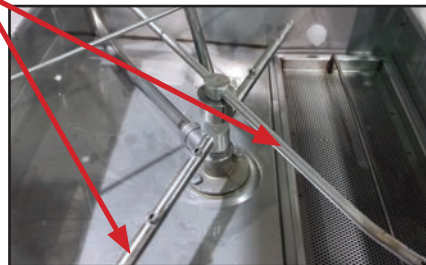
13. Ensure the water level probe is clean.



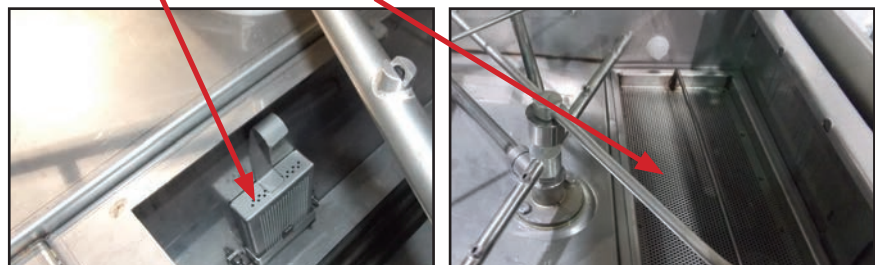
14. Spray or wipe out interior of the machine.



15. Replace wash and rinse arms.



16. Ensure sump strainer and scrap screen are clean and securely in place.



17. Use stainless steel polish to clean/protect outside of dishmachine.

**DETERGENT
CONTROL**

Detergent usage and water hardness are two factors that contribute greatly to how efficiently this dishmachine will operate. Using detergent in the proper amount can become a source of substantial savings. A qualified water treatment specialist can determine what is needed for maximum efficiency from the detergent.

1. Hard water greatly affects the performance of the dishmachine, causing the amount of detergent required for washing to increase. If the machine is installed in an area with hard water, the manufacturer recommends the installation of water treatment equipment.
2. Deposited solids from hard water can cause spotting that will not be removed with a drying agent. Treated water will reduce this occurrence.
3. Treated water may not be suitable for use in other areas of operation and it might be necessary to install a water treatment unit for the water going to the dishmachine only. Discuss this option with a qualified water treatment specialist.
4. Dishmachine operators should be properly trained on how much detergent is to be used per cycle. Meet with a water treatment specialist and detergent vendor to discuss a complete training program for operators.
5. These dishmachines require that chemicals be provided for proper operation and sanitization and require the installation of third-party chemical feeders to introduce these chemicals to the machine. Contact a chemical supplier with any questions.
6. Water temperature is an important factor in ensuring that the dishmachine functions properly. The machine's data plate details what the minimum temperatures must be for the incoming water supply, the wash tank, and the rinse tank. If minimum requirements are not met, there is a possibility that dishes will not be clean or sanitized.
7. Instruct dishmachine operators to observe the required temperatures and to report when they fall below the minimum allowed. A loss of temperature can indicate a larger problem.

DELIMING To delime the machine, follow the steps below. The tank capacities of the machine can be found in the Specifications section of this manual.

1. Remove rinse arms and place in sink with deliming solution.
2. Disconnect or turn off chemical feeder pumps.
3. Add deliming solution per chemical supplier's instructions.
4. Close the door and turn the machine on in MANUAL mode.
5. Run the machine for the length of time recommended by the chemical supplier.
6. Flip the mode switch to AUTO to shut the unit off.
7. Open the door and step away for 5 minutes.
8. Inspect the inside of the machine. If the machine is not delimed, run again.
9. When clean, drain and re-fill the machine.
10. Run two cycles in AUTO to remove residual deliming solution.
11. Drain and re-fill the machine.
12. Flush rinse arms with water and replace.



This equipment is not recommended for use with deionized water or other aggressive fluids. Use of deionized water or other aggressive fluids will result in corrosion and failure of materials and components. Use of deionized water or other aggressive fluids will void the manufacturer's warranty.

**PREVENTATIVE
MAINTENANCE**

The manufacturer highly recommends that any maintenance and repairs not specifically discussed in this manual be performed only by QUALIFIED SERVICE PERSONNEL. Performing maintenance on your dishmachine may void your warranty, lead to larger problems, or even cause harm to the operator. So if you have a question or concern, do not hesitate to contact a QUALIFIED SERVICE AGENCY.

By following the operating and cleaning instructions in this manual, you should get the most efficient results from your machine. As a reminder, here are some steps to take to ensure that you are using the dishmachine the way it was designed to work:



1. Ensure that the water temperatures match those listed on the machine data plate. There can be a variety of reasons why your water temperature could be too low.
2. Ensure that all strainers are clean and securely in place before operating the machine. When cleaning out strainers, do NOT beat them on waste cans. Wipe-out strainers with a rag and rinse under a faucet if necessary. Use a toothpick to dislodge any stubborn debris.
3. Ensure that all wash and rinse arms are secure in the machine before operating.
4. Ensure that the standpipe is seated in the sump before operating.
5. Remove as much soil from dishes by hand as possible before loading into racks.
6. Do not overfill racks.
7. Ensure that glasses are placed upside-down in the rack.
8. Ensure that all chemicals being injected into machine have been verified at the correct concentrations.
9. Clean-out the machine at the end of every workday per the Shutdown and Cleaning section of this manual.
10. Follow all safety procedures, whether listed in this manual or put forth by local, state, or national codes/regulations.

BEARING REPLACEMENT



Disconnect electrical power at the breaker or disconnect switch and tag-out in accordance with procedures and codes.

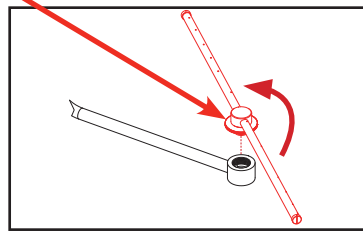
06401-004-33-51 RINSE ARM BEARING KIT

- 1 Bearing
03120-004-12-13
- 1 Retaining Clip
05340-112-01-11
- 2 Washers
05330-011-42-10

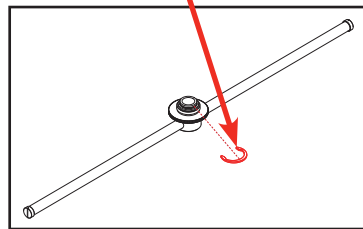
TOOLS REQUIRED

- Flathead Screwdriver

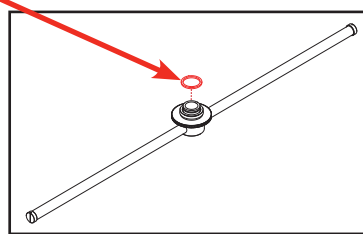
1. Unscrew the rinse arm from the manifold.



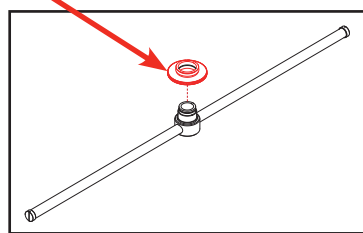
2. Take the retaining clip off with a flathead screwdriver.



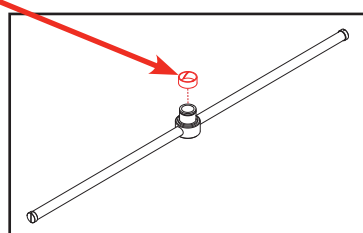
3. Remove the first washer.



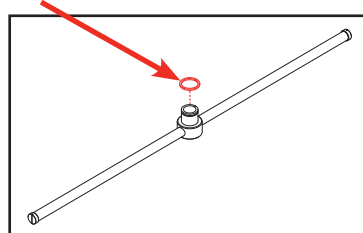
4. Remove the rinse head bushing.



5. Remove the bearing.



6. Remove the second washer.



BEARING REPLACEMENT

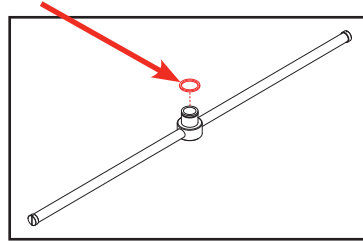
One of the washers from the kit is used in this step.

The bearing from the kit is used in this step.

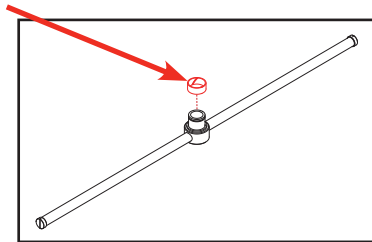
One of the washers from the kit is used in this step.

The retaining clip from the kit is used in this step.

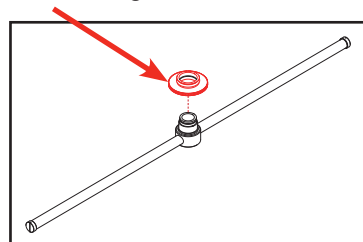
7. Place one of the washers from the kit on the rinse arm.



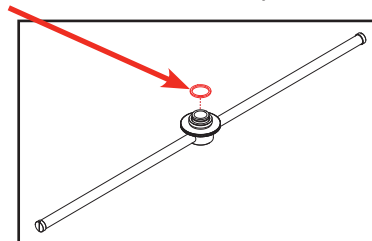
8. Put the bearing from the kit on top of the washer.



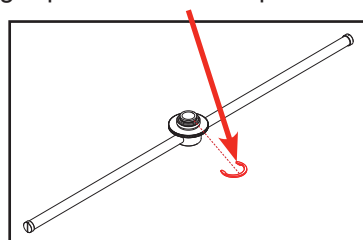
9. Place the rinse head bushing back on the rinse arm.



10. Put the other washer from the kit on top of the rinse head bushing.



11. Push the retaining clip from the kit into place.



12. Screw the rinse arm back on the manifold.

NOTICE



Work performed on dishmachines by unauthorized or unqualified personnel may void the warranty. Before beginning this or any other maintenance on a unit under warranty, you should contact a manufacturer-certified technician or the manufacturer's Technical Service.



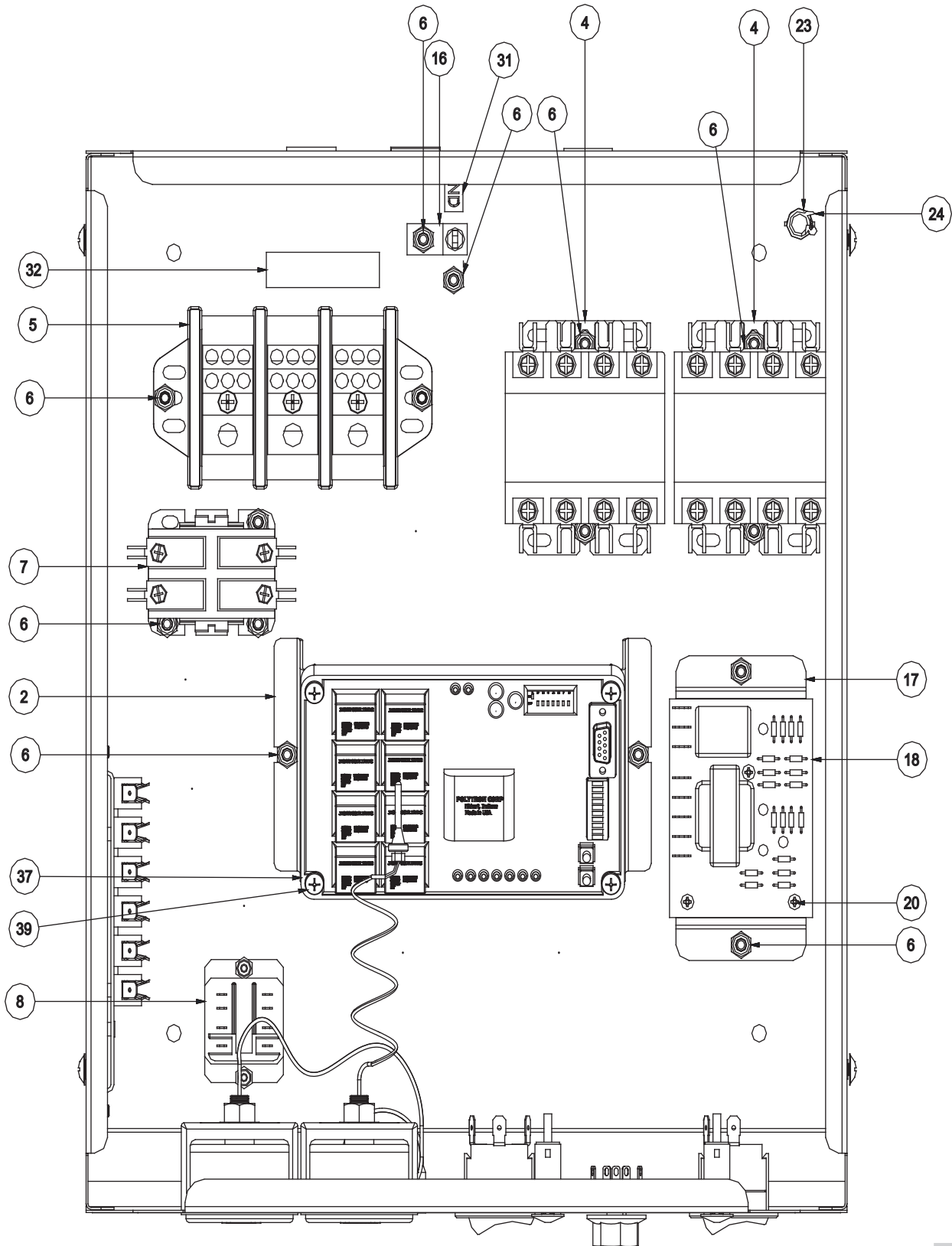
WARNING: Inspection, testing, and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the unit have power to it and live electrical components be exposed. **USE EXTREME CAUTION WHEN TESTING THE MACHINE.**

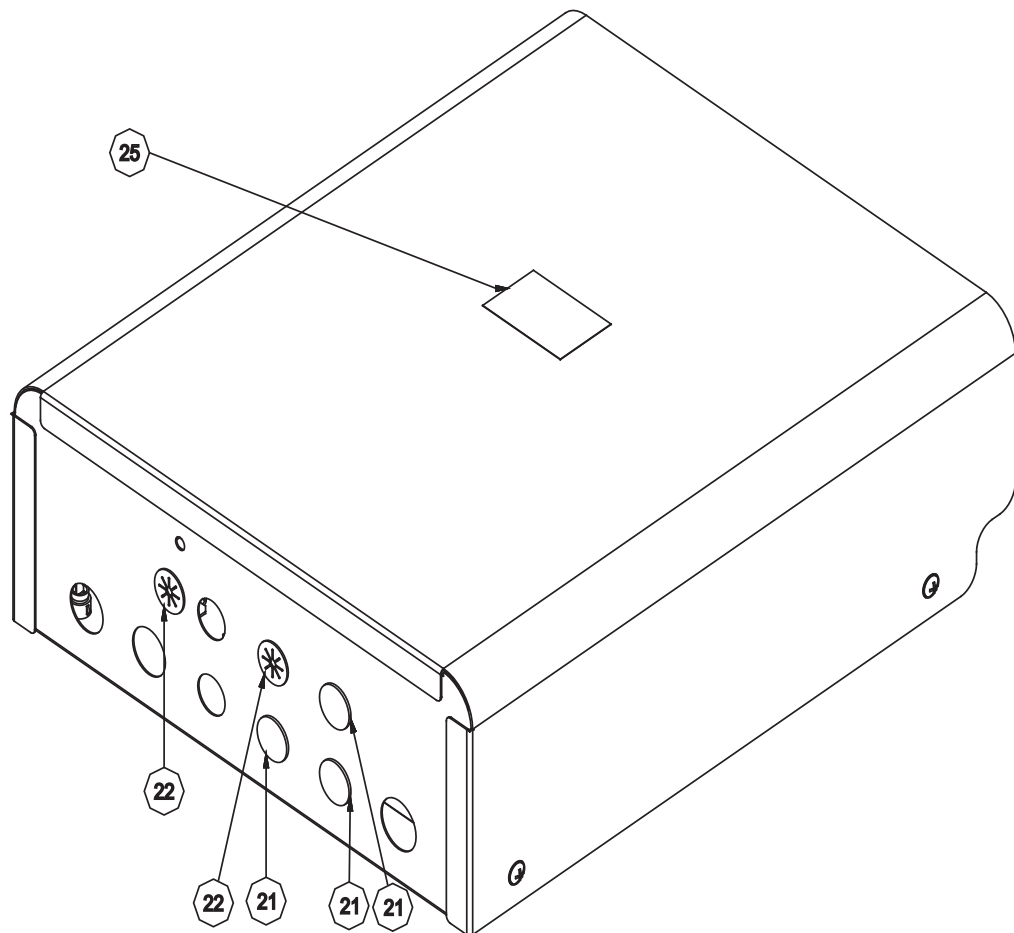
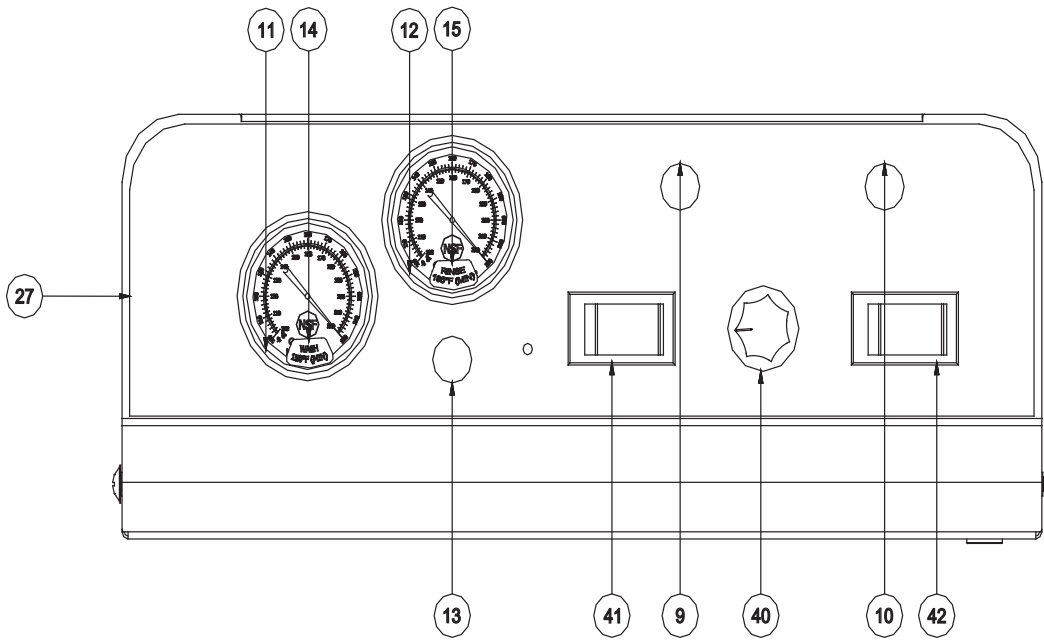
PROBLEM	POSSIBLE CAUSE	REMEDY
Dishmachine will not fill after the door is close. Power "ON" light is illuminated.	<ol style="list-style-type: none"> 1. Faulty rinse solenoid valve. 2. Faulty door switch. 3. Fouled/faulty high-level probe. 	<ol style="list-style-type: none"> 1. Repair or replace valve as required. 2. Verify the wiring of the switch; if correct, replace the switch. 3. Clean probe if fouled. If clean, and still not working, replace.
Dishmachine will not fill after the door is closed. Power "ON" light is NOT illuminated.	<ol style="list-style-type: none"> 1. Service breaker tripped. 2. Machine not connected to power source. 3. Faulty power source. 	<ol style="list-style-type: none"> 1. Reset. If the breaker trips again, contact an electrician to verify the amp draw of the machine. 2. Verify that the machine has been properly connected to the power source. 3. Verify the wiring of the switch; if correct, replace switch.
Dishmachine will not run after the door is closed. Power "ON" light is illuminated and the unit is filling.	<ol style="list-style-type: none"> 1. Timer is faulty. 2. Wash motor faulty/damaged. 3. Wash motor contactor faulty. 	<ol style="list-style-type: none"> 1. Check to see that the timer is receiving power. If so, replace the timer assembly. 2. Verify that the wash motor is getting power. If so, replace the motor. 3. Check for continuity; if contacts are open, replace the contactor.
Dishmachine runs continuously in the wash cycle.	<ol style="list-style-type: none"> 1. Machine is in Delime mode. 2. Timer motor is faulty. 3. Cam timer jammed by obstruction. 	<ol style="list-style-type: none"> 1. Flip mode switch to AUTO. 2. Verify that the timer is rotating. If not, check to see that the motor is receiving power. If so, replace the motor and/or timer assembly. 3. Remove obstruction.
Wash or rinse heater does not work	<ol style="list-style-type: none"> 1. Faulty heater element. 2. Faulty heater contactor. 3. Misadjusted/faulty thermostat(s). 	<ol style="list-style-type: none"> 1. Check element for continuity; if open, replace the heater. 2. Replace the contactor. 3. Verify operation and setting of thermostats, replace if necessary.
Dishmachine fills slowly and/or the rinse is weak.	<ol style="list-style-type: none"> 1. Clogged or obstructed rinse arms. 2. Low incoming water pressure. 3. Y-strainer is clogged 	<ol style="list-style-type: none"> 1. Remove and clean the rinse arms. 2. Adjust the water pressure regulator to ensure that there is 10 ± 2 PSI flow. 3. Clean out the Y-strainer.
Rinse water not reaching required temperature.	<ol style="list-style-type: none"> 1. Faulty rinse heater. 2. Mis-adjusted/faulty thermostat(s). 3. Rinse thermometer is defective. 	<ol style="list-style-type: none"> 1. Check element for continuity; if open, replace heater. 2. Verify operation and setting of thermostats, replace if necessary. 3. Replace thermometer.

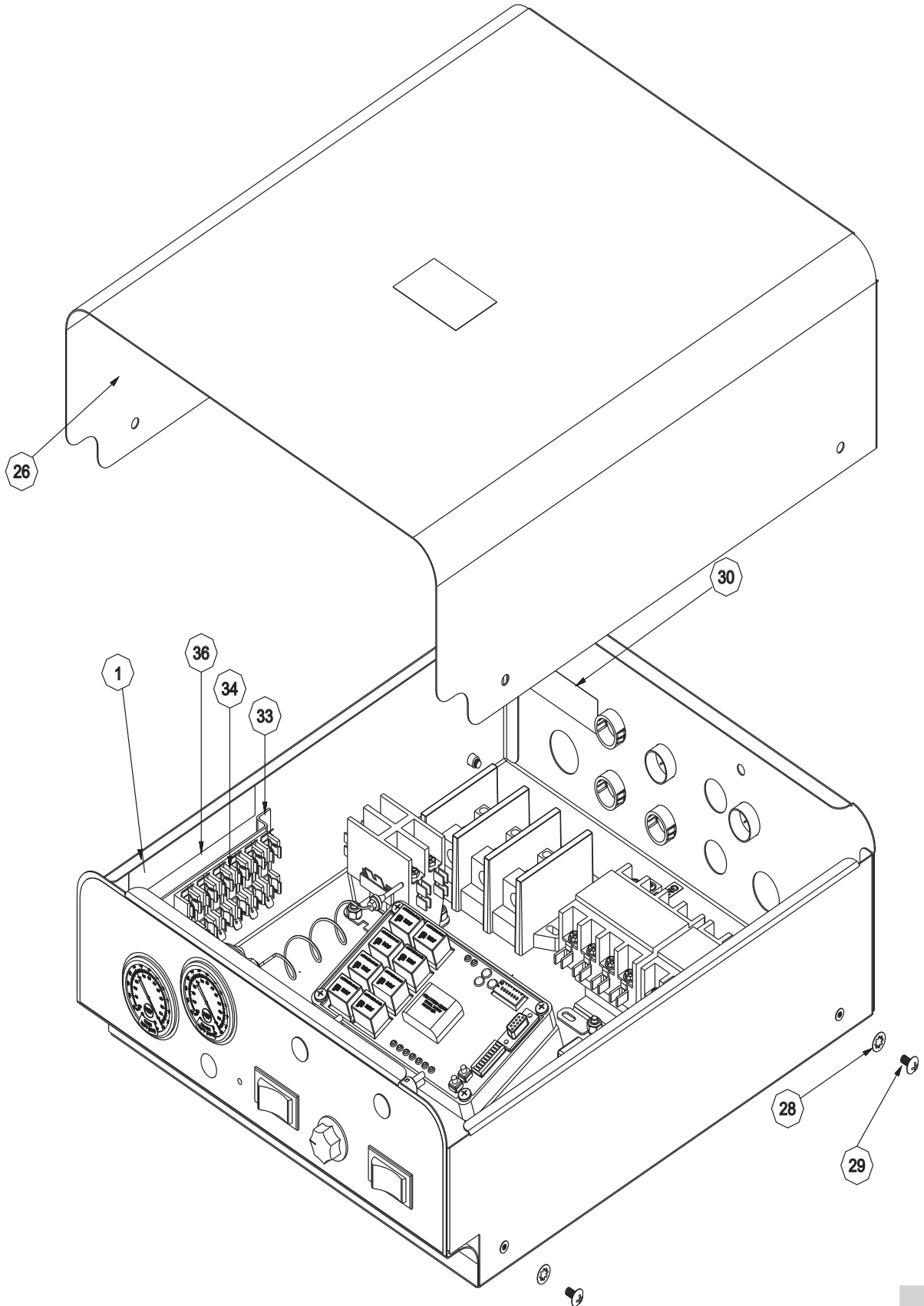


WARNING: Inspection, testing, and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the unit have power to it and live electrical components be exposed. **USE EXTREME CAUTION WHEN TESTING THE MACHINE.**

PROBLEM	POSSIBLE CAUSE	REMEDY
Machine doesn't drain when power button is pressed.	<ol style="list-style-type: none"> 1. Drain clogged. 2. Standpipe not removed before draining. 3. Defective drain valve. 	<ol style="list-style-type: none"> 1. Remove obstruction. 2. Remove standpipe and run drain cycle again. 3. Replace.
No indication of pressure.	<ol style="list-style-type: none"> 1. Water turned off. 2. Transducer disconnected. 3. Pressure transducer defective. 	<ol style="list-style-type: none"> 1. Turn water on. 2. Verify wiring. 3. Replace pressure transducer.
Wash water is not reaching required temperature.	<ol style="list-style-type: none"> 1. Faulty wash heater. 2. Misadjusted/faulty thermostat(s). 3. Wash thermometer is defective. 	<ol style="list-style-type: none"> 1. Check element for continuity; if open, replace the heater. 2. Verify operation and setting of thermostats, replace if necessary. 3. Replace thermometer.
Doors will not close completely.	<ol style="list-style-type: none"> 1. Improper spring tension. 2. Obstruction in door channel. 3. Doors are not square with frame. 	<ol style="list-style-type: none"> 1. Adjust spring tension as required by loosening (not removing) spring bolt nuts and adjusting the tension. Tighten nuts back when done. 2. Remove the obstruction. 3. Adjust the frame to accommodate the doors.
Water leaks at the wash pump.	<ol style="list-style-type: none"> 1. Wash pump seal defective. 2. Petcock or pump drain (if equipped) not shut/tight. 3. Loose hoses (hose clamps) on the wash pump. 	<ol style="list-style-type: none"> 1. Replace the seal. 2. Close or tighten. <p>Tighten the hose clamps.</p>
Will not rinse during autocycle.	<ol style="list-style-type: none"> 1. Defective rinse solenoid. 2. Faulty timer. 3. No water to the machine. 	<ol style="list-style-type: none"> 1. Repair or replace the rinse solenoid as required. 2. Replace timer. 3. Verify that there is water at 10 ± 2 PSI connected to the machine.
Dishes are not coming clean.	<ol style="list-style-type: none"> 1. Machine temperatures are not up to the minimum requirements. 2. No detergent/too much detergent. 3. Solid dispenser canister is empty. 	<ol style="list-style-type: none"> 1. Verify that incoming water, rinse water, and wash water match the required temperatures as listed on the machine data plate. 2. Adjust detergent concentration as required for the amount of water held by the machine. 3. Replace the canister.

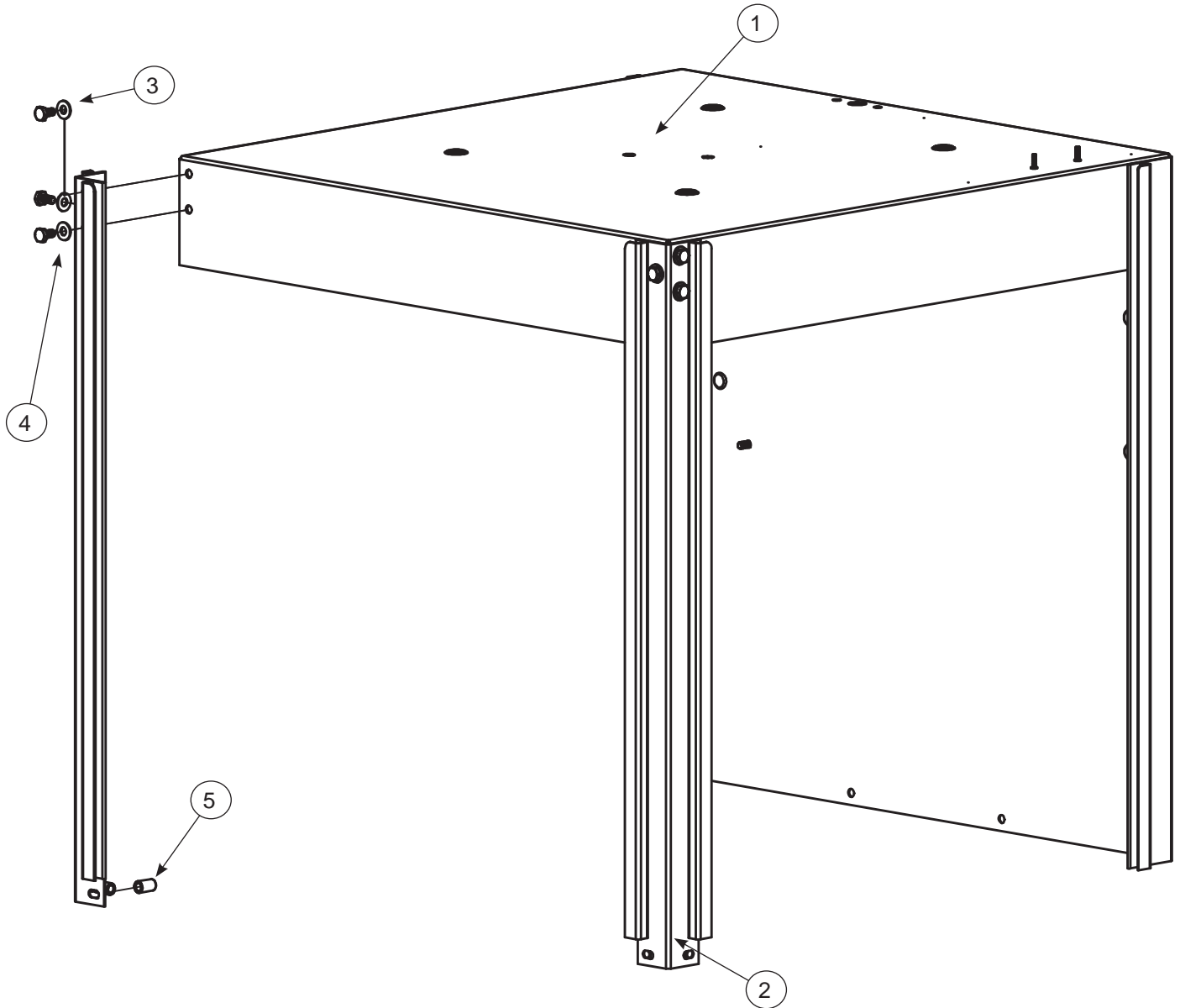




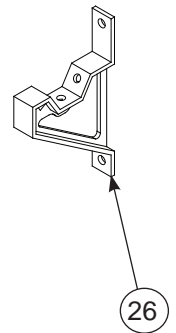
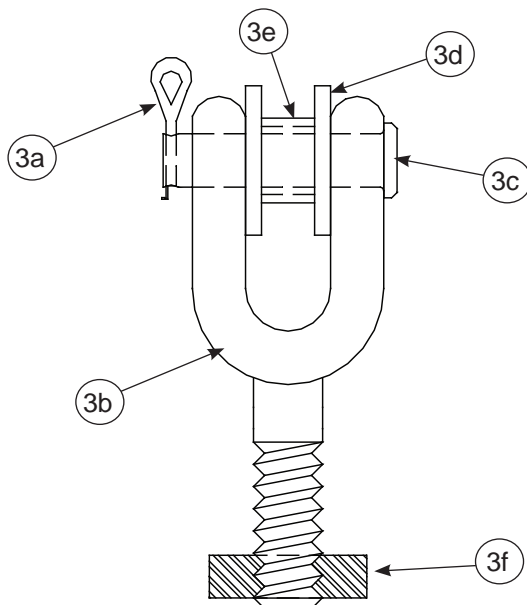
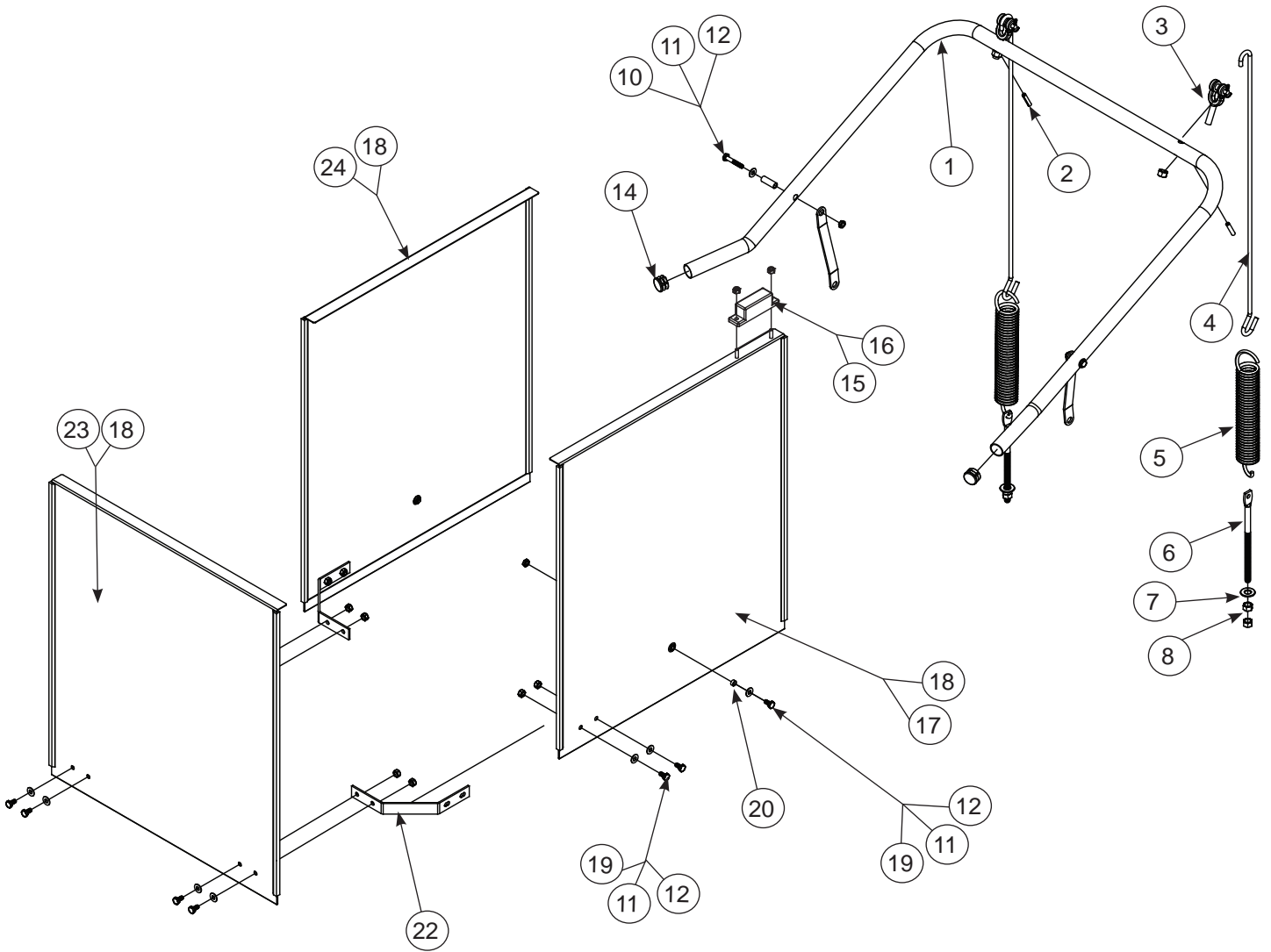


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Control Box Weldment	05700-003-30-14
2	1	Timer Bracket	05700-003-02-08
3	2	Lock Nut 6-32	05310-373-03-00
4	2	Heater Contactor	05945-109-01-69
5	1	Terminal Block	05940-011-48-27
6	17	Lock Nut 10-24	05310-373-01-00
7	1	Contactor, Wash Motor	05945-002-74-20
8	1	Relay	05945-111-47-51
	1	Relay, (415 V, 3 PH, 5 Wire Only)	05945-111-89-75
9	1	Light, Green	05945-111-44-43
10	1	Light, Red	05945-111-44-45
11	1	Temperature Gauge, 96"	06685-004-31-46
12	1	Temperature Gauge, 48"	06685-004-31-47
13	1	Light, Yellow	05945-111-44-44
14	1	Decal, Wash 150 °F Min	09905-002-97-61
15	1	Decal, Rinse 180 °F Min	09905-002-97-62
16	1	Ground Lug	05940-200-76-00
17	1	Bracket, Liquid Level Control Board	05700-002-13-22
18	1	Liquid Level Control Board	06680-200-08-21
19	6	Tricnut, 6-32	05340-118-04-00
20	3	Screw, 6-32 x 5/8"	05305-011-39-85
21	3	Plug, 1/2"	05975-011-47-81
22	2	Grommet, 7/8" Split	05975-200-40-00
23	1	Bushing Snap	05975-210-05-00
24	1	Clamp, Hose 1/4" - 1/3"	05975-002-61-43
25	1	Decal, Warning-Disconnect Power	09905-004-08-16
26	1	Cover, Top Mount Control Box	05700-002-23-03
27	1	Decal, Control Box	09905-003-97-36
28	4	Lockwasher, Int. Tooth #10	05311-273-03-00
29	4	Screw, 10-32 x 3/8" Phillips Truss Head	05305-173-12-00
30	1	Decal, Copper Conductors	09905-011-47-35

ITEM	QTY	DESCRIPTION	PART NUMBER
31	1	Decal, Ground	09905-011-86-86
32	1	Decal, L1, L2	09905-002-78-67
33	1	Bracket, Fuse Strip	05700-002-42-03
34	1	Fuse Holder, 6-pole	05920-002-42-13
35	2	Screw, 6-32 x 3/8" with Tooth Washer	05305-002-25-91
36	1	Decal, Dispenser Connection	09905-003-34-09
37	1	Kit, Universal Timer with Bracket	06401-003-80-83
		Universal Timer, Fused	05945-003-75-23
38	4	Locknut, 10-32	05310-373-02-00
39	4	Screw 10-32 x 1"	05305-002-19-42
40	1	Switch, Rotary Selector	05930-003-97-61
41	1	Switch, Operation	05930-301-53-00
42	1	Switch, Power	05930-011-49-55

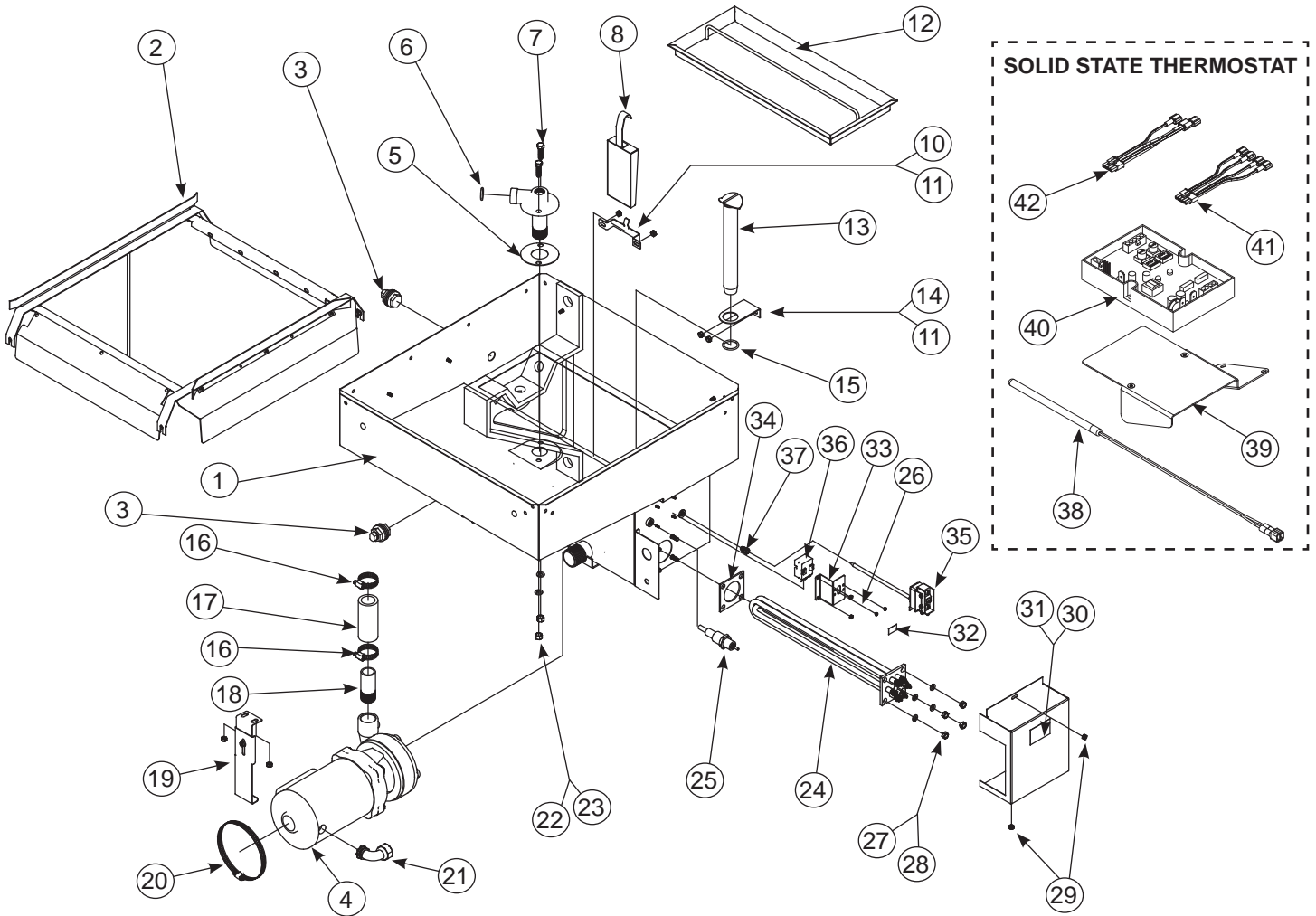


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Hood Weldment (Tempstar/Tempstar LT/Tempstar NB)	05700-002-29-79
	1	Hood Weldment (Tempstar Ventless)	05700-004-19-85
	1	Hood Weldment (Tempstar S)	05700-002-41-36
2	2	Hood Support	05700-002-78-99
3	6	Bolt, 1/4-20 x 1/2"	05305-274-21-00
4	6	Washer, Flat, SS, 1/4-20	05311-174-01-00
5	4	Spacer, Sleeve Hood	05700-003-55-15
6	6	Locknut, 1/4-20 with Nylon Insert (Not Shown)	05310-374-01-00



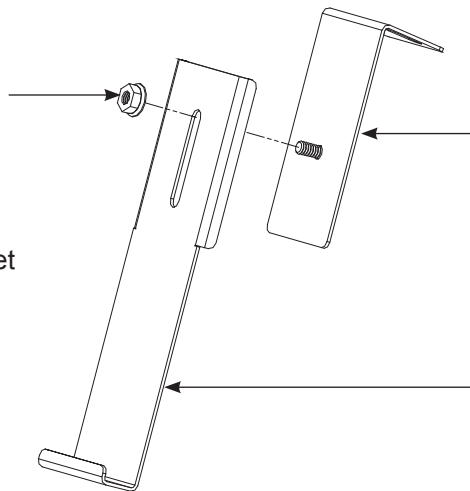
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Cantilever Arm	05700-031-50-67
2	2	Spring Pin, 1/4" x 1 1/8"	05315-407-06-00
3	2	Yoke Assembly	05700-000-75-77
3a	1	Cotter Pin	05315-207-01-00
3b	1	Yoke	05700-000-75-78
3c	1	Clevis Pin, 5/16" x 1 3/8"	05315-700-01-00
3d	2	Nylon Washer	05311-369-03-00
3e	1	Bushing	03120-100-03-00
3f	2	Locknut, 3/8-16 Hex Center	05310-256-04-00
4	2	Rod, Spring	05700-003-67-39
5	2	Spring	05340-109-02-00
6	2	Bolt, Cantilever Hanger Eye 3/8-16	05306-956-05-00
7	2	Washer, 3/8" ID x 7/8" OD	05311-176-02-00
8	4	Nut, 3/8-16 S/S Hex	05310-276-01-00
9	2	Connector, Cantilever Arm	05700-011-90-99
10	2	Screw, 1/4-20 x 1 1/2"	05305-274-23-00
11	4	Washer, 1/4"	05311-174-01-00
12	4	Locknut, 1/4-20 Hex with Nylon Insert Low Profile	05310-374-02-00
13	2	Sleeve, Cantilever Arm	05700-000-85-69
14	2	Plug, Cantilever Arm	05340-011-35-00
15	1	Magnet, Reed Switch	05930-111-51-68
16	2	Locknut, 8-32 Hex with Nylon Insert	05310-272-02-00
17	1	Door, Right Side (Complete Assembly)	05700-004-07-47
	1	Door, Right Side Weldment with Studs	05700-002-29-85
18	6	Door, Guides	05700-111-33-59
19	2	Screw, 1/4-20 x 1/2"	05307-011-36-96
20	2	Spacer, PB Bolt	05700-000-29-40
21	4	Locknut, 1/4-20 Hex with Nylon Insert (Not Shown)	05310-374-01-00
22	2	Door Connector Bracket	05700-021-33-39
23	1	Door, Front (Complete Assembly) with Decal	05700-002-30-89
	1	Door Only, Front	05700-002-67-71

ITEM	QTY	DESCRIPTION	PART NUMBER
24	1	Door, Left Side (Complete Assembly)	05700-002-30-87
	1	Door, Left Side (Ventless, Complete Assembly)	05700-004-24-32
	1	Door Only, Left Side	05700-002-29-86
	1	Door Only, Left Side (Ventless)	05700-004-24-34
25	1	Door Connecting Plate (Not Shown)	05700-002-20-78
26	1	Bracket, Cantilever Arm Support	09515-003-15-64
27	1	Wear Button, 1/2" Dia. UHMW (Not Shown)	05700-011-88-01
28	1	Door Interlock Bracket (Not Shown)	05700-004-23-17



Nut, 1/4-20 Hex Nut
05310-011-66-49

Pump Support Adjustable Bracket
Complete Assembly
05700-011-60-33

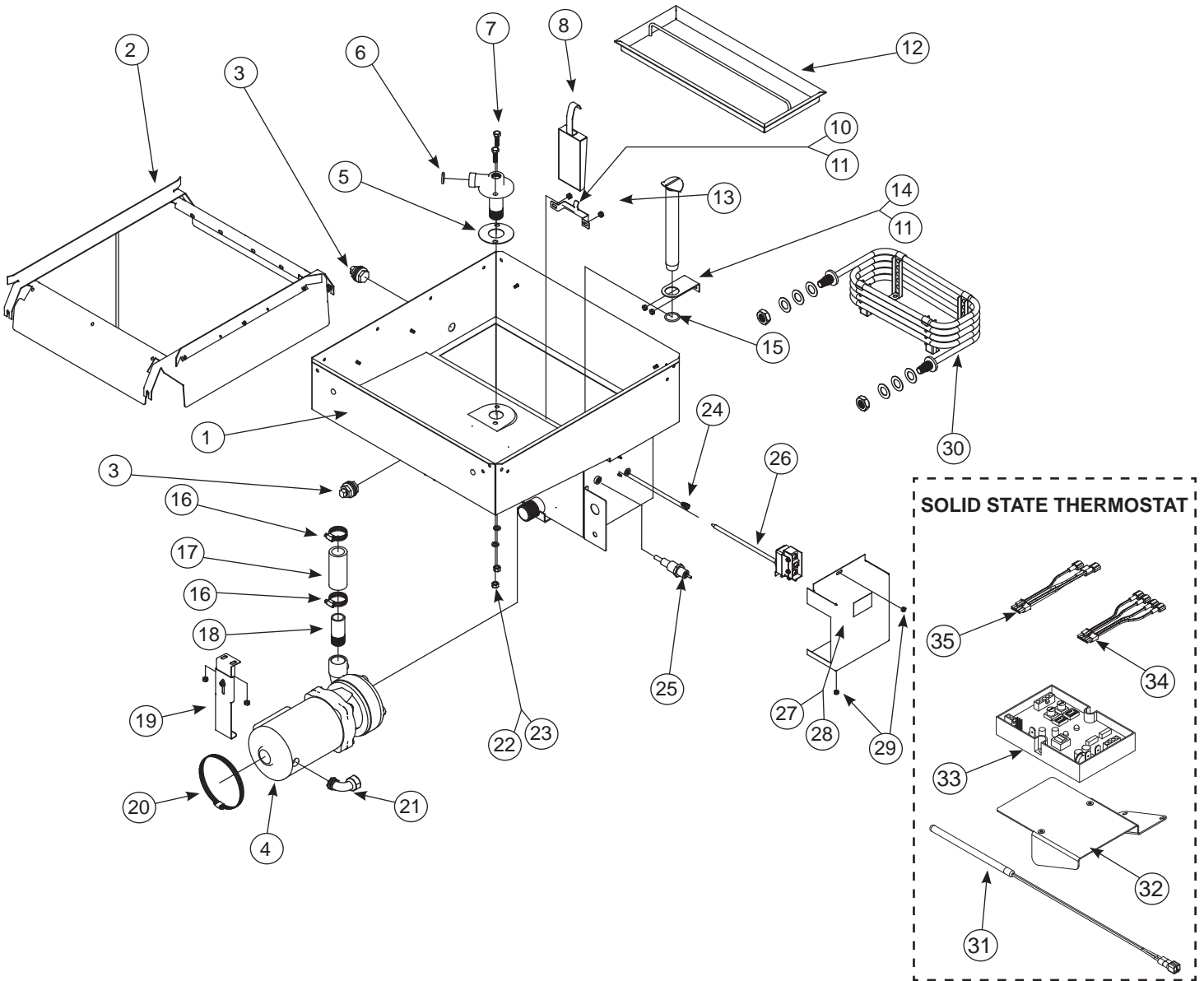


Bracket, Motor Support Weldment
05700-002-68-31

Pump Support Adjustable Bracket
05700-002-20-41

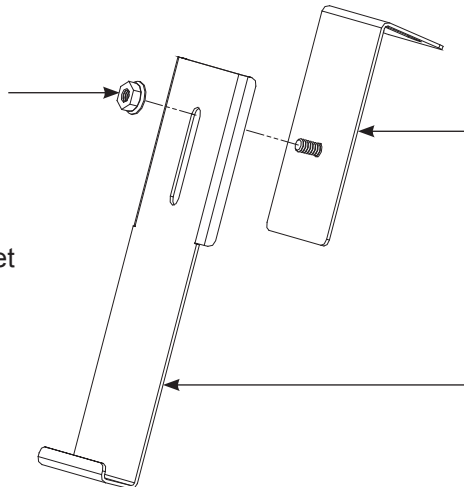
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Tub Weldment	05700-002-33-93
2	1	Rack Assembly	05700-002-01-00
3	2	Bulk Head Plug	04730-609-05-00
4	1	See Page Entitled "Wash Motors"	N/A
5	1	Gasket	05700-111-35-03
6	1	O-ring	05330-111-35-15
7	4	Bolt, Hex 3/8-16 x 1 1/4" Long	05305-276-10-00
8	1	Lower Wash Manifold Weldment	05700-031-46-00
9	1	Suction Strain Weldment	05700-001-22-23
10	1	Suction Strain Bracket	05700-001-22-24
11	8	Locknut, 1/4-20 with Nylon Insert	05310-374-02-00
12	1	Scrap Screen	05700-003-07-76
13	1	Standpipe	05700-001-25-69
13a	1	Support, Ball Stop Lift (Not Shown)	05700-002-91-55
13b	1	Ball Stop Lift (Not Shown)	05700-002-91-54
14	1	Overflow Support Bracket	05700-001-27-55
14a	1	Shim, Overflow Support (Not Shown)	05700-002-96-48
15	1	O-ring	05330-400-05-00
16	2	Clamp, Hose 1 5/16" to 2 1/4"	04730-719-01-37
17	1	Discharge Hose	05700-011-88-24
18	1	Nipple	05700-021-34-84
19	1	Pump Support Bracket Assembly	05700-002-00-46
20	1	Clamp, Hose 5 5/8" to 6"	04730-011-34-90
21	1	Connector, 1/2"	05975-111-01-00
22	4	Nut, 3/8-16 Hex	05310-276-01-00
23	4	Lockwasher 3/8"	05311-276-01-00
24	1	See "Wash Heaters/Rinse Heaters" page	N/A
25	5	Probe, High Water	06680-200-02-68
26	1	Locknut, 6-32 with Nylon Insert	05310-373-03-00

ITEM	QTY	DESCRIPTION	PART NUMBER
27	4	Lockwasher, 5/16", Split	05311-275-01-00
28	4	Nut, Hex, 5/16-18	05310-275-01-00
29	4	Locknut, 10-24 with Nylon Insert	05310-373-01-00
30	1	Cover, Wash Heater	05700-031-47-57
31	1	Decal, Warning-Disconnect Power	09905-004-08-16
32	1	Decal, High Limit	09905-011-84-32
33	1	Thermostat Bracket	05700-011-81-64
34	1	Wash Heater Gasket	05330-011-47-79
35	1	Thermostat, Regulating	05930-510-02-79
	1	Kit, Wash Thermostat Replacement (Includes: thermostat, brass fitting, two jumper wires, & instructions)	06401-003-18-22
36	1	Thermostat, High Limit	05930-004-33-12
37	1	Fitting, 1/4" Imperial Brass	05310-924-02-05
38	1	Probe, Thermistor 4"	06685-004-17-26
39	1	Thermostat Mounting Bracket	05700-004-22-17
40	1	Thermostat, Elan Electric Dual	06685-004-17-27
41	1	Harness, 5-Connector	05700-004-23-78
42	1	Harness, 4-Connector	05700-004-23-79



Nut, 1/4-20 Hex Nut
05310-011-66-49

Pump Support Adjustable Bracket
Complete Assembly
05700-011-60-33

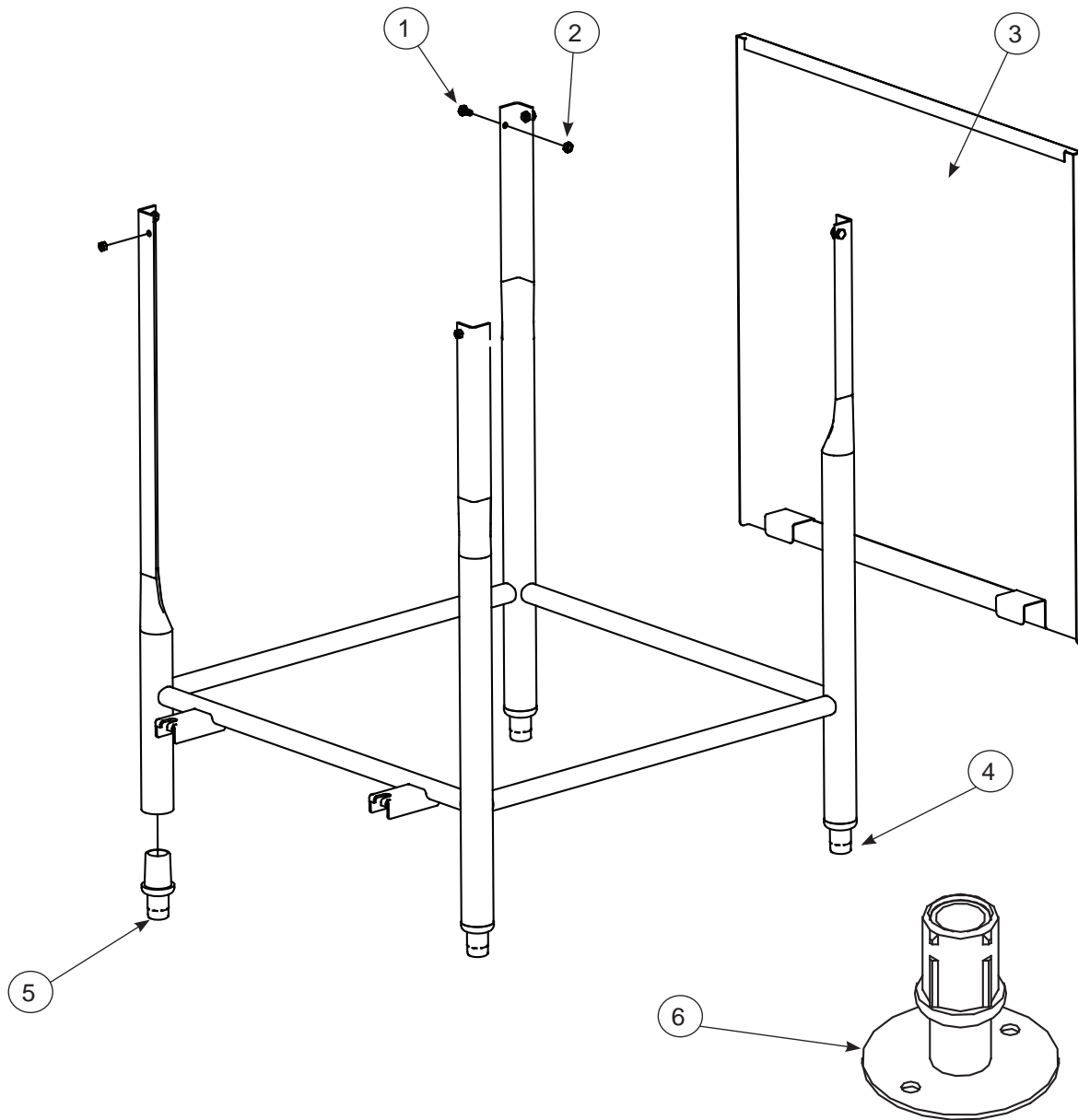


Bracket, Motor Support Weldment
05700-002-68-31

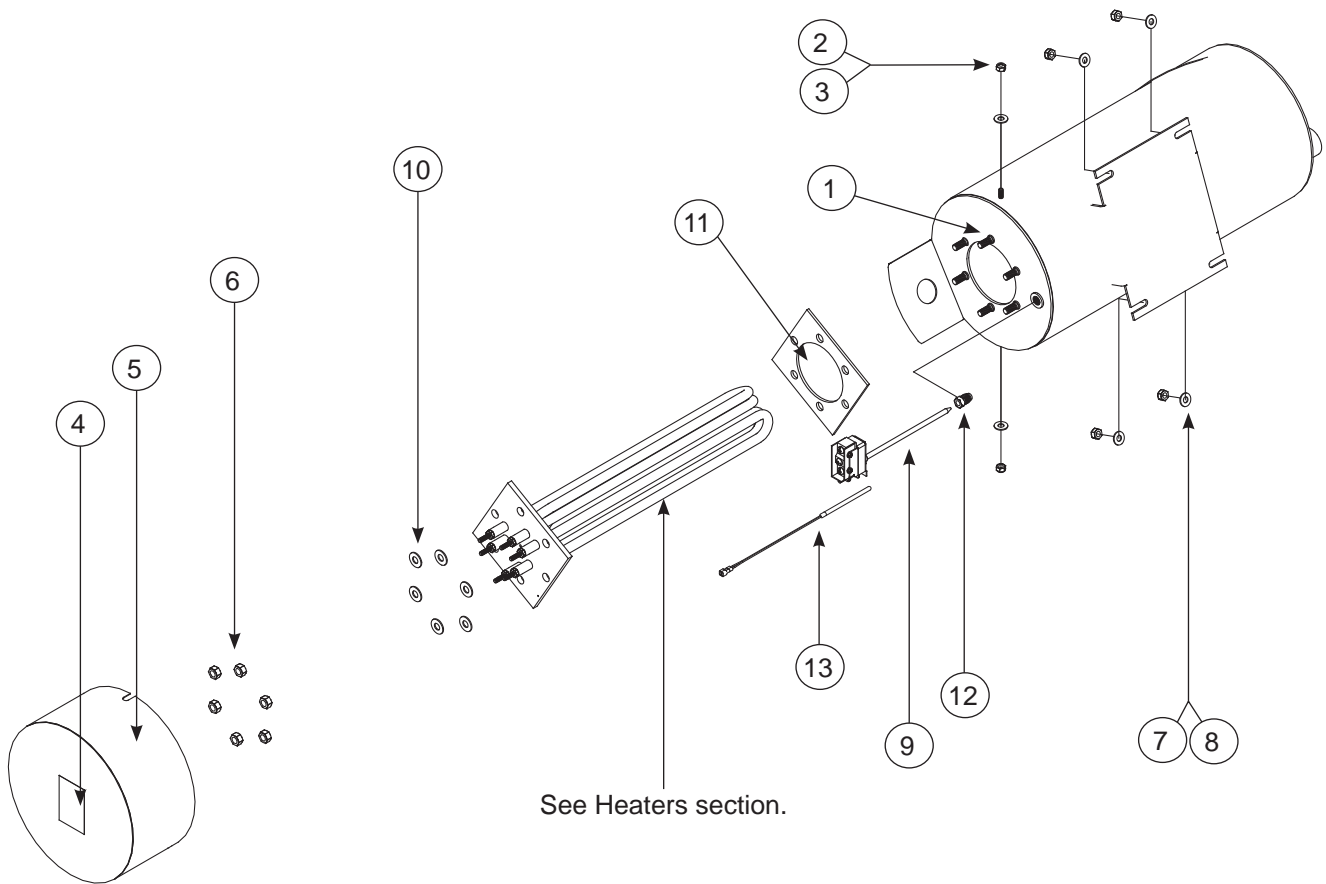
Pump Support Adjustable Bracket
05700-002-20-41

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Tub Weldment, Steam	05700-002-09-26
2	1	Rack Assembly	05700-002-01-00
3	2	Bulk Head Plug	04730-609-05-00
4	1	See Page Entitled "Wash Motors"	N/A
5	1	Gasket	05700-111-35-03
6	1	O-ring	05330-111-35-15
7	4	Bolt, Hex 3/8-16 x 1 1/4" Long	05305-276-10-00
8	1	Lower Wash Manifold Weldment	05700-031-46-00
9	1	Suction Strain Weldment	05700-001-22-23
10	1	Suction Strain Bracket	05700-001-22-24
11	8	Locknut, 1/4-20 with Nylon Insert	05310-374-02-00
12	1	Scrap Screen	05700-003-07-76
13	1	Standpipe	05700-001-25-69
13a	1	Support, Ball Stop Lift (Not Shown)	05700-002-91-55
13b	1	Ball Stop Lift (Not Shown)	05700-002-91-54
14	1	Overflow Support Bracket	05700-001-27-55
14a	1	Shim, Overflow Support (Not Shown)	05700-002-96-48
15	1	O-ring	05330-400-05-00
16	2	Clamp, Hose 1 5/16" to 2 1/4"	04730-719-01-37
17	1	Discharge Hose	05700-011-88-24
18	1	Nipple	05700-021-34-84
19	1	Pump Support Bracket Assembly	05700-002-00-46
20	1	Clamp, Hose 5 5/8" to 6"	04730-011-34-90
21	1	Connector, 1/2"	05975-111-01-00
22	4	Nut, 3/8-16	05310-276-01-00
23	4	Lockwasher 3/8"	05311-276-01-00
24	1	Fitting, 1/4" Imperial Brass	05310-924-05-05

ITEM	QTY	DESCRIPTION	PART NUMBER
25	1	Probe, High Water	06680-200-02-68
26	1	Thermostat, Regulating	05930-510-02-79
	1	Kit, Wash Thermostat Replacement (Includes: thermostat, brass fitting, two jumper wires, & instructions)	06401-003-18-67
27	1	Cover, Wash Heater	05700-031-47-57
28	1	Decal, Warning-Disconnect Power	09905-004-08-16
29	2	Locknut, 10-24 with Nylon Insert	05310-373-01-00
30	1	Steam Coil	05700-031-41-37
31	1	Probe, Thermistor 4"	06685-004-17-26
32	1	Thermostat Mounting Bracket	05700-004-22-17
33	1	Thermostat, Elan Electric Dual	06685-004-17-27
34	1	Harness, 5-Connector	05700-004-23-78
35	1	Harness, 4-Connector	05700-004-23-79

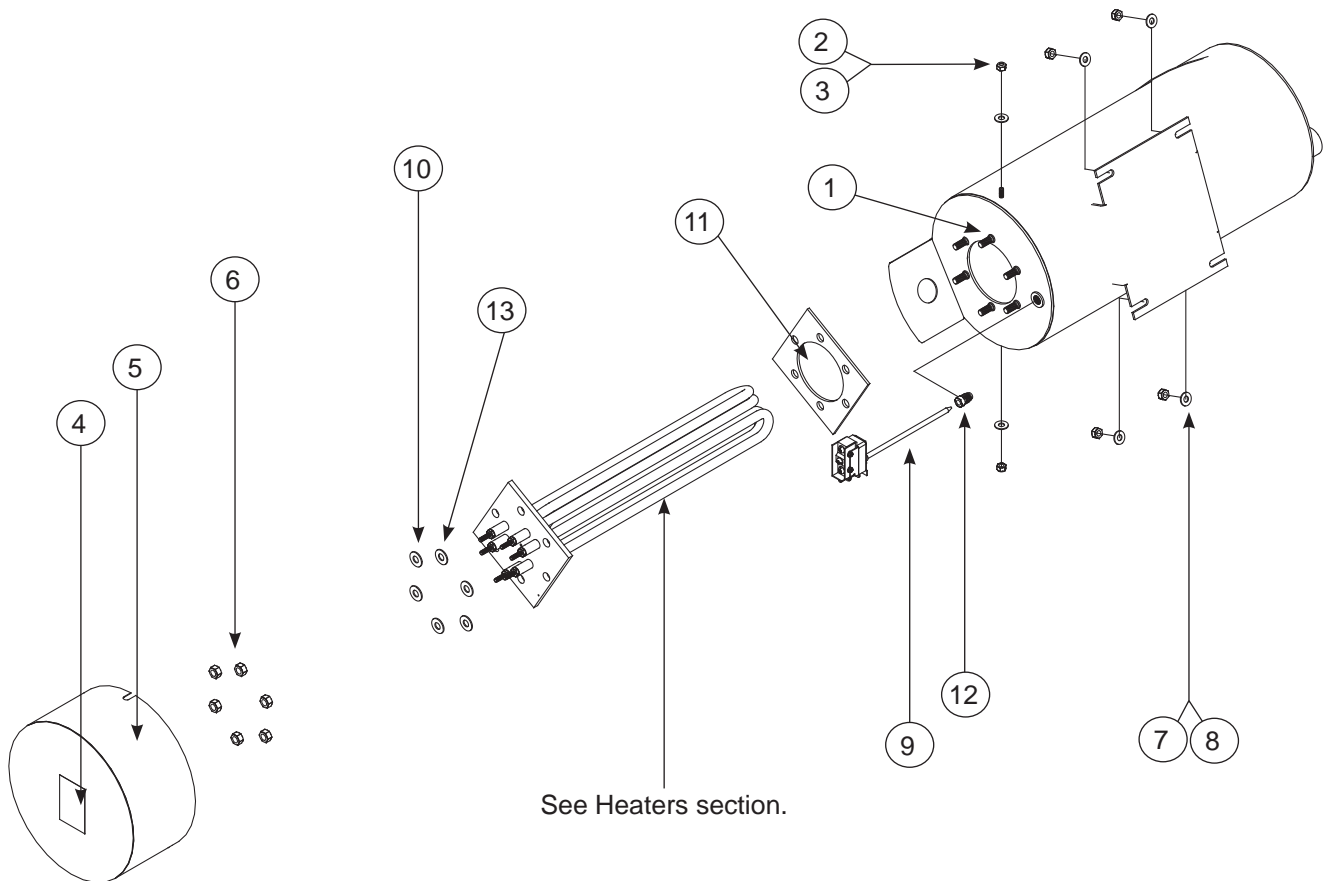


ITEM	QTY	DESCRIPTION	PART NUMBER
1	4	Bolt, 1/4-20 x 1/2"	05305-274-02-00
2	4	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-02-00
3	1	Front Panel	05700-002-36-65
4	1	Frame Weldment	05700-031-48-01
5	4	Bullet Foot	05340-108-01-03
6	4	Flanged Bullet Foot (Optional)	05340-002-34-86



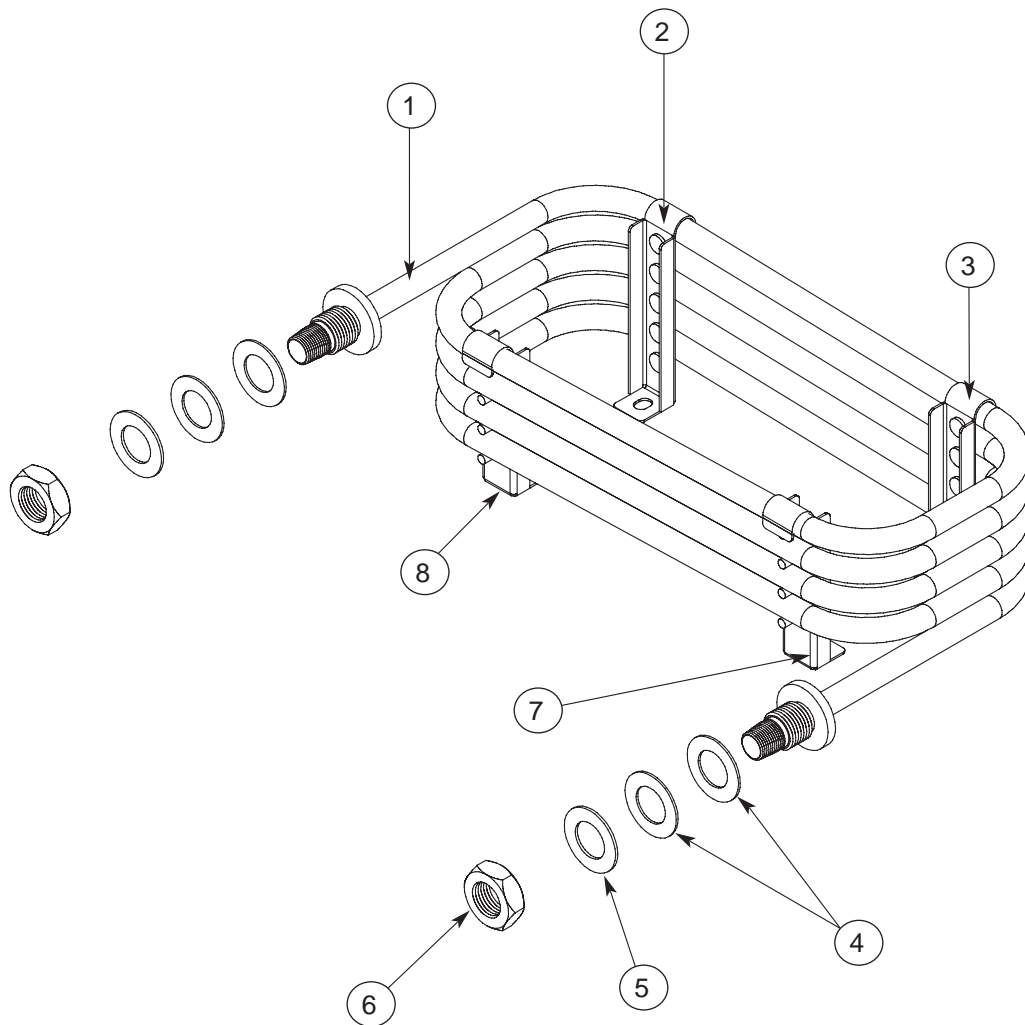
See Heaters section.

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Booster Tank Weldment	05700-001-22-02
2	2	Locknut, 10-24 with Nylon Insert	05310-373-01-00
3	2	Washer, #10 Flat	05311-173-01-00
4	1	Decal, Warning - Disconnect Power	09905-004-08-16
5	1	Booster Tank Cover Weldment	05700-001-29-30
6	6	Nut, Hex, 5/16-18	05310-275-01-00
7	4	Locknut, 1/4-20 with Nylon Insert	05310-374-01-00
8	4	Washer, 1/4", Flat	05311-174-01-00
9	1	Thermostat, Rinse	05930-510-03-79
	1	Kit, Rinse Thermostat Replacement (Includes: thermostat, brass fitting, two jumper wires, & instructions)	06401-011-66-55
10	6	Washer, 5/16"	05311-275-01-00
11	1	Gasket, Rinse Heater	05330-200-02-70
12	1	Fitting, 1/4" Imperial Brass	05310-924-02-05
13	1	Probe, Thermistor 4"	06685-004-17-26



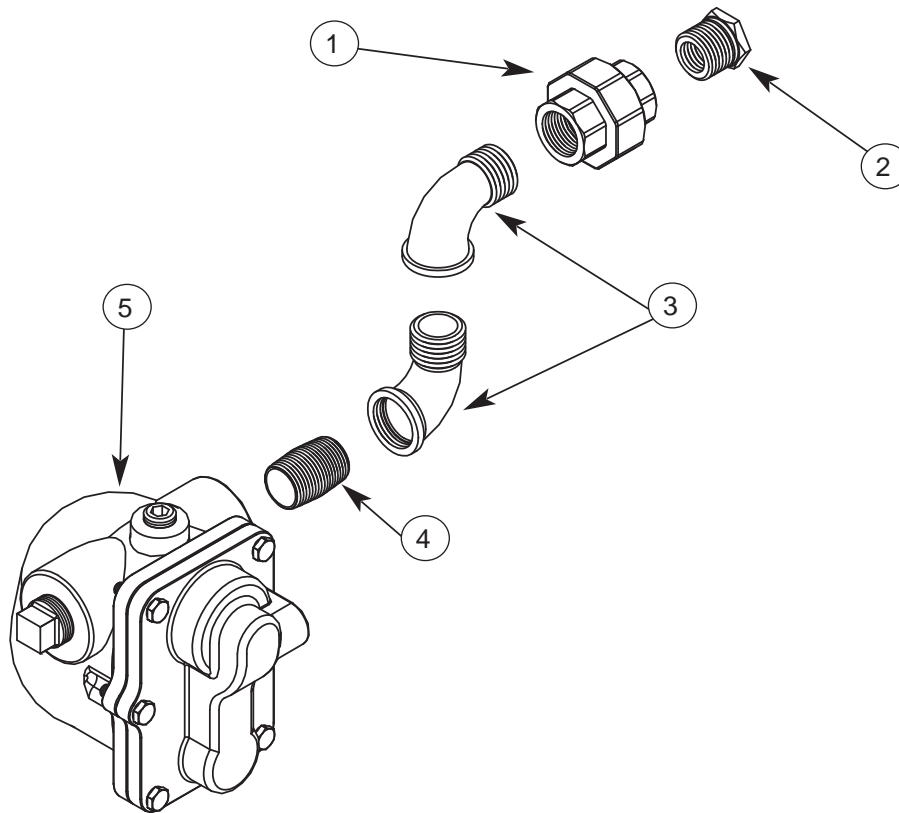
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Booster Tank Weldment	05700-003-90-50
2	2	Locknut, 10-24 with Nylon Insert	05310-374-01-00
3	2	Washer, #10 Flat	05311-174-01-00
4	1	Decal, Warning - Disconnect Power	09905-004-08-16
5	1	Booster Tank Cover Weldment	05700-001-29-30
6	6	Nut, Hex, 5/16-18	05310-275-01-00
7	4	Locknut, 1/4-20 with Nylon Insert	05310-374-01-00
8	4	Washer, 1/4", Flat	05311-174-01-00
9	1	Thermostat, Rinse	05930-510-03-79
	1	Kit, Rinse Thermostat Replacement (Includes: thermostat, brass fitting, two jumper wires, & instructions)	06401-011-66-55
10	6	Washer, 5/16"	05311-275-01-00
11	1	Gasket, Rinse Heater	05330-003-60-60
12	1	Fitting, 1/4" Imperial Brass	05310-924-02-05
13	1	Washer, 1/4" Split Lock	05311-274-01-00

TempStar S



ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Steam Coil Assembly	05700-002-08-62
1	1	Steam Coil Weldment	05700-021-41-38
2	1	Stand C, Steam Coil Support	05700-002-08-52
3	1	Stand D, Steam Coil Support	05700-002-08-53
4	4	Gasket, Steam Coil	05700-001-17-86
5	2	Washer, Steam Coil	05700-001-17-87
6	2	Adapter, Steam Coil Nut	05310-011-17-85
7	1	Stand A, Steam Coil Support	05700-002-08-50
8	1	Stand B, Steam Coil Support	05700-002-08-51

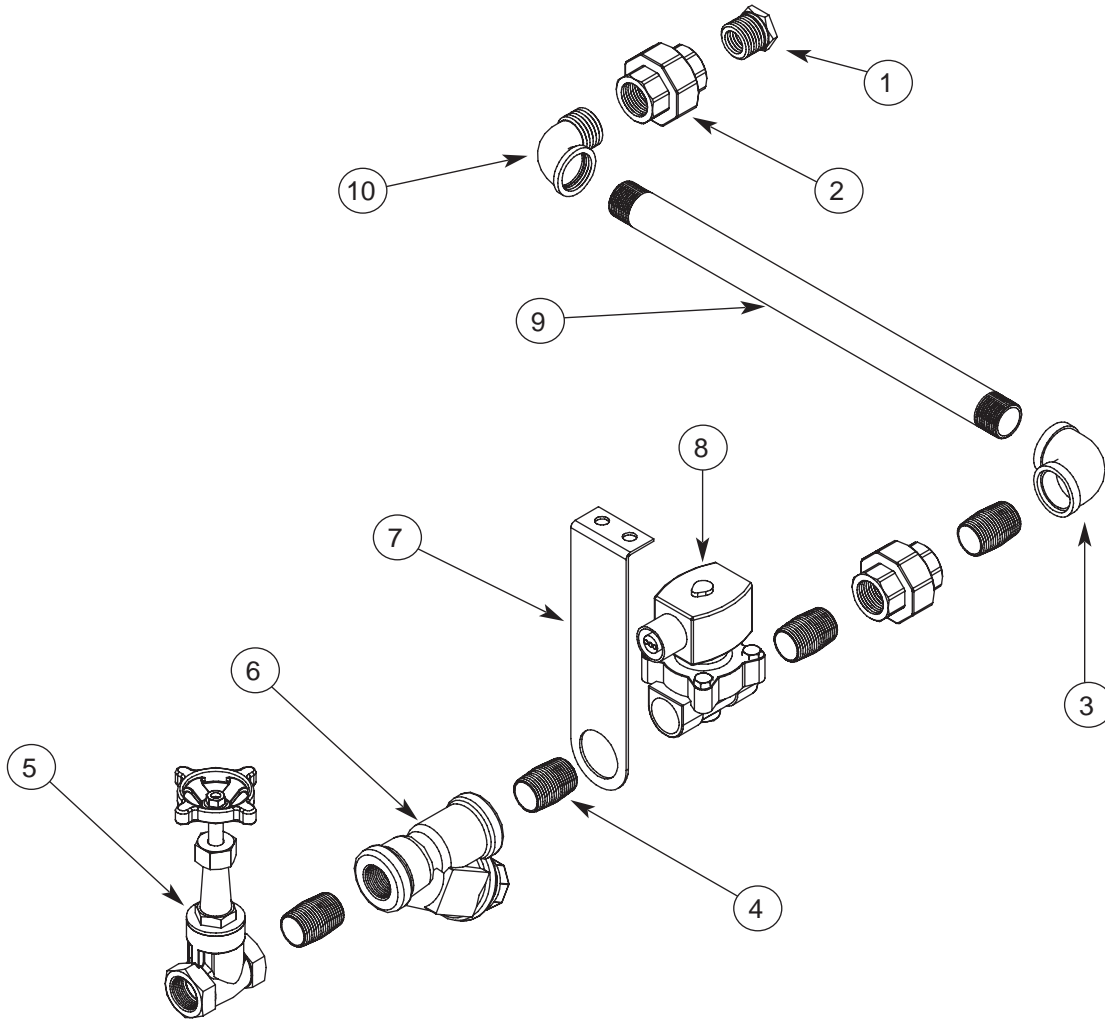
TempStar S

**NOTICE**

When servicing plumbing components, take care not to damage the threads of each individual item. Damaged threads can cause leaks and loss of pressure, which could adversely affect the performance of the dishmachine. It is strongly recommended that thread tape—used in conservative amounts—be applied to threads when joining components together. Do not use thread-sealing compounds, sometimes referred to as “pipe dope.” Compounds can be ejected from the threads during the tightening process and become lodged in key components, rendering them useless, including solenoid valves and pressure gauge ball valves.

ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Assembly	05700-002-01-55
1	1	Union, 3/4" NPT, Black Iron	04730-912-01-00
2	1	Bushing, Reducing, 3/4" to 1/2"	04730-911-02-34
3	2	Elbow, 3/4" 90° Street	04730-011-87-37
4	1	Nipple, Close, 3/4" NPT, Black Iron	04730-907-01-00
5	1	Steam Trap, 3/4" NPT	06680-500-02-77

TempStar S



ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Assembly	05700-002-01-60
1	1	Bushing, Reducing, 3/4" to 1/2"	04730-911-02-34
2	2	Union, 3/4" NPT, Black Iron	04730-912-01-00
3	1	Elbow, 3/4" NPT, Black Iron	04730-906-10-34
4	4	Nipple, Close, 3/4" NPT, Black Iron	04730-907-01-00
5	1	Gate Valve, 3/4" NPT	04820-100-19-00
6	1	Y-Strainer, 3/4" NPT, Black Iron	04730-217-01-32
7	1	Bracket, Steam Plumbing Support	05700-002-01-63
8	1	Solenoid Valve, Steam Plumbing, 220 V	04820-002-01-56
9	1	3/4" NPT Black Iron Pipe	05700-002-20-83
10	1	Elbow, 3/4" 90° Street	04730-011-87-37

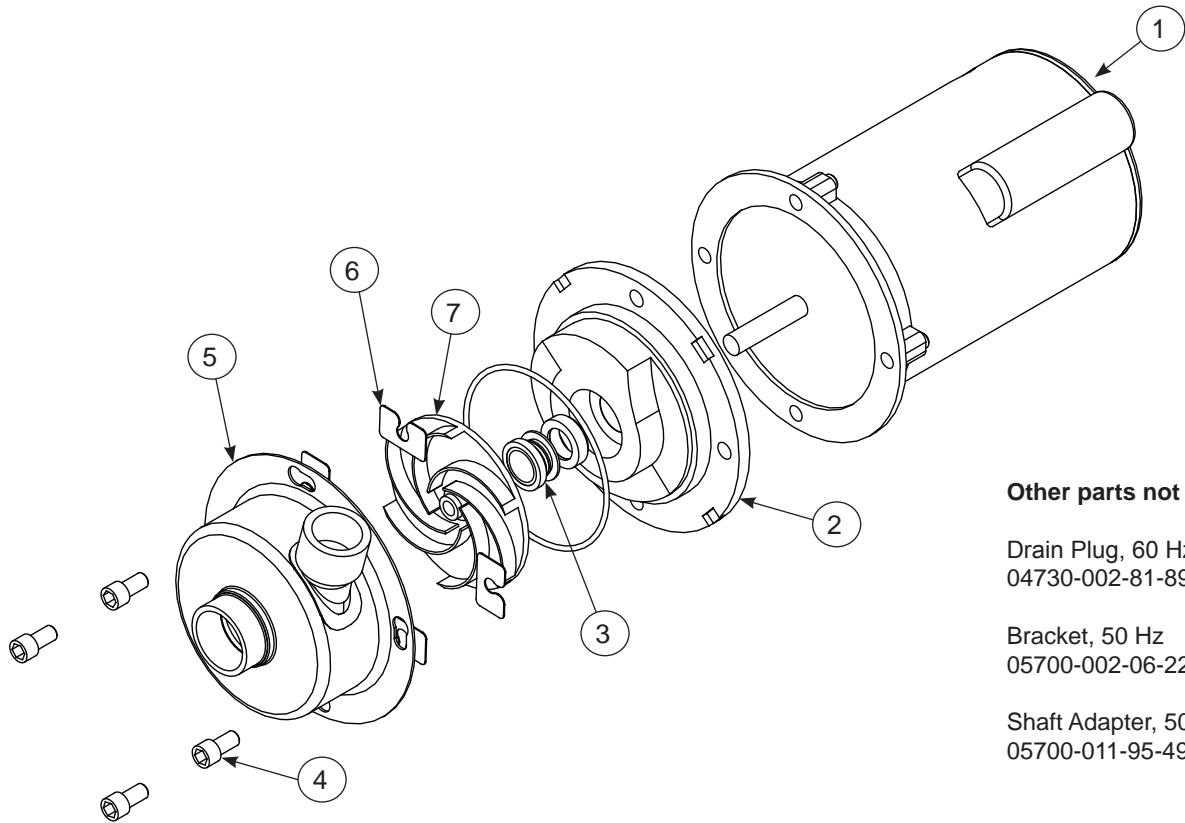
The models covered in this manual come supplied with various wash motor assemblies (a wash motor assembly includes the wash motor and the pump) depending on the characteristics of the machine. To ensure that you order the correct wash motor assembly for the model you are servicing, please refer to the following table:

TempStar/TempStar NB

Volts	Hz	Phase	Wash Motor Assembly
208	50	1	06105-002-19-87
208	50	3	06105-002-19-87
208	60	1	06105-004-24-80
208	60	3	06105-004-24-80
230	50	1	06105-002-19-87
230	50	3	06105-002-19-87
230	60	1	06105-004-24-80
230	60	3	06105-004-24-80
380	50	3	06105-002-41-24
415	50	3	06105-002-41-24
440	50	3	06105-002-41-24
460	60	3	06105-121-64-21

TempStar LT

Volts	Hz	Phase	Wash Motor Assembly
208	50	1	06105-002-19-87
208	50	3	06105-002-19-87
208	60	1	06105-004-24-80
208	60	3	06105-004-24-80
230	50	1	06105-002-19-87
230	50	3	06105-002-19-87
230	60	1	06105-004-24-80
230	60	3	06105-004-24-80
380	50	3	06105-002-41-24
415	50	3	06105-002-41-24
440	50	3	06105-002-41-24
460	60	3	06105-121-64-21



Other parts not shown

Drain Plug, 60 Hz
04730-002-81-89

Bracket, 50 Hz
05700-002-06-22

Shaft Adapter, 50 Hz
05700-011-95-49

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Motor Only, 60 Hz	06105-004-32-04
		Motor Only, 50 Hz	06105-002-85-36
2	1	Case O-ring, 60 Hz	05330-002-81-83
		Seal Plate, 60 Hz	05700-002-81-87
		Gasket, 50 Hz	05330-002-41-48
3	1	Mechanical Seal, 60 Hz	05330-002-34-22
		Seal, 50 Hz	05330-002-06-21
4	1	Case Capscrew, 60 Hz	05305-002-81-88
5	1	Pump Casing 60 Hz	05700-002-85-01
6	1	Shim Kit, 60 Hz	05700-002-82-58
7	1	Impeller Assembly, 60 Hz	05700-002-81-86
		Impeller Assembly, 50 Hz	05700-002-41-49

TempStar

Volts	Hz	Phase	Wash Heater	Rinse Heater (12 kW)	Rinse Heater (14 kW)
208	50	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
208	50	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
208	60	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
208	60	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
230	50	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
230	50	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
230	60	1	04540-121-47-39	04540-121-47-40	04540-121-63-38
230	60	3	04540-121-47-39	04540-121-47-40	04540-121-63-38
380	50	3	04540-002-44-31	04540-002-44-32	04540-121-63-38
415	50	3	04540-002-43-09	04540-002-43-10	N/A
440	50	3	04540-121-65-99	04540-100-01-15	04540-121-63-39
460	60	3	04540-121-65-99	04540-100-01-15	04540-121-63-39

TempStar LT

Volts	Hz	Phase	Wash Heater
208	50	1	04540-121-47-39
208	50	3	04540-121-47-39
208	60	1	04540-121-47-39
208	60	3	04540-121-47-39
230	50	1	04540-121-47-39
230	50	3	04540-121-47-39
230	60	1	04540-121-47-39
230	60	3	04540-121-47-39
380	50	3	04540-002-44-31
440	50	3	04540-121-65-99
460	60	3	04540-121-65-99

TempStar NB

Volts	Hz	Phase	Wash Heater
208	50	1	04540-121-47-39
208	50	3	04540-121-47-39
208	60	1	04540-121-47-39
208	60	3	04540-121-47-39
230	50	1	04540-121-47-39
230	50	3	04540-121-47-39
230	60	1	04540-121-47-39
230	60	3	04540-121-47-39
380	50	3	04540-002-44-31
415	50	3	04540-002-43-09
440	50	3	04540-121-65-99
460	60	3	04540-121-65-99

Heater Conversion Kits

1 to 3 Phase, 208-230 V/50 Hz
Conversion Kit: 06401-003-15-59

3 to 1 Phase, 208-230 V/50 Hz
Conversion Kit: 06401-003-16-60

1 to 3 Phase, 208-230 V/60 Hz
Conversion Kit: 06401-003-16-61

3 to 1 Phase, 208-230 V/60 Hz
Conversion Kit: 06401-003-16-62

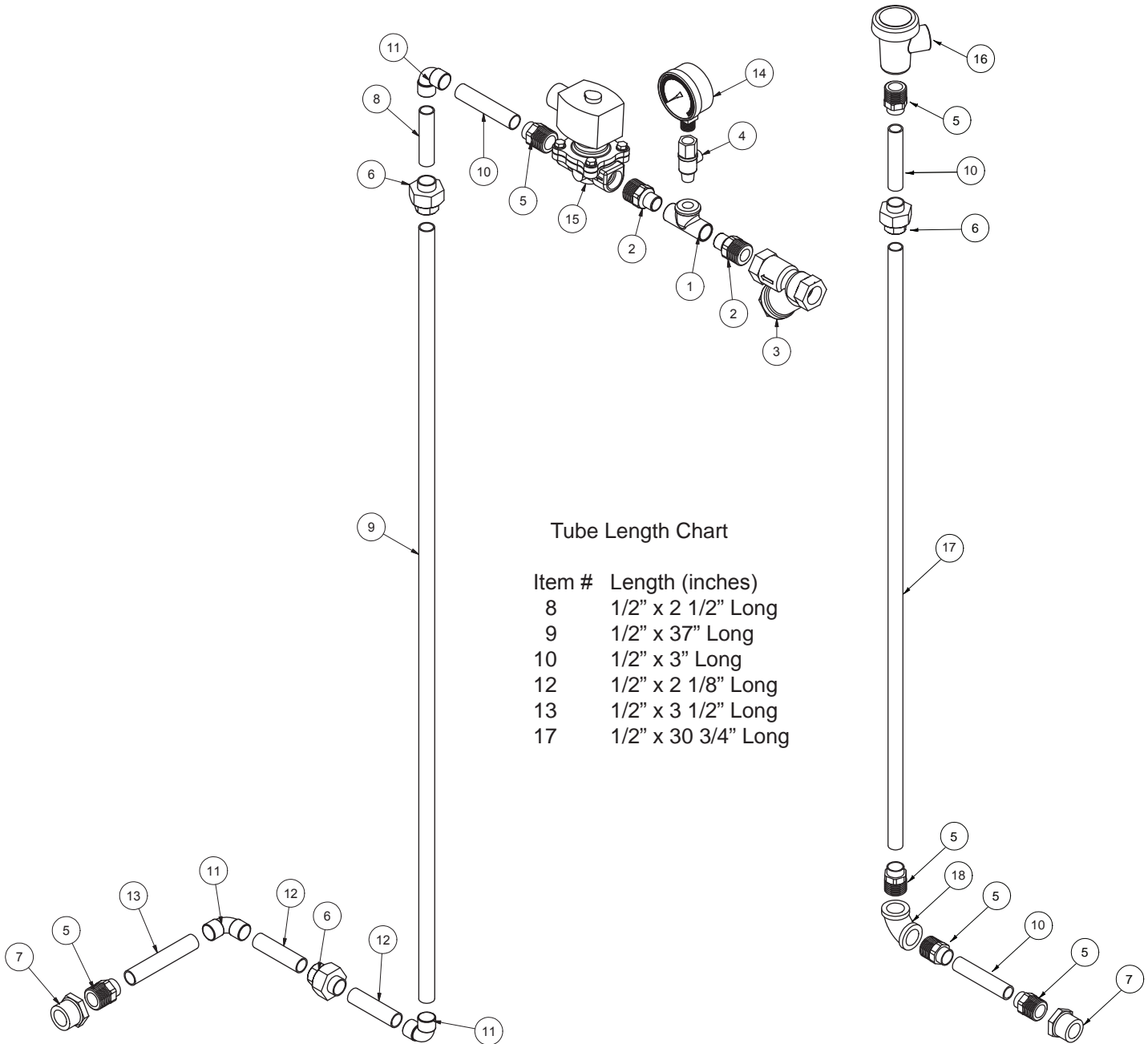
TempStar with Round-Flanged Rinse Heater

Volts	HZ	Phase	Wash Heater	Rinse Heater (12 kW)
208	50	1	04540-003-58-27	04540-003-58-28
208	50	3	04540-003-58-27	04540-003-58-28
208	60	1	04540-003-58-27	04540-003-58-28
208	60	3	04540-003-58-27	04540-003-58-28
230	50	1	04540-003-58-27	04540-003-58-28
230	50	3	04540-003-58-27	04540-003-58-28
230	60	1	04540-003-58-27	04540-003-58-28
230	60	3	04540-003-58-27	04540-003-58-28

TempStar

Complete Inlet Plumbing Assembly
05700-003-60-74

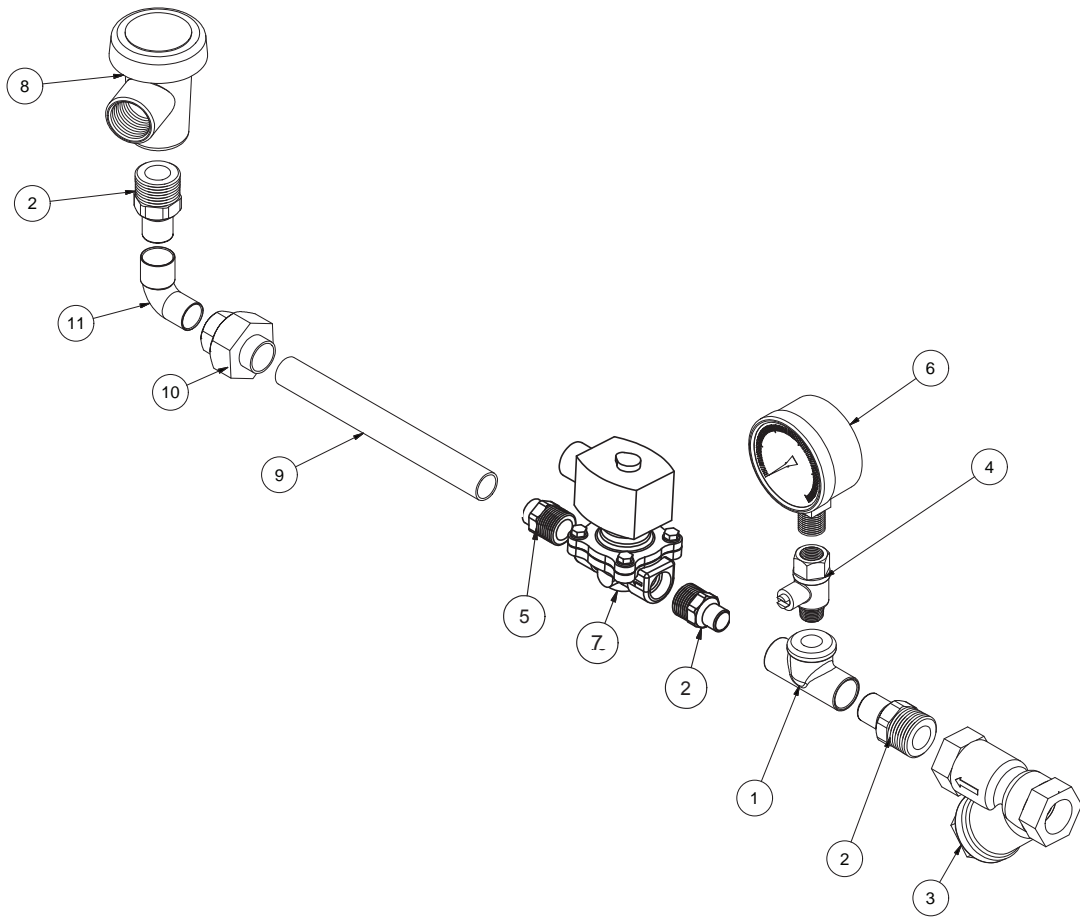
Complete Outlet Plumbing Assembly
05700-003-60-75

**NOTICE**

When servicing plumbing components, take care not to damage the threads of each individual item. Damaged threads can cause leaks and loss of pressure, which could adversely affect the performance of the dishmachine. It is strongly recommended that thread tape—used in conservative amounts—be applied to threads when joining components together. Do not use thread-sealing compounds, sometimes referred to as "pipe dope." Compounds can be ejected from the threads during the tightening process and become lodged in key components, rendering them useless, including solenoid valves and pressure gauge ball valves.

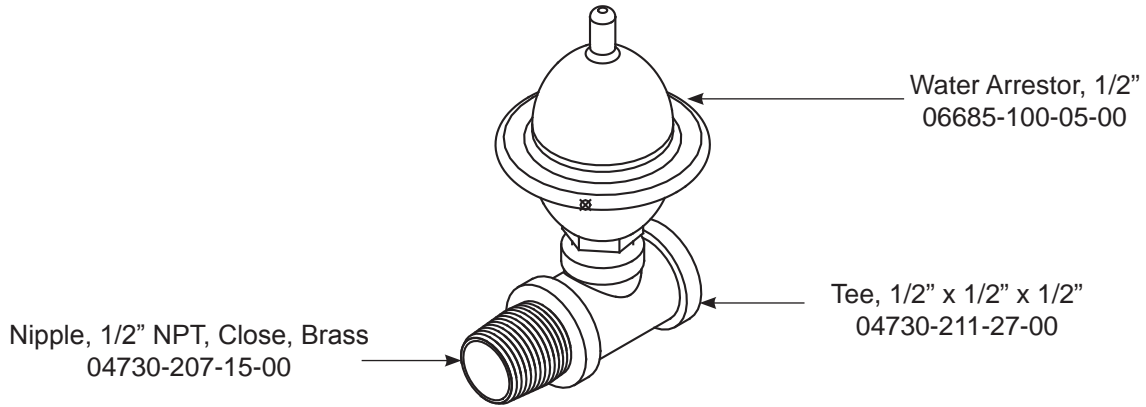
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Fitting, Tee, 1/2" x 1/2" x 1/4"	04730-411-25-01
2	2	Adapter, 1/2" MNPT x CU Male	04730-011-59-53
3	1	Y-Strainer, 1/2"	04730-217-01-10
4	1	Ball Valve, Bronze, 1/4" NPT	04810-011-72-67
5	6	Adapter, 1/2"	04730-401-03-01
6	3	Union, 1/2"	04730-412-05-01
7	1	Bushing, Hex 3/4" MNPT - 1/2" FNPT Brass	04730-002-56-27
8	3	Tube, Copper 1/2" x 2 1/2"	05700-002-17-38
9	2	Tube, Copper 1/2" x 37"	05700-003-60-80
10	1	Tube, Copper 1/2" x 3"	05700-001-05-21
11	3	Elbow, 1/2" CU x CU, 90B	04730-406-01-01
12	2	Tube, Copper 1/2" x 2.406"	05700-003-60-79
13	1	Tube, Copper 1/2" x 3 1/2"	05700-003-60-78
14	1	Pressure Gauge, 0-100 PSI	06685-111-88-34
15	1	Valve, 1/2" 208/60	04810-003-71-56
16	1	Vacuum Breaker, 1/2" NPT	04820-003-06-13
17	1	Tube, Copper 1/2" x 30 3/4"	05700-003-60-81
18	1	Elbow, 1/2" NPT 90-Degree Brass	04730-011-42-96

TempStar LT & TempStar NB

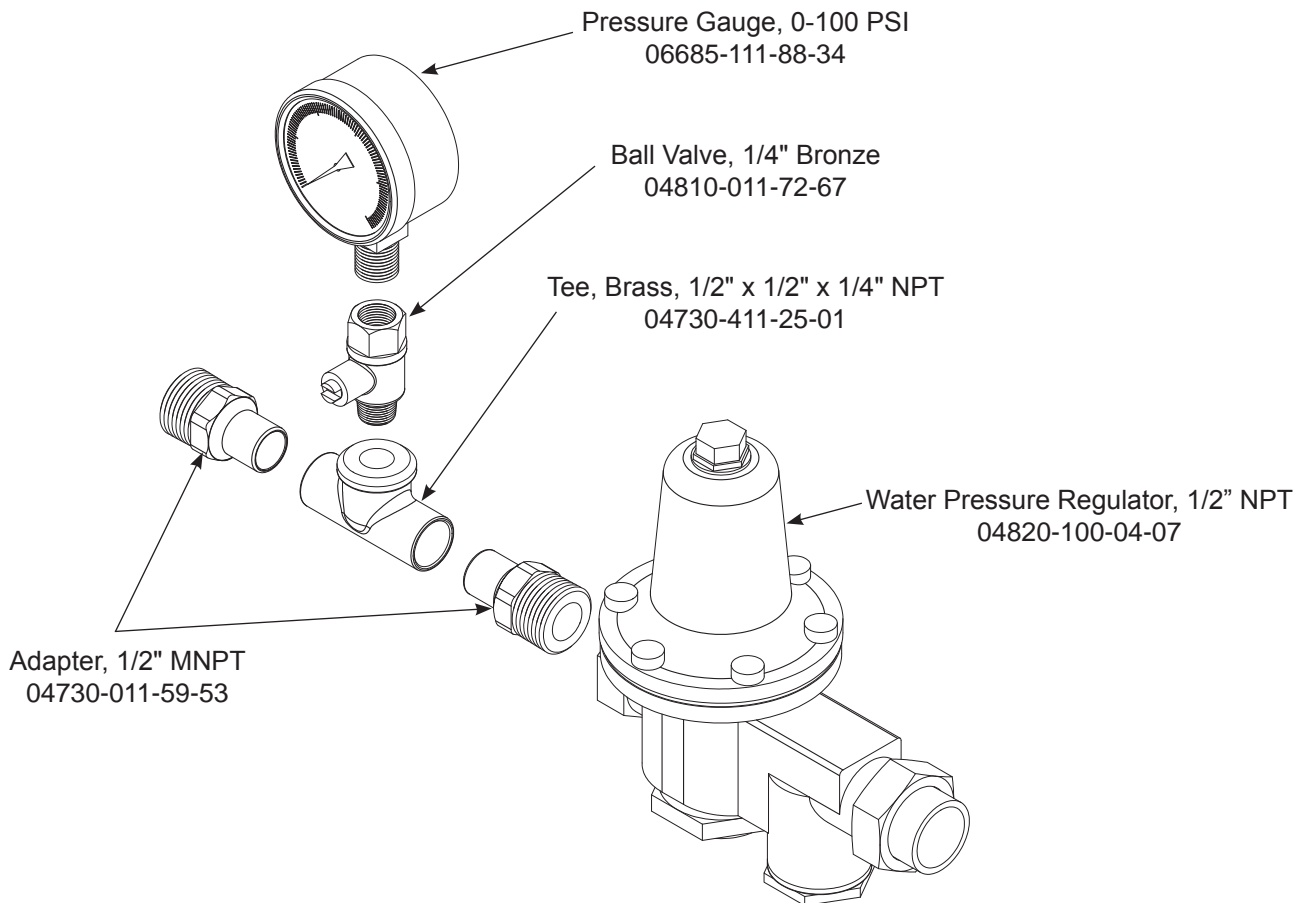


ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Assembly	05700-003-60-73
1	1	Tee, Brass, 1/2" x 1/2" x 1/4" NPT	04730-411-25-01
2	3	Adapter, 1/2" MNPT x CU Male	04730-011-59-53
3	1	Y-Strainer, 1/2"	04730-217-01-10
4	1	Ball Valve, Bronze, 1/4" NPT	04810-011-72-67
5	1	Adapter, 1/2" Male/CU to MSPS	04730-401-03-01
6	1	Pressure Gauge, 0-100 PSI	06685-111-88-34
7	1	Valve, Solenoid, 1/2" NPT 208-240 V	04810-003-71-56
8	1	Vacuum Breaker, 1/2" NPT	04820-003-06-13
9	1	Tube, Copper 1/2" x 5 3/4"	05700-002-91-03
10	1	Union, 1/2"	04730-412-05-01
11	1	Elbow, 1/2" 90-Degree CU to MSPS	04730-406-31-01

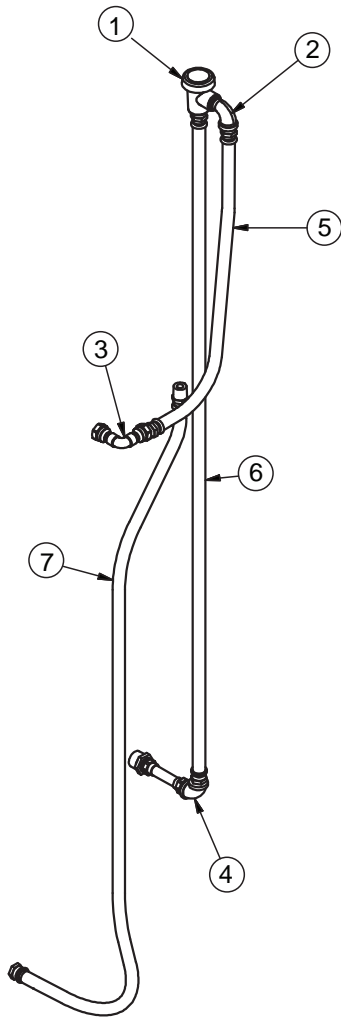
SHOCK ABSORBER (WATER ARRESTOR) OPTION



PRESSURE REGULATOR OPTION



TempStar Ventless



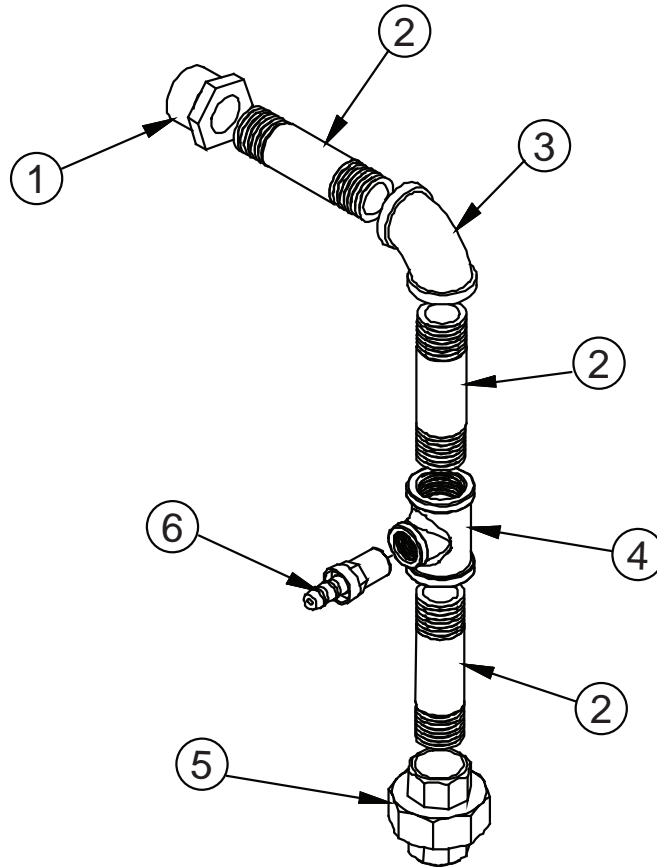
RINSE INJECTOR
09515-004-22-73



Hose Pac Assembly
05700-004-20-01

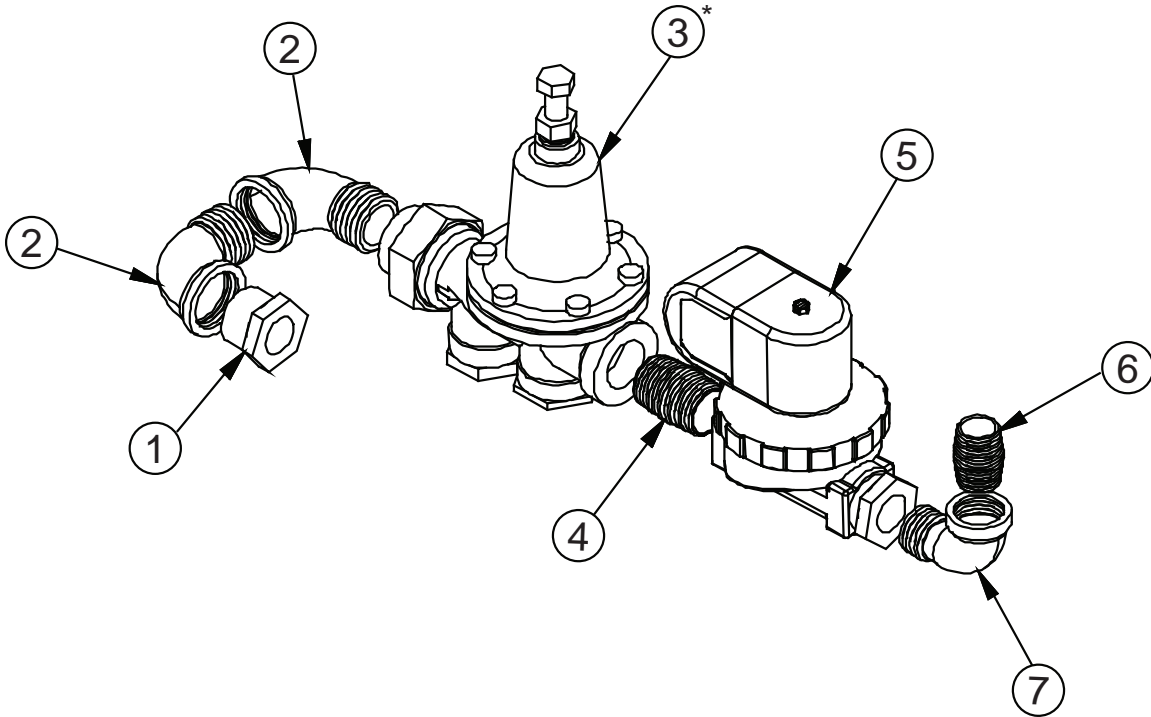
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Vacuum Breaker, 1/2" Brass	04820-003-06-13
2	1	Elbow, 90-Degree, 1/2" Street Brass	04730-206-08-00
3	1	Plumbing, Rinse Injector	05700-004-19-83
4	1	Plumbing, Outlet with Heat Exchanger	05700-004-19-12
5	1	Hose, 1/2" ID x 24" LG Red	05700-004-19-89
6	1	Hose, 1/2" ID x 60" LG Red	05700-004-19-90
7	1	Hose, 1/2" ID x 58" LG Blue	05700-004-19-91

TempStar Ventless



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Bushing, Hex 3/4" to 1/2" Brass	04730-002-56-27
2	3	Nipple, Brass 1/2" x 3" NPT	04730-004-20-10
3	1	Elbow, 1/2" NPT, 90-Degree Brass	04730-011-42-96
4	1	Tee, 1/2" x 1/2" x 1/4" FNPT	04730-002-22-56
5	1	Union, 1/2" x 1/2" Brass	04730-003-62-44
6	1	Fitting, 1/4" Barb, 1/4" MNPT Swivel	04730-011-95-41
7	1	Hose, 1/2" ID x 58" Blue	05700-004-19-91

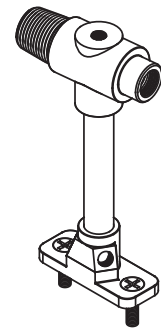
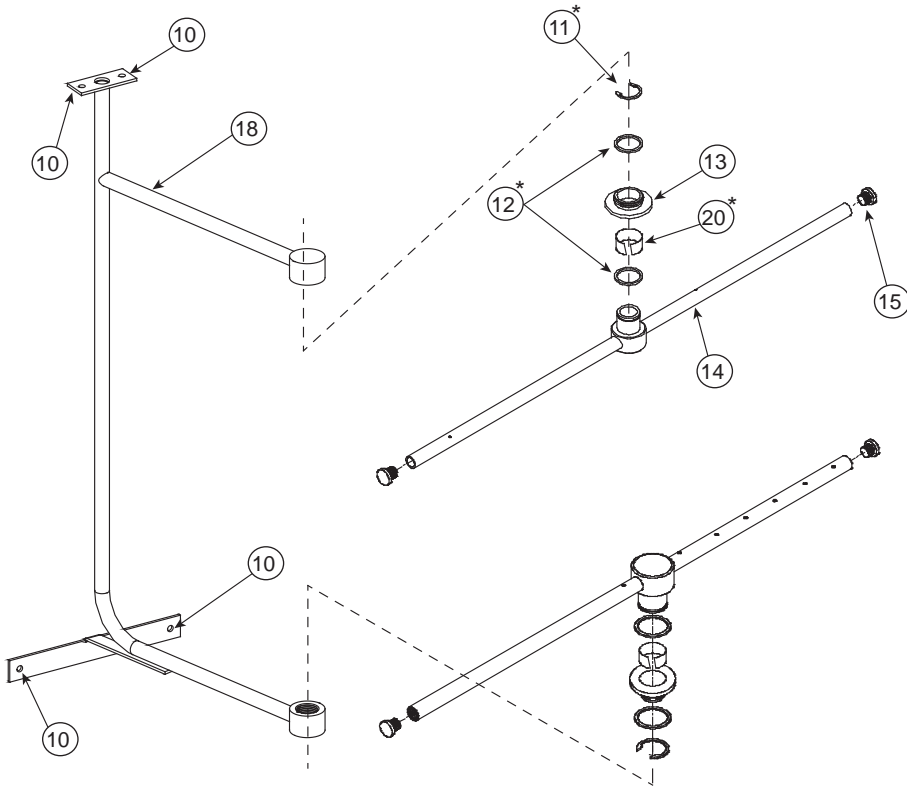
TempStar Ventless



**Pressure Regulator comes standard on the Ventless unit.*

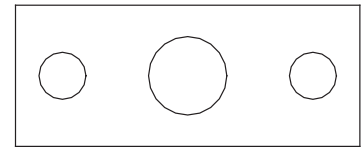
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Bushing, Hex 3/4" to 1/2" Brass	04730-002-56-27
2	3	Elbow, 3/4" NPT, 90-Degree Street Brass	04730-206-04-34
3	1	Pressure Regulator, 3/4"	06685-011-58-22
4	1	Nipple, 3/4" NPT x 1 3/8" Closed Brass	04730-207-34-00
5	1	Solenoid Valve, 220 V, 3/4"	04810-100-03-18
6	1	Nipple, 1/2" Closed Brass	04730-207-15-00
7	1	Elbow, 1/2", 90-Degree Street Brass	04730-206-08-00

FINAL RINSE ARMS & MANIFOLD



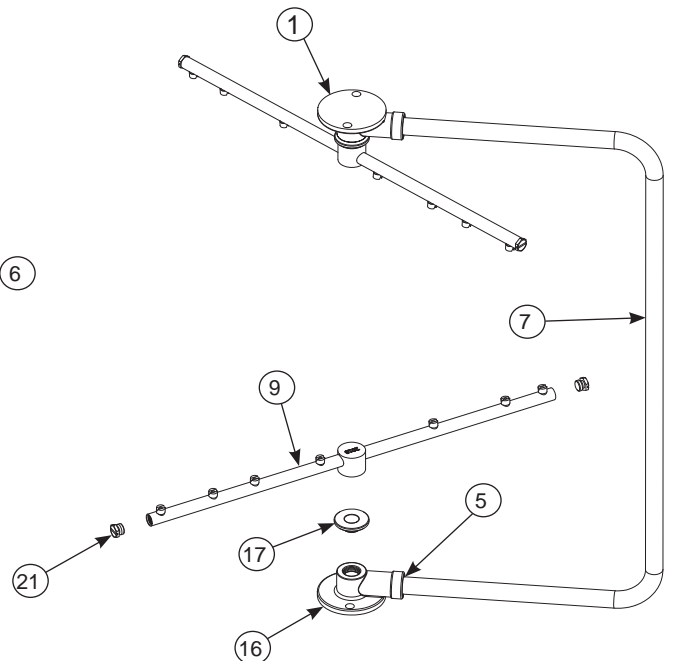
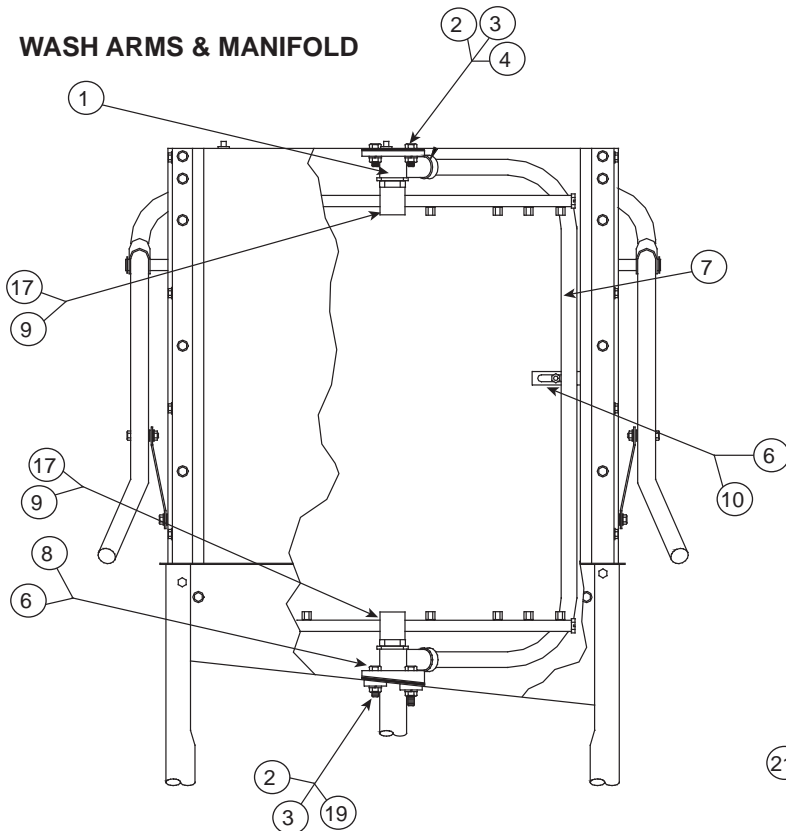
Rinse Injector Weldment
1 per machine
05700-002-56-75

Plug, 1/8" NPT, Brass
3 per Rinse Injector
04730-209-07-37



Rinse Injector Gasket
2 per machine
05330-111-42-81

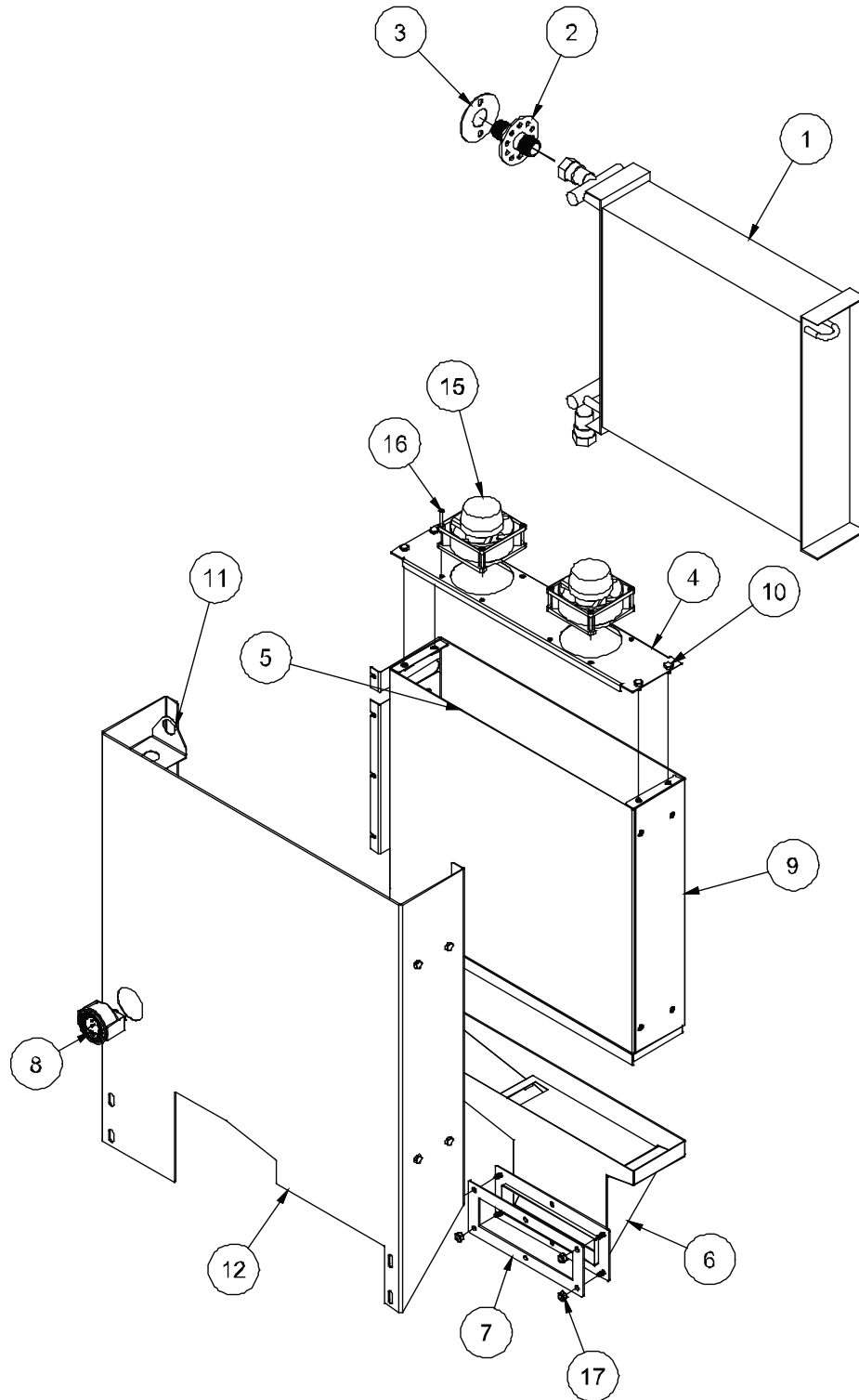
WASH ARMS & MANIFOLD



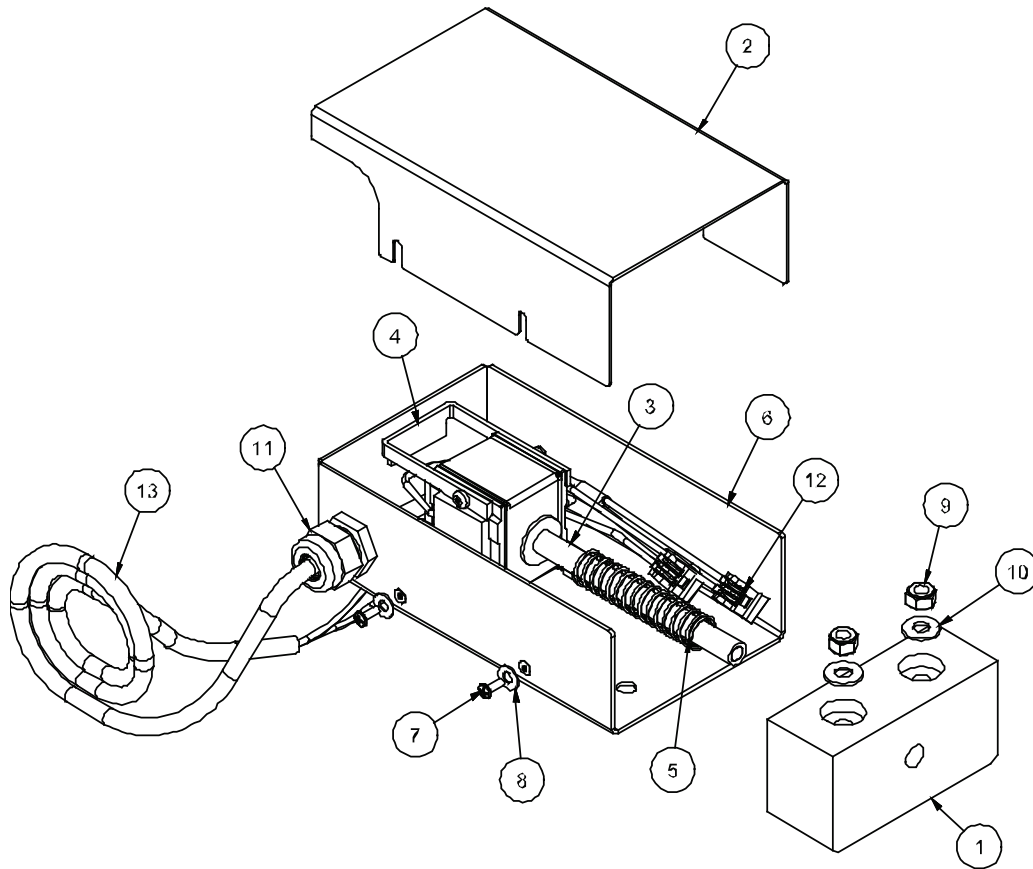
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Upper Manifold	05700-031-34-82
2	4	Nut, 3/8-16 Hex	05310-276-01-00
3	4	Lockwasher, 3/8"	05311-276-01-00
4	2	Bolt, Hex 3/8-16 x 7/8"	05306-011-36-95
5	2	O-ring	05330-111-35-15
6	1	Positioning Bracket, Manifold Tube	05700-011-34-63
7	1	Tube, Wash Manifold	05700-131-15-07
8	2	Gasket, Manifold	05700-111-35-03
9	2	Wash Arm	05700-004-13-13
10	5	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
11*	2	Clip, Retaining, Rinse Head Bushing	05340-112-01-11
12*	4	Rinse Arm Washer	05330-011-42-10
13	2	Bushing, Rinse Head	05700-021-33-84
14	2	Rinse Arm	05700-003-58-94
15	4	Rinse Arm End-cap	04730-111-60-41
16	1	Lower Wash Manifold	05700-031-46-00
17	2	Bearing Assembly	05700-021-35-97
18	1	Rinse Manifold Assembly	05700-021-47-61
19	2	Bolt, Hex 3/8-16 x 1 1/4"	05305-276-10-00
20*	2	Bearing, Rinse Head	03120-004-12-13
21	4	Wash Arm End-cap	05700-011-35-92

*Rinse Arm Bearing Kit
(Includes items 11, 12, and 20)
06401-004-33-51

See Maintenance section for [replacement instructions](#).

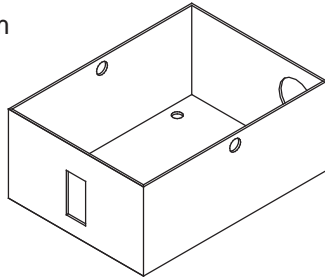


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Coil, Heat Exchanger	04420-004-19-61
2	1	Inlet, Cold Water	05700-004-19-01
3	1	Ring, Water Inlet	05700-004-19-24
4	1	Plate, Fan Mounting	05700-004-18-07
5	1	Upper Shroud	05700-004-18-06
6	1	Exhaust Box	05700-004-18-04
7	1	Gasket, Heat Exchanger	05330-004-18-22
8	1	Gauge	06680-011-86-42
9	1	Coil Box Back	05700-004-18-03
10	12	Bolt, 1/4-20 x 3/8" Hex	05305-274-20-00
11	1	Bracket, Vacuum Breaker	05700-004-18-91
12	1	Shroud, Hear Exchanger	05700-004-18-92
13	6	Nut, Lock 10-24 Hex with Nylon Insert	05310-373-01-00
14	6	Washer, Flat	05311-173-02-00
15	2	Fan, 3.62 Square, 85-236 V AC Corrosion-Resistant	05999-004-19-46
16	8	Screw, 6-32 x 1 1/2"	05305-004-19-80
17	4	Nut, Lock 1/4-20 Hex with Nylon Insert	05310-374-01-00

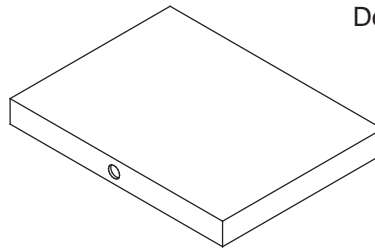


ITEM	QTY	DESCRIPTION	PART NUMBER
		Door Interlock Assembly	05700-004-23-06
1	1	Guide Block, Door Lock	09330-004-22-72
2	1	Cover, Door Lock Mounting	05700-004-22-80
3	1	Rod, Interlock Weldment	05700-004-23-15
4	1	Solenoid, Horizontal 1" Push	04820-004-24-11
5	1	Spring, Compression	05935-004-24-10
6	1	Base, Door Interlock Box	05700-004-24-25
7	8	Screw, 3/8" Pan Head	05305-171-02-00
8	8	Washer, Flat	05311-173-02-00
9	2	Locknut, 1/4-20	05310-374-01-00
10	2	Washer, 1/4-20	05311-174-01-00
11	1	Fitting	05975-011-59-50
12	2	Connector, 2-Conductor	05935-004-03-49
13	1	Cord, SJ 55" LG	05700-004-24-31

Door Interlock Box Bottom
05700-001-21-26

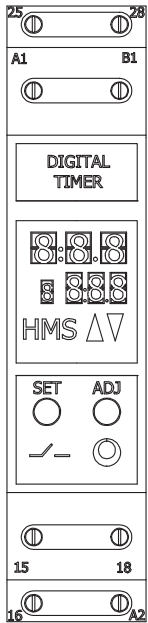


Door Interlock Box Cover
05700-001-21-27

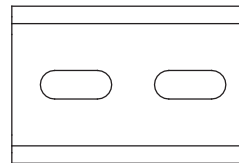


OTHER DOOR INTERLOCK (SDI) COMPONENTS (NOT SHOWN):

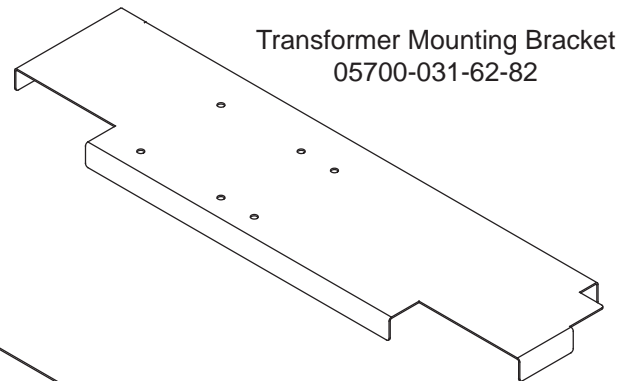
DESCRIPTION	PART NUMBER
Pipe Clamp (found on the side of the machine)	05700-000-35-05
Solenoid, Electrical Interlock Option	04810-100-61-33
Relay	05945-111-47-51



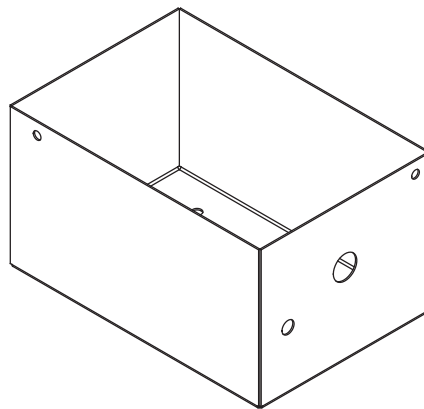
Exhaust Fan Control
Delay Timer
05945-004-22-78



Exhaust Fan Control
2" Din Rail
05700-002-36-09

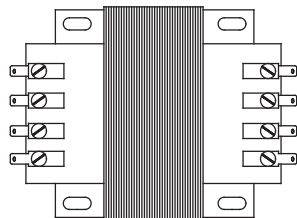


Transformer Mounting Bracket
05700-031-62-82

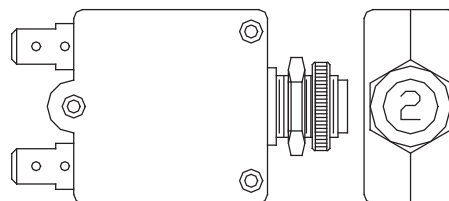


Transformer Mounting Box
05700-002-10-01

Transformer Mounting Box Top
(Not Shown)
05700-000-78-53



415/440/460 V Transformer
05950-111-65-93



2 Amp Circuit Breaker
05925-111-64-18

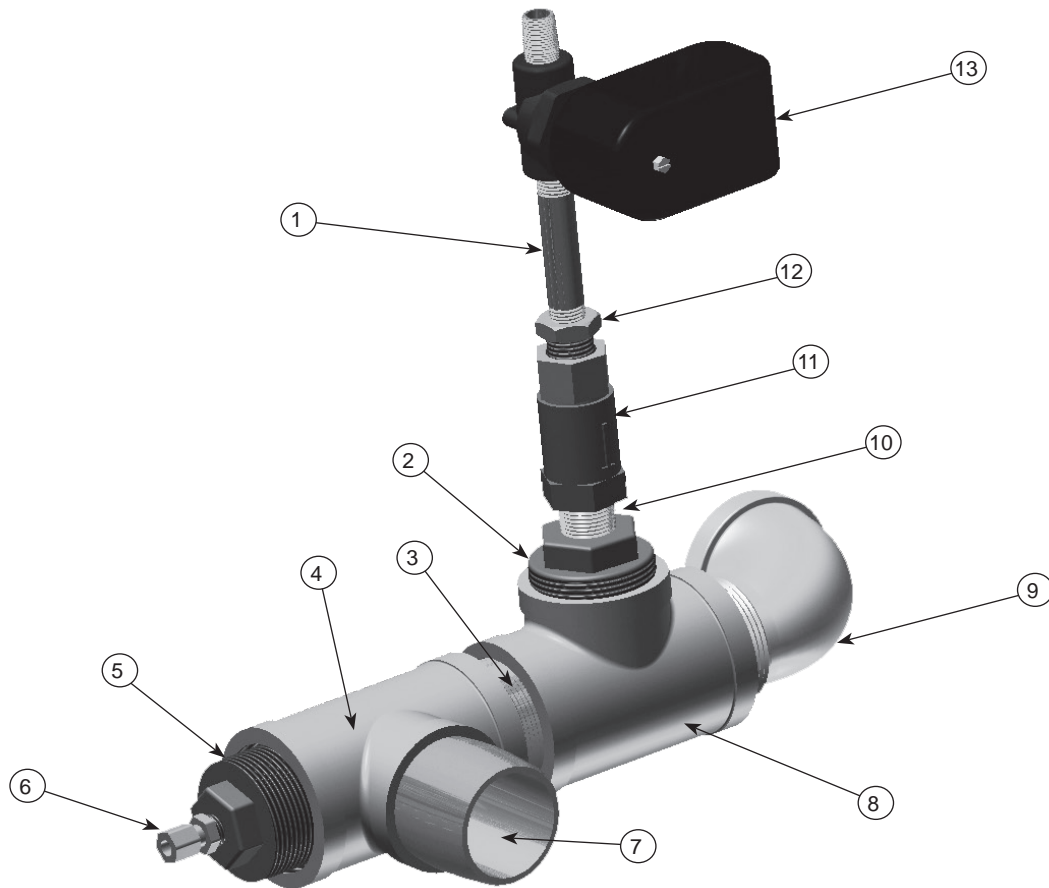
380 V Transformer
05950-111-64-17

A Go Box is a kit of the most-needed parts for a particular model or model family to successfully effect a repair in the first call, 90% or more of the time.

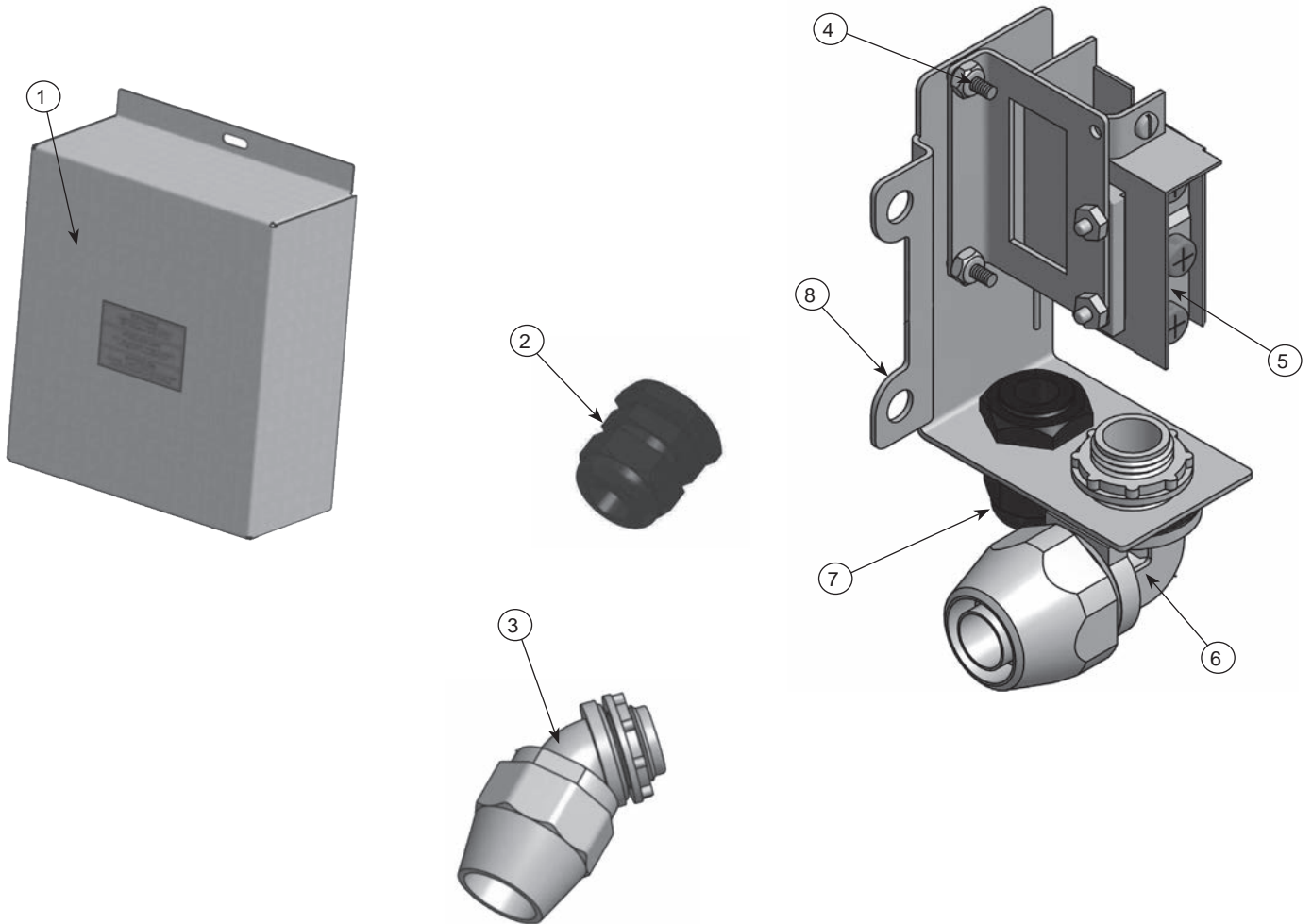
The following components can be ordered together using part number 06401-003-62-04

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Contactora, Rinse/Wash Heater	05945-109-01-69
2	1	Contactora, Wash Motor	05945-002-74-20
3	1	Gauge, Pressure, 0-100 PSI	06685-111-88-34
4	1	Thermometer	06685-004-31-46
5	1	ELAN Thermostat	06685-004-17-27
6	1	Thermostat, Hi-Limit	05930-011-49-43
7	1	Liquid Level Control	06680-200-08-21
8	1	Probe, Water Level Sensing	06680-200-02-68
9	1	Magnet, Door	05930-111-51-68
10	6	Glide, Door Edge	05700-111-33-59
11	2	O-ring Wash Manifold	05330-111-35-15
12	1	Relay, Control 240 V 50/60 Hz	05945-111-47-51
13	1	Seal, Mechanical Pump	05330-002-34-22
14	1	O-ring, Wash Pump Gasket	05330-002-81-83
15	1	Door Switch, Magnetic Reed	05930-111-51-69
16	2	Snap Ring, Retaining, Rinse Arm	05340-112-01-11
17	1	Bearing Assembly, Wash Arm	05700-021-35-97
18	1	Timer, Universal	06401-003-80-83
19	4	Washer, Rinse Arm	05330-011-42-10
20	1	Vacuum Breaker, 1/2" Brass	04820-003-06-13
21	1	Solenoid Valve, 1/2", 208-240 V	04810-003-71-56
22	1	Drain Seat O-ring	05330-400-05-00
23	1	Rotary Selector Switch	05930-003-97-61
24	1	Operation Switch	05930-301-53-00
25	1	Power Switch	05930-011-49-55
26	2	Rinse Head Bearing	03120-004-12-13

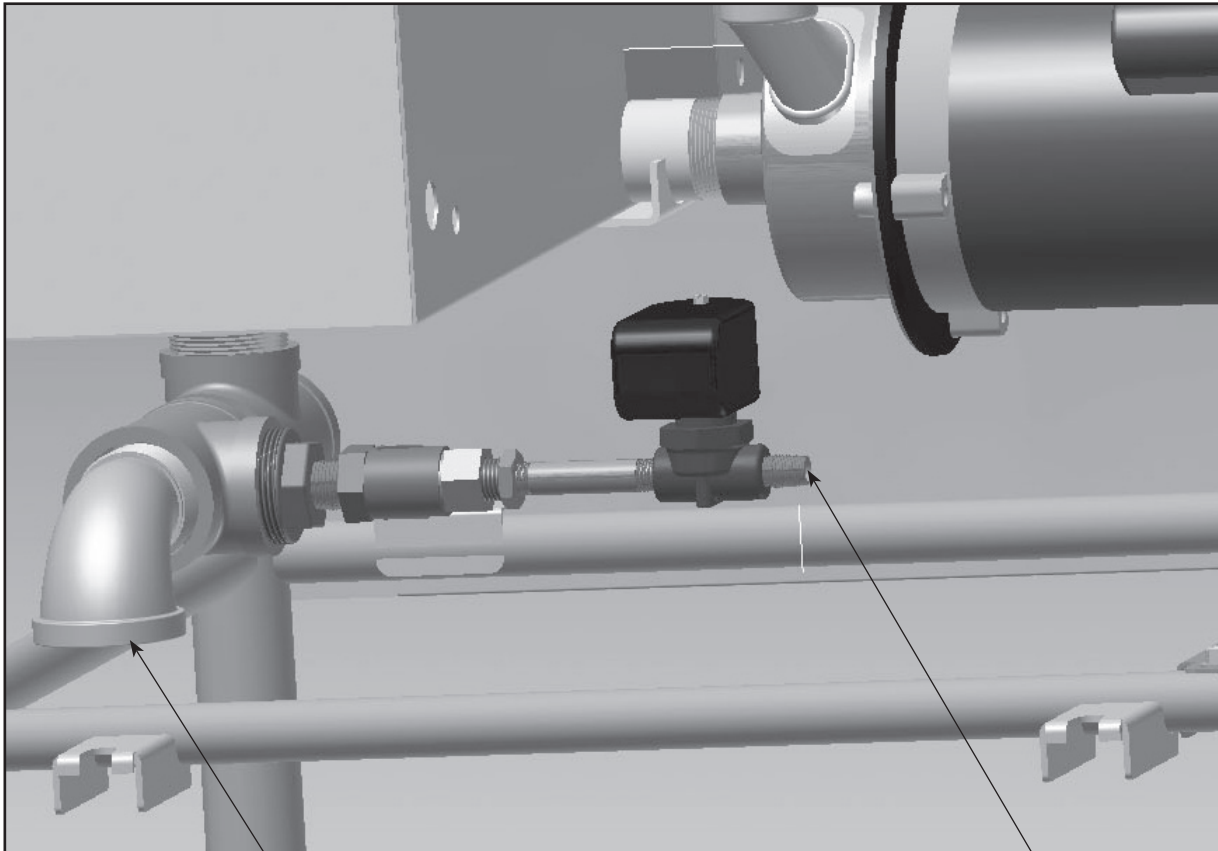
* 1 Pump & Motor Assembly 06105-004-24-80
Special pricing available when purchased with the Go Box. Call for details.



ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Drain Quench Assembly	05700-004-07-93
1	1	Nipple, 1/4" NPT x 3" Brass	04730-004-08-07
2	1	Reducer, 1 1/2" x 1/2" Hex Brass	04730-002-55-75
3	1	Nipple, 1 1/12" Brass	04730-207-40-00
4	1	Tee, 1 1/2" Brass	04730-011-69-93
5	1	Reducer, 1 1/2" x 1/4" Hex Brass	04730-002-55-76
6	1	Union, 1/4" Modified	05700-001-16-52
7	1	Nipple, 1 1/2" Brass	04730-207-40-00
8	1	Tee, 1 1/2" Brass	04730-011-69-93
9	1	Elbow, 1 1/2" NPT, Female	04730-206-32-00
10	1	Nipple, 1/2" Brass	04730-207-15-00
11	1	Valve, Check 1/2"	04820-002-55-77
12	1	Reducer, 1/2" x 1/4" Brass	04730-003-62-16
13	1	Solenoid Valve, 1/4", 240 V	04810-002-31-09



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Wash Heater Cover	05700-031-47-57
2	1	Large Fitting	05975-011-65-51
3	1	Conduit Fitting, 45-Degree, 1/2"	05975-011-45-23
4	2	Lock Nut, 6-32 Hex	05310-373-03-00
5	1	Thermostat	05930-003-13-65
6	1	Conduit Fitting, 90-Degree, 1/2"	05975-011-45-14
7	1	Small Fitting	05975-011-49-03
8	1	Drain Quench Bracket	05700-004-07-92



Connect 1 1/2" drain plumbing
(elbow can be removed if not needed)

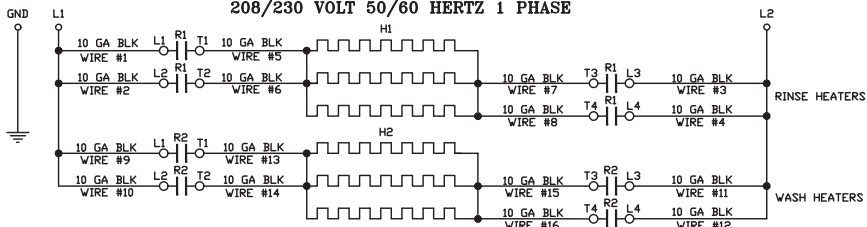
Connect 1/4" cold water line

LEGEND

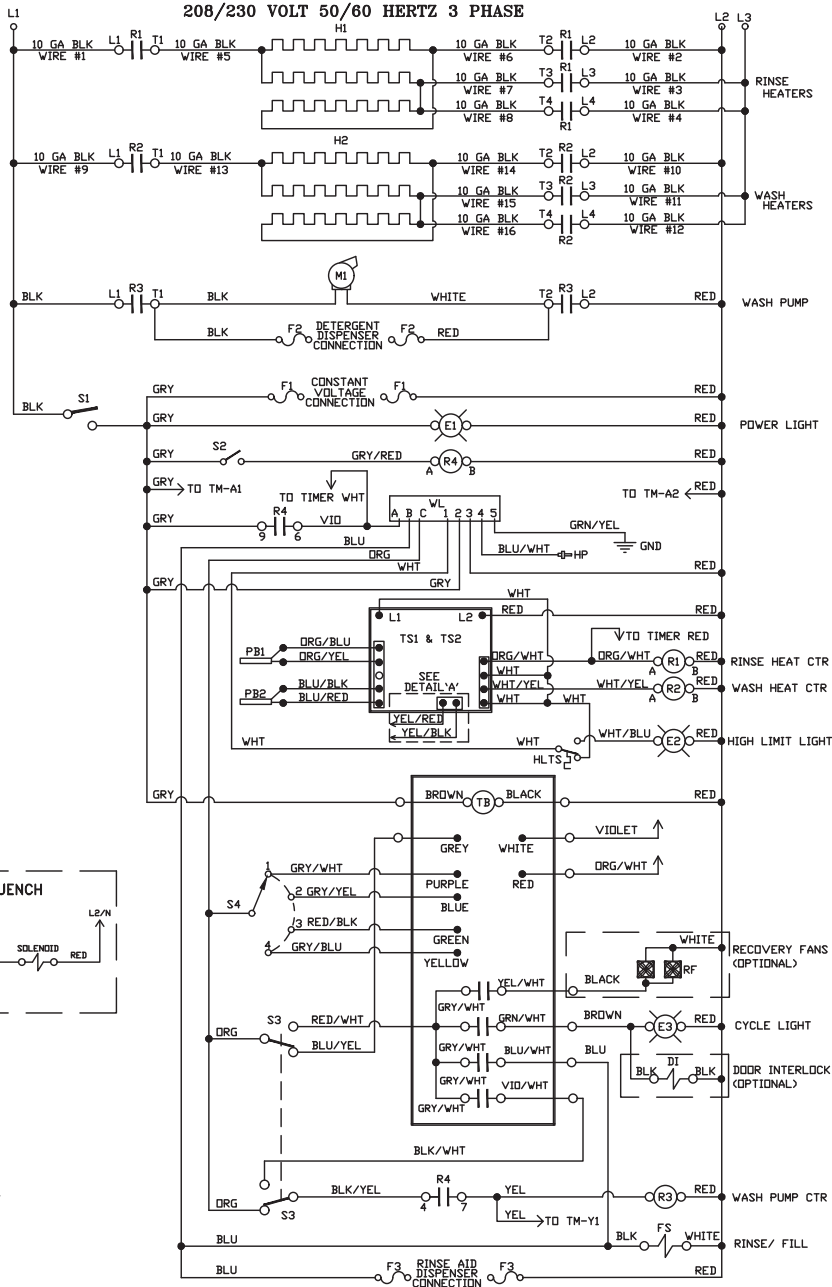
- L1 L2 L3 POWER DISTRIBUTION BLOCK
- GND GROUND
- H1 RINSE HEATER
- H2 WASH HEATER
- M1 WASH MOTOR
- R1 RINSE HEATER CONTACTOR
- R2 WASH HEATER CONTACTOR
- R3 WASH MOTOR CONTACTOR
- R4 CONTROL RELAY
- F1 CONSTANT VOLTAGE CONNECTION
- F2 DETERGENT DISPENSER FUSE BLOCK
- F3 RINSE DISPENSER FUSE BLOCK
- F4 EXHAUST FAN FUSE BLOCK
- S1 POWER SWITCH
- S2 DOOR SWITCH
- S3 AUTO/MANUAL (DELIME) SWITCH
- S4 CYCLE SELECTOR
- E1 POWER LIGHT
- E2 HEATER OVERLOAD LIGHT
- E3 CYCLE LIGHT
- HLTS WASH HEATER HIGH LIMIT
- TS1 RINSE HEATER THERMOSTAT
- TS2 WASH HEATER THERMOSTAT
- HP HIGH WATER LEVEL PROBE
- WL WATER LEVEL CONTROL
- FS RINSE/FILL SOLENOID
- TB TIMER BOARD
- TM EXHAUST FAN TIMER
- PB1 RINSE TEMP PROBE
- PB2 WASH TEMP PROBE
- RF RECOVERY FANS
- DI DOOR INTERLOCK

TEMPSTAR/TEMPSTAR HH ELECTRICAL DIAGRAM

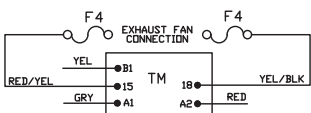
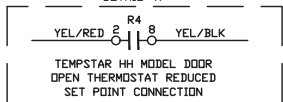
208/230 VOLT 50/60 HERTZ 1 PHASE



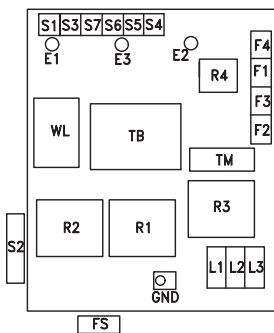
208/230 VOLT 50/60 HERTZ 3 PHASE



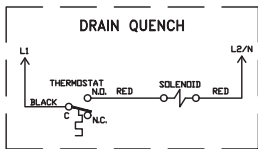
DETAIL 'A'



CONTROL BOX LAYOUT



DRAIN QUENCH



DIP SWITCH SETTINGS

TEMPSTAR	ON	1	2	3	4	5	6	7	8
	↑	0	0	0	0	0	0	0	X

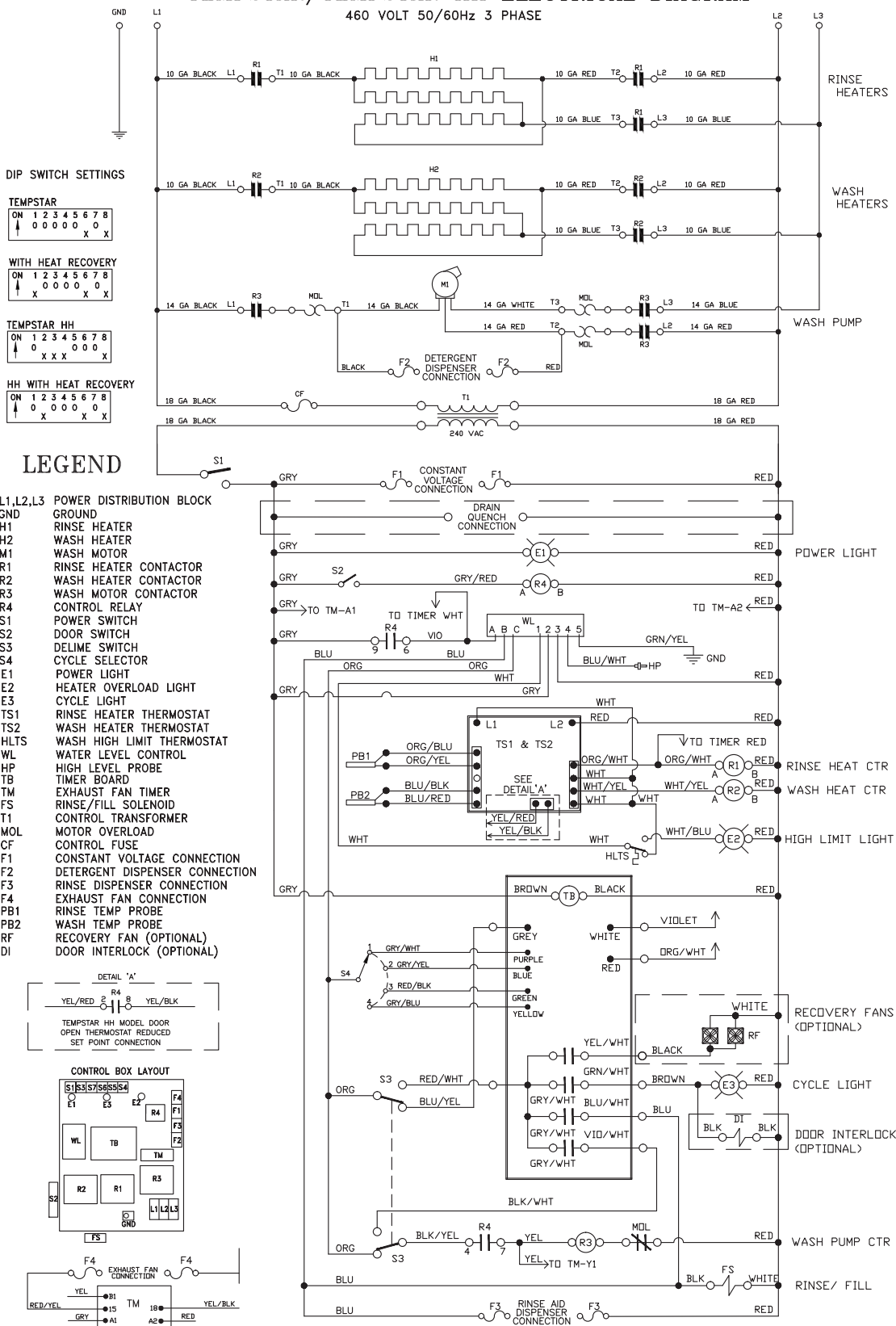
TEMPSTAR HH	ON	1	2	3	4	5	6	7	8
	↑	0	X	X	X	0	0	0	0

WITH HEAT RECOVERY	ON	1	2	3	4	5	6	7	8
	↑	0	0	0	0	0	0	X	X

HH WITH HEAT RECOVERY	ON	1	2	3	4	5	6	7	8
	↑	0	X	0	0	0	0	X	X

09905-003-30-39 N

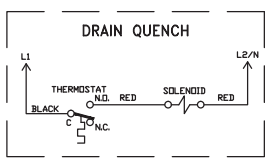
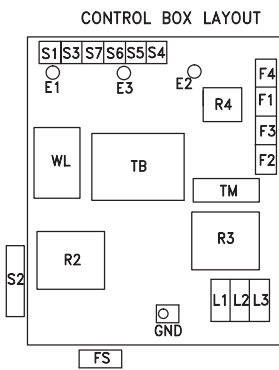
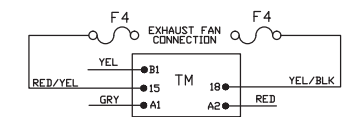
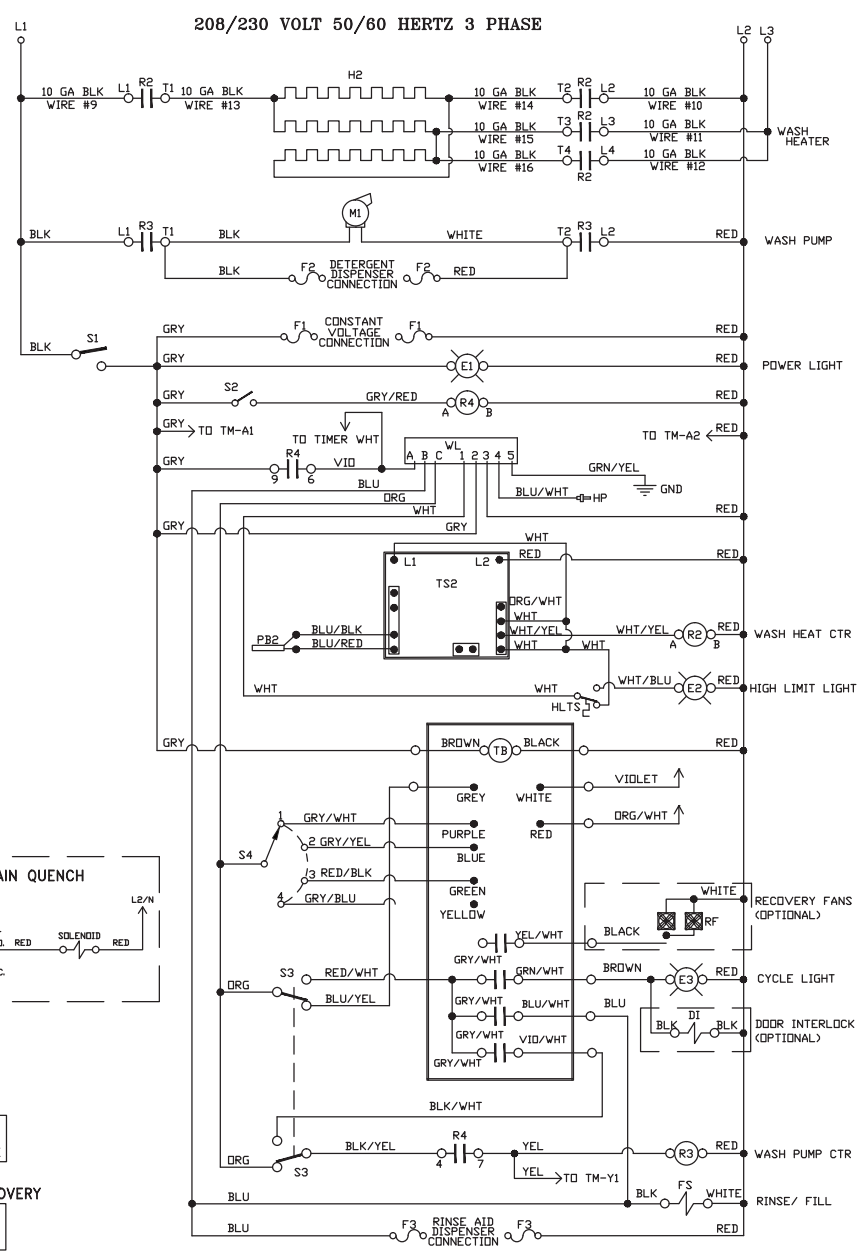
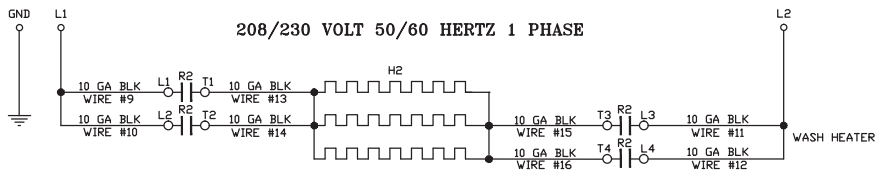
TEMPSTAR/TEMPSTAR HH ELECTRICAL DIAGRAM
460 VOLT 50/60Hz 3 PHASE



**TEMPSTAR NB/LT & TEMPSTAR HH NB/LT
ELECTRICAL DIAGRAM**

LEGEND

- L1 L2 L3 POWER DISTRIBUTION BLOCK
- GND GROUND
- H2 WASH HEATER
- M1 WASH MOTOR
- R2 WASH HEATER CONTACTOR
- R3 WASH MOTOR CONTACTOR
- R4 CONTROL RELAY
- F1 CONSTANT VOLTAGE CONNECTION
- F2 DETERGENT DISPENSER FUSE BLOCK
- F3 RINSE DISPENSER FUSE BLOCK
- F4 EXHAUST FAN FUSE BLOCK
- S1 POWER SWITCH
- S2 DOOR SWITCH
- S3 AUTO/MANUAL (DELIME) SWITCH
- S4 CYCLE SELECTOR
- E1 POWER LIGHT
- E2 HEATER OVERLOAD LIGHT
- E3 CYCLE LIGHT
- HLTS WASH HEATER HIGH LIMIT
- TS2 WASH HEATER THERMOSTAT
- HP HIGH WATER LEVEL PROBE
- WL WATER LEVEL CONTROL
- FS RINSE/FILL SOLENOID
- TB TIMER BOARD
- TM EXHAUST FAN TIMER
- PB2 WASH TEMP PROBE
- RF RECOVERY FANS
- DI DOOR INTERLOCK

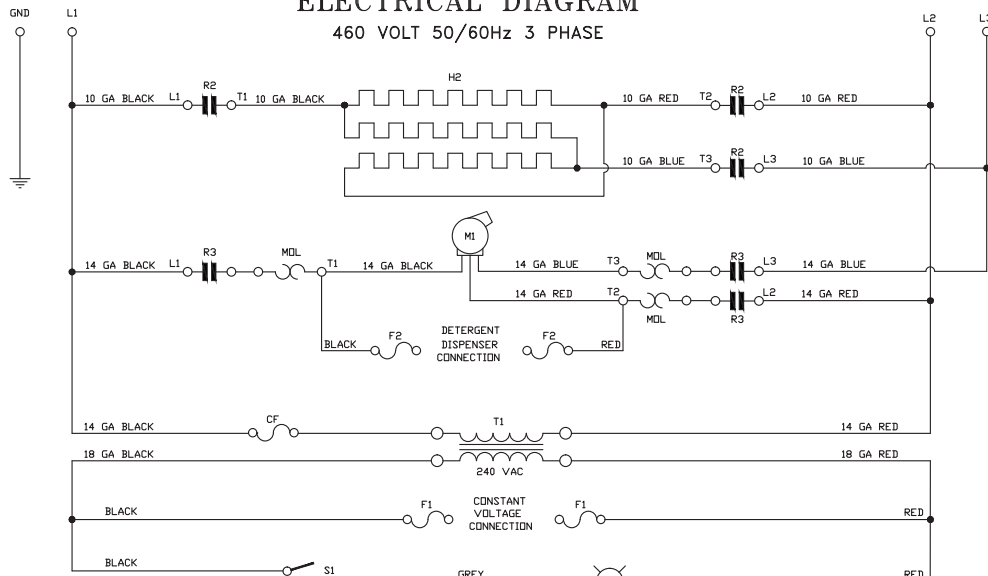


DIP SWITCH SETTINGS

TEMPSTAR	TEMPSTAR HH
ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8
↑ 0 0 0 0 0 0 X X	↑ 0 X X X 0 0 0 X
WITH HEAT RECOVERY	HH WITH HEAT RECOVERY
ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8
↑ X 0 0 0 0 0 0	↑ 0 X 0 0 0 X X X

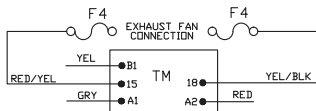
09905-003-14-97H

**TEMPSTAR NB/LT & TEMPSTAR HH
ELECTRICAL DIAGRAM**
460 VOLT 50/60Hz 3 PHASE

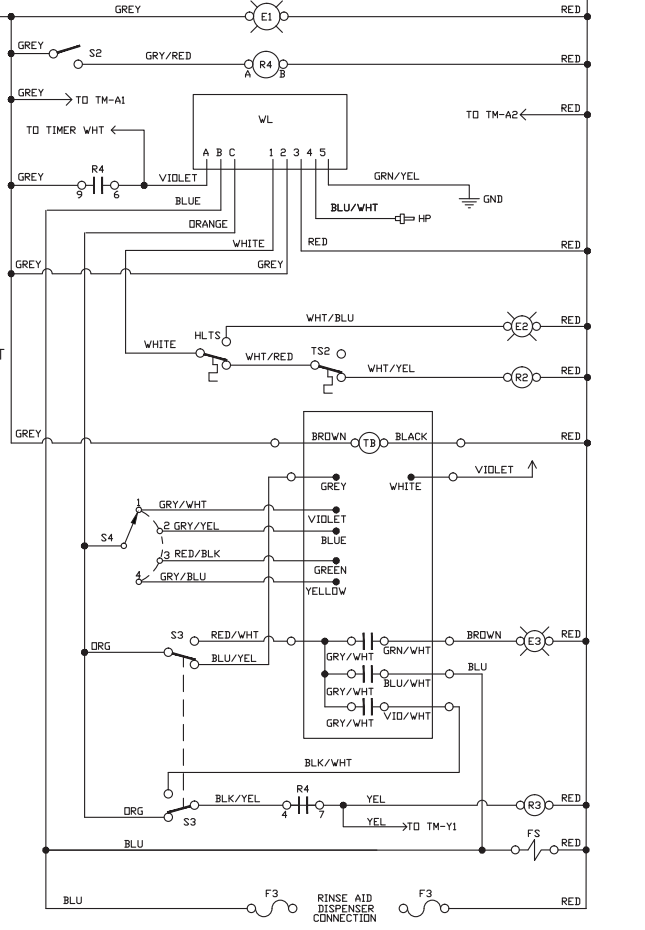
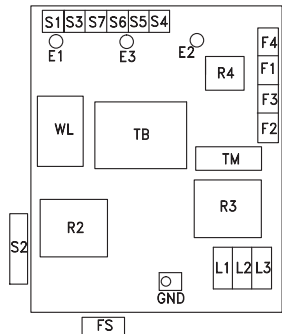


LEGEND

- L1 L2 L3 RINSE HEATER
- GND GROUND
- H2 WASH HEATER
- M1 WASH MOTOR
- R2 WASH HEATER CONTACTOR
- R3 WASH MOTOR CONTACTOR
- R4 CONTROL RELAY
- F1 CONSTANT VOLTAGE CONNECTION
- F2 DETERGENT DISPENSER CONNECTION
- F3 RINSE DISPENSER CONNECTION
- F4 EXHAUST FAN CONNECTION
- S1 POWER SWITCH
- S2 DOOR SWITCH
- S3 AUTO/MANUAL (DELIME) SWITCH
- S4 CYCLE SELECTOR
- E1 POWER LIGHT
- E2 HEATER OVERLOAD LIGHT
- E3 CYCLE LIGHT
- HLTS WASH HEATER HIGH LIMIT THERMOSTAT
- TS2 WASH HEATER THERMOSTAT
- HP HIGH WATER LEVEL PROBE
- WL WATER LEVEL CONTROL
- FS RINSE/FILL SOLENOID
- TB TIMER BOARD
- TM EXHAUST FAN TIMER

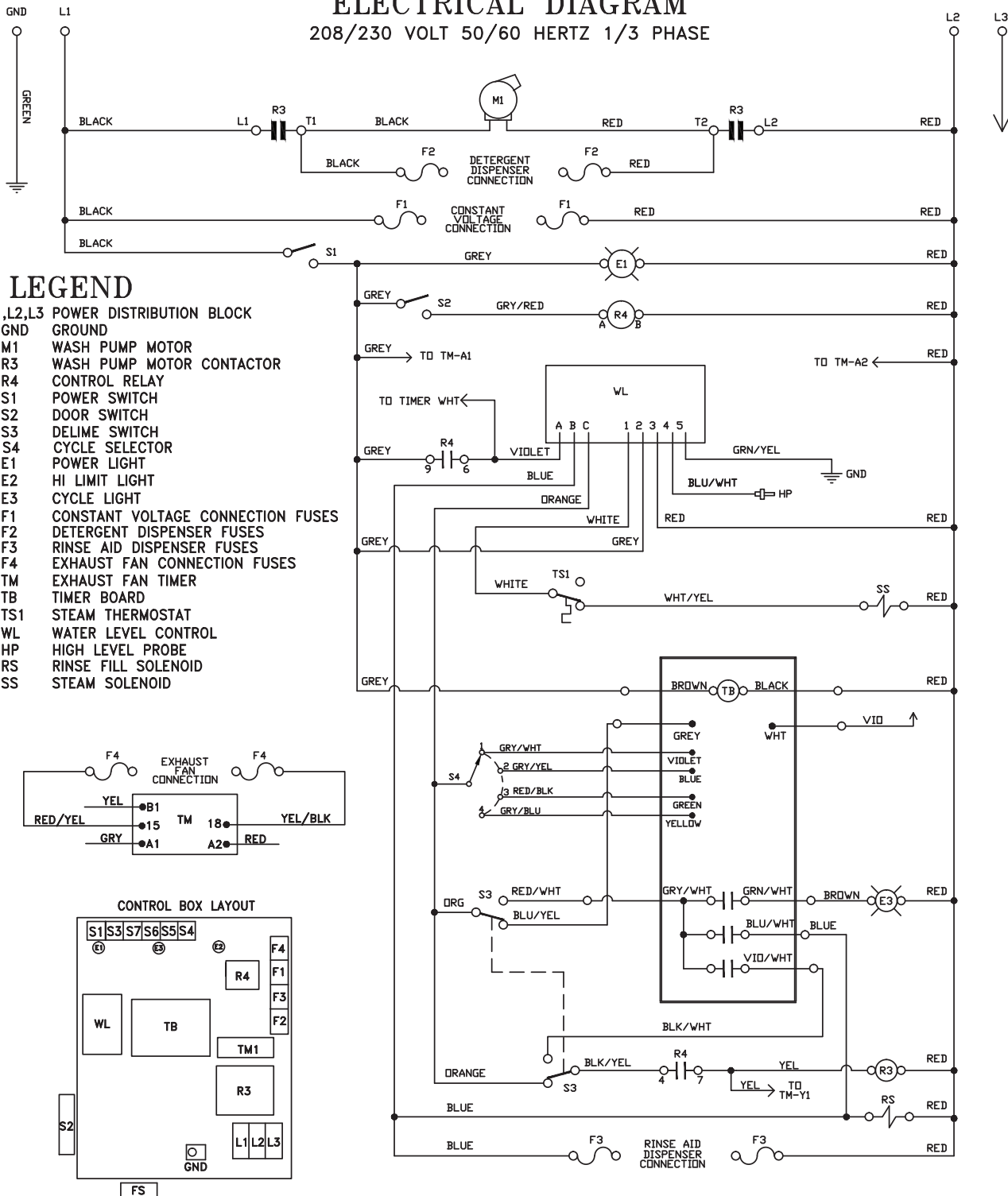


CONTROL BOX LAYOUT



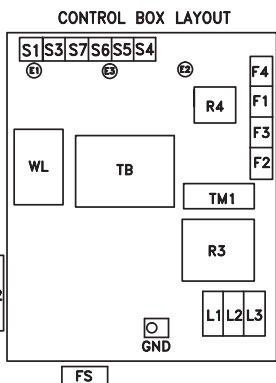
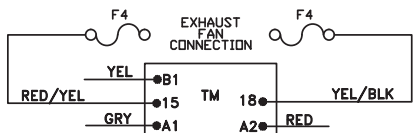
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**TEMPSTAR STEAM
ELECTRICAL DIAGRAM**
208/230 VOLT 50/60 HERTZ 1/3 PHASE



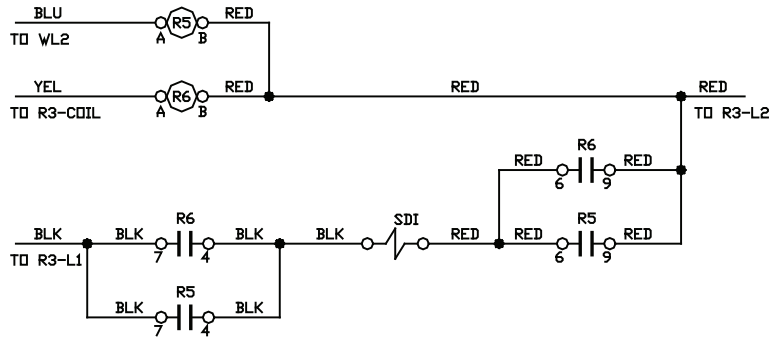
LEGEND

- L1,L2,L3 POWER DISTRIBUTION BLOCK
- GND GROUND
- M1 WASH PUMP MOTOR
- R3 WASH PUMP MOTOR CONTACTOR
- R4 CONTROL RELAY
- S1 POWER SWITCH
- S2 DOOR SWITCH
- S3 DELIME SWITCH
- S4 CYCLE SELECTOR
- E1 POWER LIGHT
- E2 HI LIMIT LIGHT
- E3 CYCLE LIGHT
- F1 CONSTANT VOLTAGE CONNECTION FUSES
- F2 DETERGENT DISPENSER FUSES
- F3 RINSE AID DISPENSER FUSES
- F4 EXHAUST FAN CONNECTION FUSES
- TM EXHAUST FAN TIMER
- TB TIMER BOARD
- TS1 STEAM THERMOSTAT
- WL WATER LEVEL CONTROL
- HP HIGH LEVEL PROBE
- RS RINSE FILL SOLENOID
- SS STEAM SOLENOID



9905-003-14-99_F

TEMPSTAR SDI OPTION

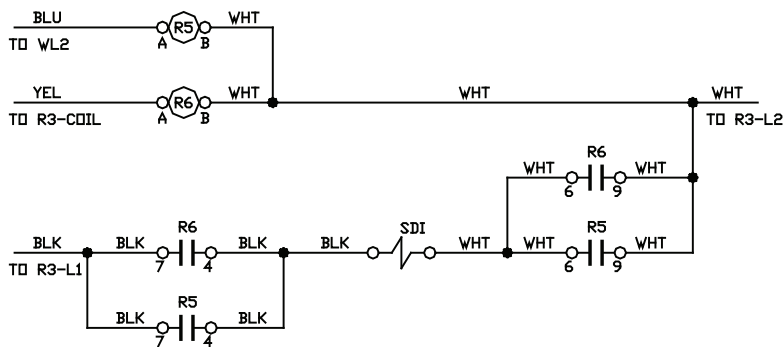


LEGEND

- R5 RINSE RELAY
- R6 WASH RELAY
- SDI SAFETY DOOR INTERLOCK SOLENOID

09905-002-35-85a

TEMPSTAR SDI OPTION

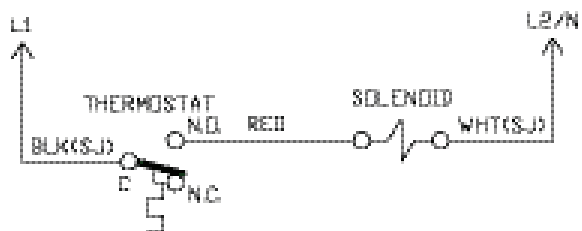


LEGEND

- R5 RINSE RELAY
- R6 WASH RELAY
- SDI SAFETY DOOR INTERLOCK SOLENOID

09905-002-55-78a

DRAIN QUENCH SYSTEM



TEMPSTAR UNIT

CONNECT BLACK WIRE TO MOTOR CONTACTOR - L1 WITH PIGGYBACK TERMINAL PROVIDED
 CONNECT WHITE WIRE TO MOTOR CONTACTOR - L2 WITH PIGGYBACK TERMINAL PROVIDED

09905-004-07-98



SERIAL NUMBER: XXXXXXXXXX

MODEL: Tempstar

208-230-460 Volt/60 Hz/3 Phase

	208V	230V	460V
40°F RISE BOOSTER			
WASH MOTOR	3/4 HP 5.7 A	3/4 HP 5.7 A	3/4 HP 1.8 A
WASH HEATER	4.1 KW 11.4 A	5 KW 12.6 A	5 KW 6.3 A
RINSE HEATER	9 KW <u>25.0 A</u>	11 KW <u>27.2 A</u>	11 KW <u>13.8 A</u>
TOTAL LOAD	42.1 A	45.5 A	21.9 A
70°F RISE BOOSTER			
WASH MOTOR	3/4 HP 5.7 A	3/4 HP 5.7 A	3/4 HP 1.8 A
WASH HEATER	4.1 KW 11.4 A	5 KW 12.6 A	5 KW 6.3 A
RINSE HEATER	10.5 KW <u>29.1 A</u>	12.9 KW <u>32.4 A</u>	12.9 KW <u>16.2 A</u>
TOTAL LOAD	46.2 A	50.7 A	24.3 A




Intertek
4000897
Conforms to UL Std 921
Conforms to CSA
Std C22.2 No.168

208-230 Volt/60 Hz/1 Phase

	208V	230V
40°F RISE BOOSTER		
WASH MOTOR	3/4 HP 5.7 A	3/4 HP 5.7 A
WASH HEATER	4.1 KW 19.7 A	5 KW 21.7 A
RINSE HEATER	9 KW <u>43.3 A</u>	11 KW <u>47.8 A</u>
TOTAL LOAD	68.7 A	75.2 A
70°F RISE BOOSTER		
WASH MOTOR	3/4 HP 5.7 A	3/4 HP 5.7 A
WASH HEATER	4.1 KW 19.7 A	5 KW 21.7 A
RINSE HEATER	10.5 KW <u>50.4 A</u>	12.9 KW <u>56.1 A</u>
TOTAL LOAD	75.8 A	83.6 A

OPERATING PARAMETERS

MINIMUM WASH TEMPERATURE 150°F

MINIMUM RINSE TEMPERATURE 180°F

MINIMUM INCOMING WATER TEMPERATURE

70°F RISE BOOSTER 110°F

40°F RISE BOOSTER 140°F

WASH CYCLE TIME 45 SEC

RINSE CYCLE TIME 11 SEC

FLOW PRESSURE 10 PSI

Made in the USA
Jackson WWS, Inc.
P.O. Box 1060
Barbourville, KY. 40906
(606) 523-9795
09905-003-69-11D

TempStar units that are manufactured with the above-referenced data plate are able to be field-converted to different phases and voltages. To accomplish this, your unit should have shipped with the TempStar Phase Conversion Kit, part number 06401-003-71-71. This kit contains the appropriate decals and schematics to apply to your unit once the conversion is complete.

All work should be performed only by Authorized Jackson Service Agents.

Steps:

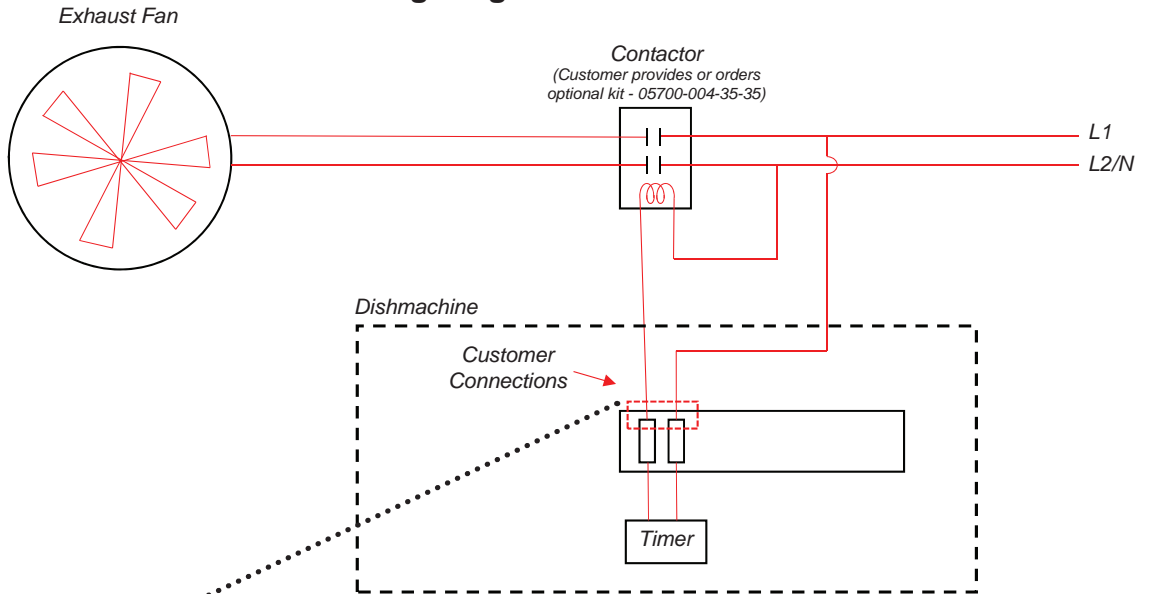
1. Perform the appropriate wiring and component changes as necessary to achieve the desired result. Reference Jackson technical manuals or contact technical service for assistance.
2. Verify the schematic is correct. If not, replace with the correct one from the kit.
3. At the power inlet, remove the “Wired For” decal and replace with the one that matches the configuration of your machine.

75

07610-003-61-42-U

Wiring Diagram

CAUTION
Do NOT connect primary load directly to Fuse Block!



NOTICE
Orientation of Fuse Block and wires might differ between models. Wire colors correspond to function.

Fuse Block

WARNING: DISCONNECT POWER TO MACHINE BEFORE SERVICING

EXHAUST FAN CONNECTION	CONSTANT VOLTAGE CONNECTION	RINSE-AID DISPENSER CONNECTION	DETERGENT DISPENSER CONNECTION
MAXIMUM LOAD 1 AMP, 240/120 VAC	LIVE WHEN MACHINE POWER SWITCH IS ON	LIVE WHEN RINSE VALVE IS OPEN	LIVE WHEN WASH PUMP MOTOR IS ON
INPUT L1 (EXTERNAL)	OUTPUT TO EXT. RELAY	FUSE: 3 AMP SLOW-ACTING L1 OUT	FUSE: 3 AMP SLOW-ACTING L1 OUT
		FUSE: 3 AMP SLOW-ACTING L2 OUT	FUSE: 3 AMP SLOW-ACTING L2 OUT

The diagram shows a fuse block with eight terminal pairs. Wires are color-coded as follows from left to right: RED/YEL, YEL/BLK, GRY, RED, BLU, RED, BLK, RED. The first two pairs correspond to the Exhaust Fan connection, and the remaining six pairs correspond to the Dishmachine connections.



Jackson WWS, Inc. • 6209 N. US Hwy 25E • Gray, KY 40734 USA
1.888.800.5672 • www.jacksonwws.com

TempStar® Manual • 07610-003-61-42-U