



Warewashing Systems

INSTALLATION, OPERATION, AND SERVICE MANUAL



DYNATEMP[®]

DYNATEMP SERIES DOOR-TYPE MACHINES

DynaTemp Manual • 07610-004-29-29-D

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 machine 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 machine 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 MACHINE 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	07-27-16	JH	N/A	Initial release of the manual.
B	10-31-16	JH	ECN 8392 ECN 8411 ECN 8442	Updated top-view dimensions, pg. 1. Updated table dimensions, pg. 2. Added Drain Quench Kit P/N to pg. 50. Updated Outlet Steam Plumbing, pg. 39. Updated Inlet Steam Plumbing, pg. 40. Replaced thermostat on pg. 28 with new thermostat and bracket. Replaced thermostat on pg. 30 with new thermostat and bracket. Added thermostat and bracket to pg. 34. Updated External Device Wiring diagram, pg. 57.
C	2-22-17	JH	N/A	Added the VER Machine to the manual. Updated the External Device Wiring page.
D	7-10-18	JH	ECN 8392 ECN 8481 ECN 8480 ECN 8492 ECN 8522 ECN 8533 ECN 8536 ECN 8599 ECN 8617 ECN 8618 QOF NDB-449 QOF NDB-470	Added Chemical Connections section to pg. 9. Added Motor Rotation section to pg. 10. Revised Deliming section on pg. 17 to address rinse arms. Added links to Steam Booster manual where appropriate. Changed P/Ns of items 8, 10, and 13 on pg. 27. Added door stop block to pg. 28. Changed yoke and yoke assembly P/Ns on pg. 30. Added thermostat and thermostat bracket to pgs. 31-32. Added display components to pg. 36. Updated rinse arm assembly with new bearing on pgs. 37-38. Added new rinse tank assembly to pg. 39. Updated P/Ns for old rinse tank and rinse tank cover on pg. 40. Added phase conversion kit to pg. 41. Corrected 60 Hz motor P/N on pg. 42. Added motor only P/N for 60 Hz on pg. 42. Updated Plumbing and VER Plumbing sections to 1/2" plumbing. Updated NB Plumbing section. Added top vent bracket and fan wiring harness to pg. 52. Updated schematics on pgs. 53-55. Added I/O Module schematic to pg. 56. Moved External Device Wiring section from addendum to hyperlink.



Warewashing Systems

DynaTemp®

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

DynaTemp® NB

Door-type machine; electrically-heated, high-temp, hot-water sanitizing, without booster heater.

DynaTemp® S

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

DynaTemp® VER

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

The manufacturer provides technical support for all of the machines 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 open 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.

TABLE OF CONTENTS

GUIDES

Symbols	1
Abbreviations & Acronyms	1

SPECIFICATIONS

DynaTemp/NB/S Dimensions	2
VER Dimensions	3
Table Dimensions	4
Operating Capacities	5
Electrical Requirements	6

INSTALLATION

Installation Instructions	7
<i>Inspection</i>	7
<i>Unpacking</i>	7
<i>Leveling</i>	7
<i>Plumbing</i>	7
<i>Drain Line Connection</i>	7
<i>Water Supply Connection</i>	8
<i>Steam Line Connection</i>	8
<i>Plumbing Check</i>	8
<i>Chemical Connections</i>	9
<i>Electrical Power Connections</i>	10
<i>Motor Rotation</i>	10
<i>Voltage Check</i>	11
<i>Exhaust Fan Timer</i>	11
<i>Surrounding Area</i>	11
<i>Temperature Setpoints</i>	11
<i>Corner Install/False Panel</i>	11

OPERATION

Operating Instructions	12
<i>Preparation</i>	12
<i>Power Up</i>	12
<i>Filling the Wash Tub</i>	12
<i>Ware Preparation</i>	13
<i>Daily Machine Preparation</i>	13
<i>Washing a Rack of Ware</i>	13
<i>Shutdown & Cleaning</i>	14
<i>Detergent Control</i>	16
<i>Deliming Instructions</i>	17
<i>Display Instructions</i>	18

TABLE OF CONTENTS

MAINTENANCE

Preventative Maintenance	19
--------------------------------	----

TROUBLESHOOTING

Programming	20
Fault Codes	22
Common Problems	25

PARTS

Control Box	27
Hood	29
Cantilever Arm	30
Tub	32
Steam Tub	34
Steam Coil	36
Frame	37
Wash & Rinse Arms	38
Rinse Tank	40
Heaters	42
Motors	43
Plumbing	45
NB Plumbing	47
Steam Inlet Plumbing	49
Steam Outlet Plumbing	50
VER Plumbing	51
Plumbing Options	53
VER System	54

SCHEMATICS

DynaTemp/NB/VER 208/230 V	55
DynaTemp/NB/VER 460 V	56
DynaTemp Steam	57
I/O Module	58

ADDENDUM

Display Template	59
------------------------	----

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.



- instructions hyperlink.

ABBREVIATIONS & ACRONYMS

ANSI - American National Standards Institute

Btu/Hr - British Thermal Units per Hour

CFM - Cubic Feet per Minute

GHT - Garden Hose Thread

GPH - Gallons per Hour

GPM - Gallons per Minute

GPG - Grains per Gallon

HP - Horsepower

Hz - Hertz

ID - Inside Diameter

kW - Kilowatts

MCA - Minimum Circuit Ampacity

MOP - Maximum Overcurrent Protection

NFPA - National Fire Protection Association

NPT - National Pipe Thread

OD - Outside Diameter

PRV - Pressure Regulating Valve

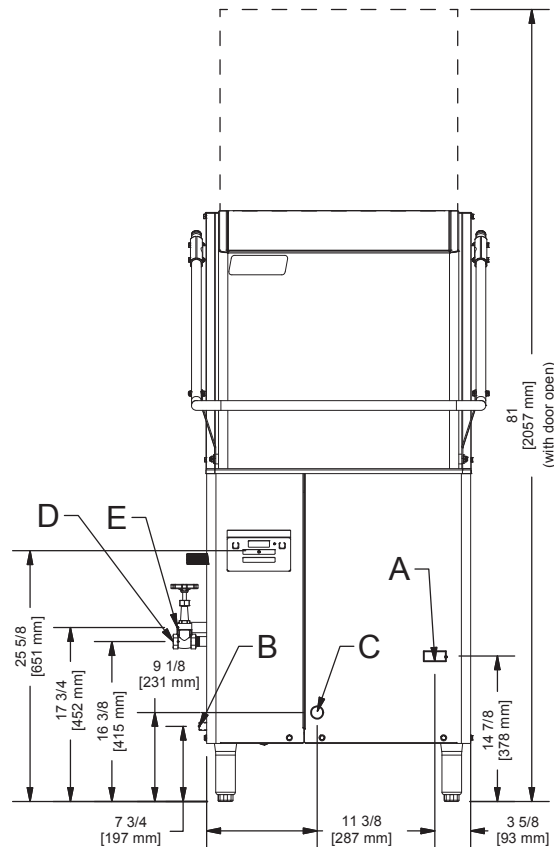
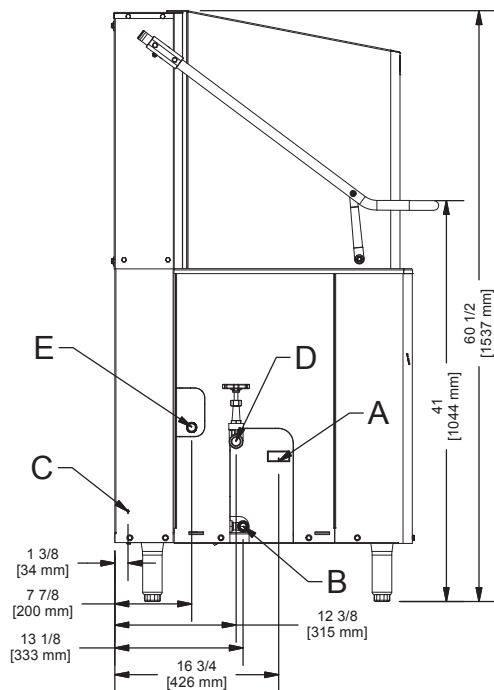
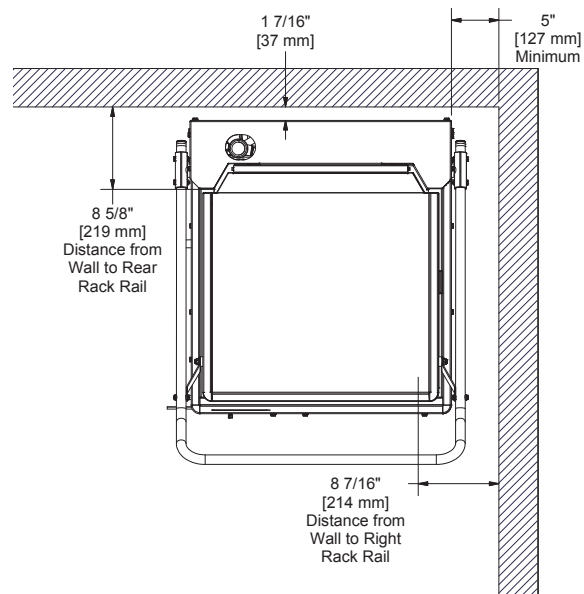
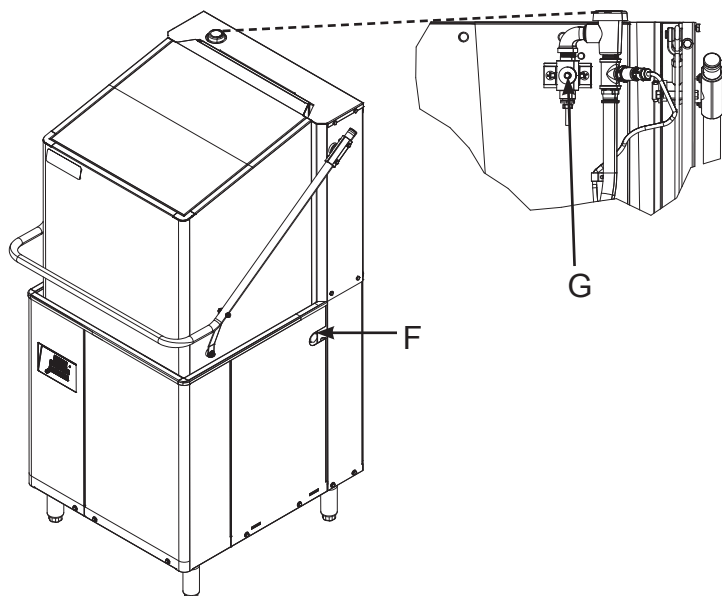
PSI - Pounds per Square Inch

V - Volts

LEGEND

- A - Drain Connection (1 1/2" NPT)
- B - Water Inlet (1/2" NPT)
(3/4" NPT - DynaTemp S)
- C - Electrical Connection (1 1/4" Hole Size)
- D - Steam Inlet (3/4" NPT)
- E - Steam Outlet (3/4" NPT)
- F - Detergent Connection
- G - Rinse-aid Connection

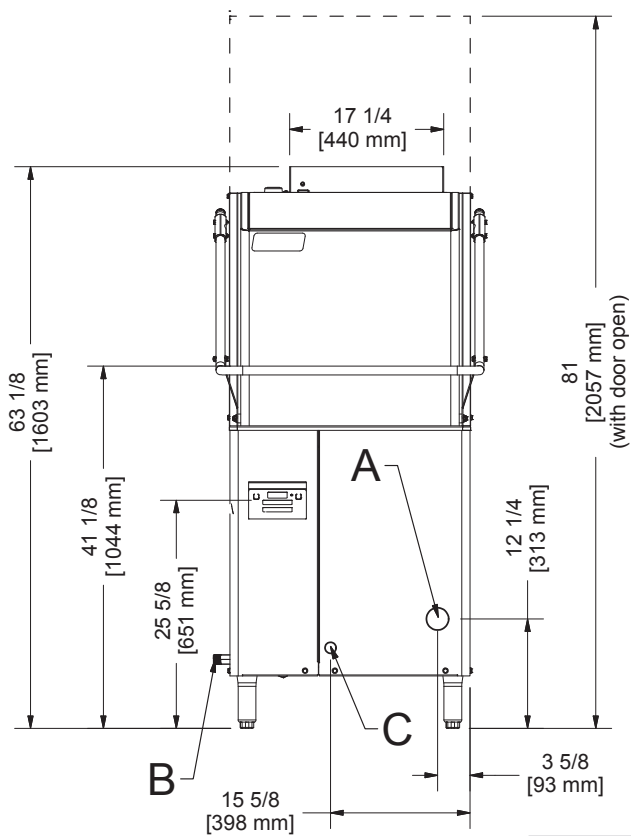
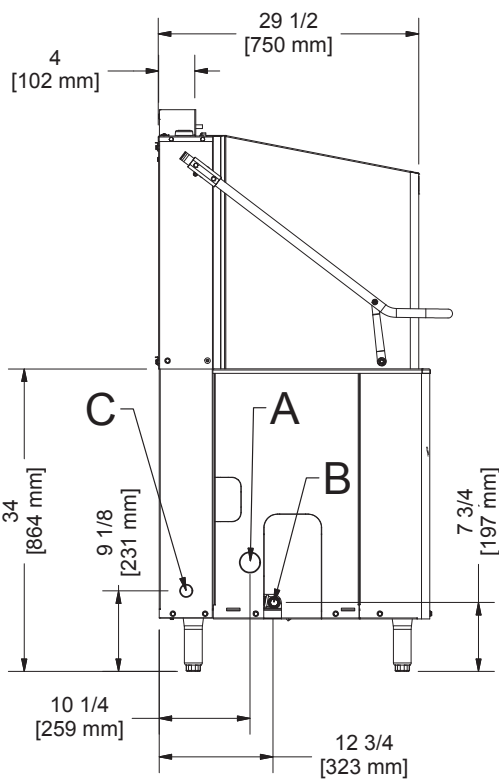
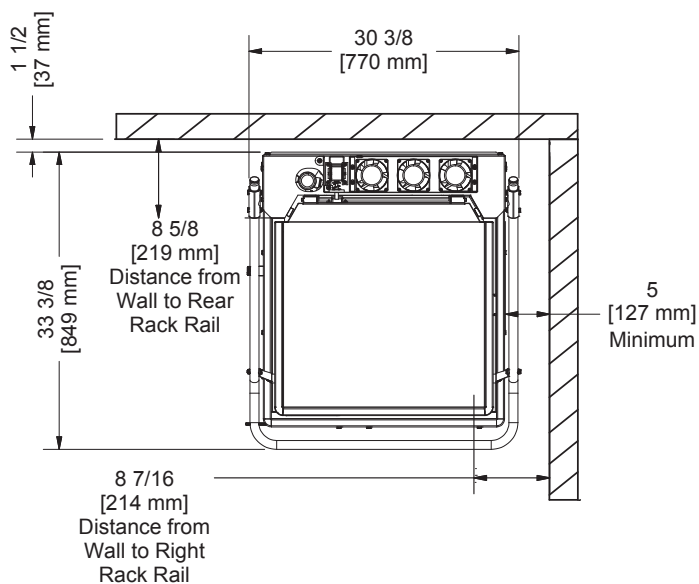
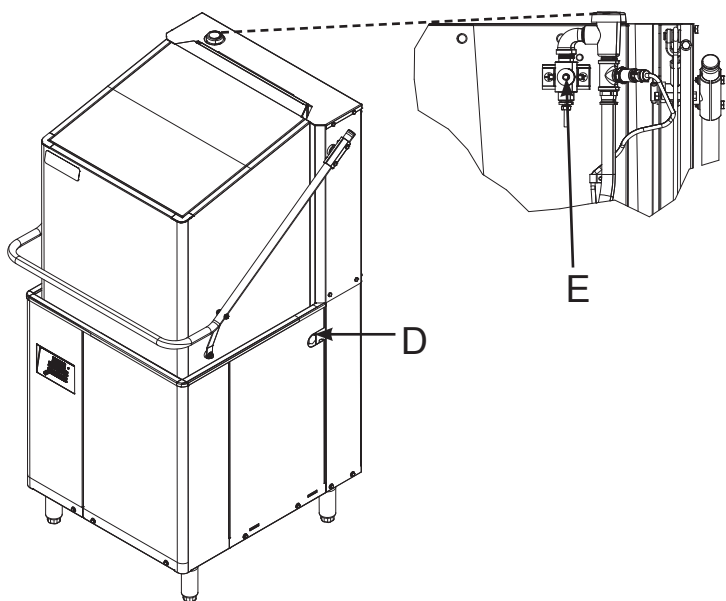
All dimensions from the floor can be increased 2" using the machine's adjustable feet.



LEGEND

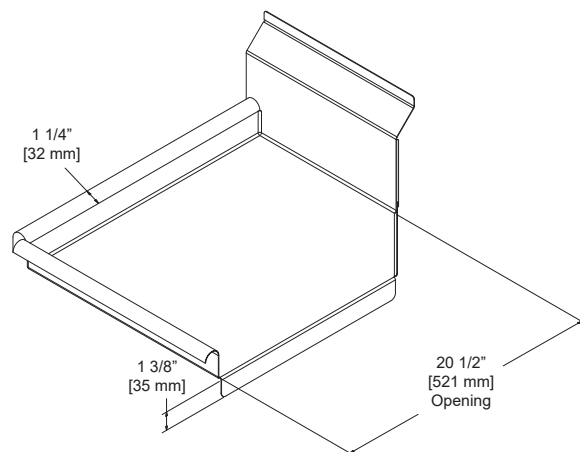
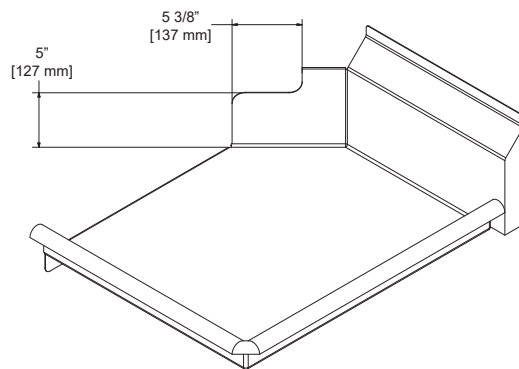
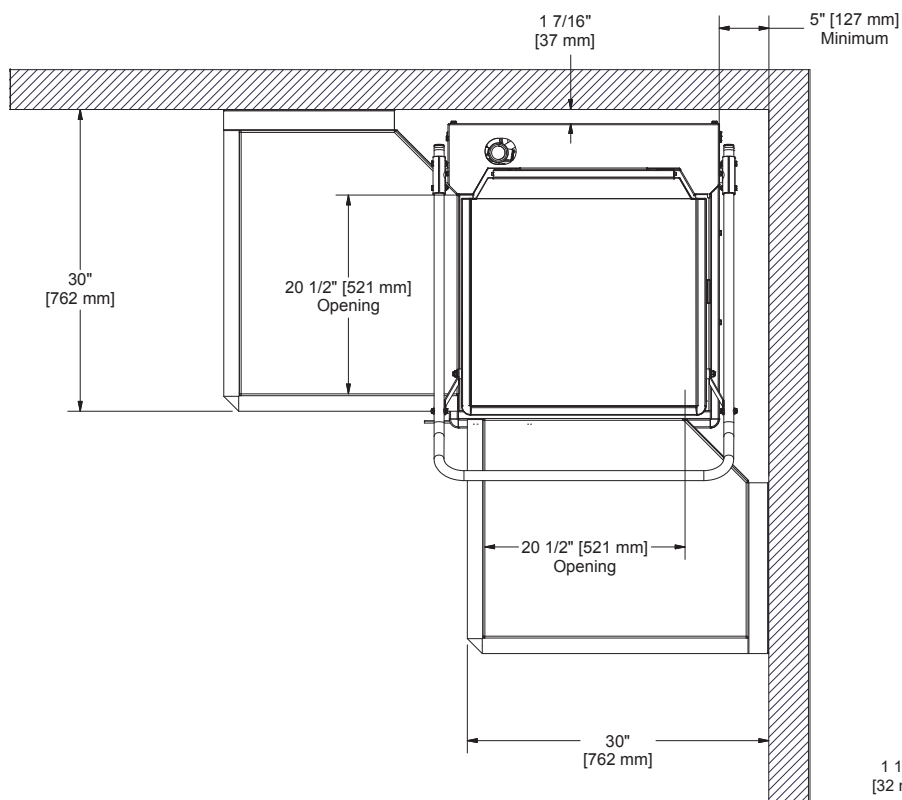
- A - Drain Connection (1 1/2" NPT)
- B - Water Inlet (1/2" NPT)
- C - Electrical Connection (1 1/4" Hole Size)
- D - Detergent Connection
- E - Rinse-aid Connection

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

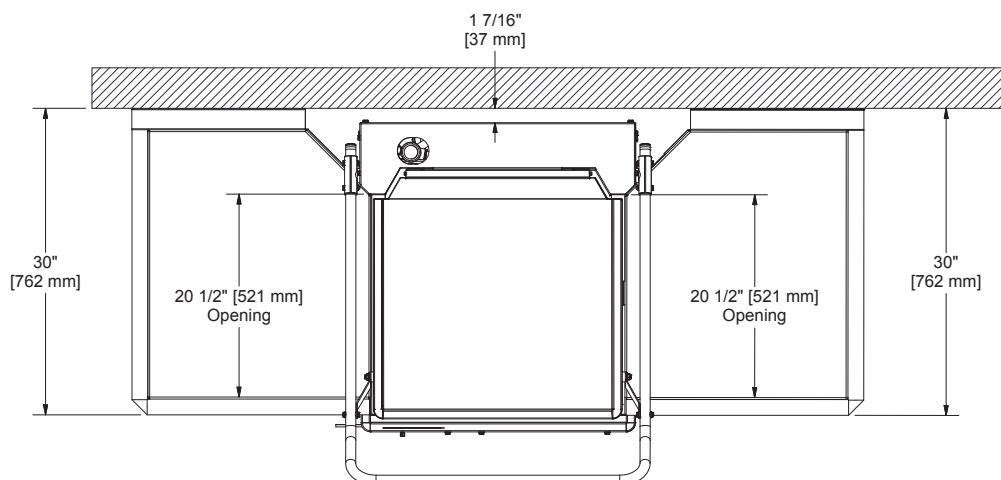


CORNER INSTALLATION

For Corner Install instructions, use [this link](#).



STRAIGHT-THROUGH INSTALLATION



PERFORMANCE/CAPABILITIES

Operating Capacity:

DynaTemp/DynaTemp NB/DynaTemp S

Racks per Hour	57
Dishes per Hour	1425
Glasses per Hour	2052

DynaTemp VER

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

Minimum Operating Cycle (seconds):

Cycle 1 Wash Time	40
Cycle 2 Wash Time	90
Cycle 3 Wash Time	220
Rinse Time	11
Dwell Time	7
Cycle 1 Total Time	58
Cycle 2 Total Time	108
Cycle 3 Total Time	238

VER Condensate Removal	30
------------------------	----

Tank Capacity (gallons/liters):

Wash Tank	8.0/30.3
Rinse Tank	2.0/7.6

Steam Requirements:

Steam Inlet Connection (NPT)	3/4"
Steam Outlet Connection (NPT)	3/4"
Steam Flow Pressure (PSI)	10-30
Consumption @ 15 PSI (lbs/hr)	45

Click [here](#) for the Steam Booster manual.

Electrical Loads (as applicable):

Wash Motor HP	1
Wash Heater kW	5.4
Rinse Heater kW	14

WATER REQUIREMENTS

DynaTemp

Wash Temperature (Minimum)	150 °F/66 °C
Rinse Temperature (Minimum)	180 °F/83 °C
Inlet Water Temperature	110 °F/44 °C
Flow Pressure (PSI)	10 ± 2
Water Line Size (NPT)	1/2"
Drain Line Size (NPT)	1 1/2"

DynaTemp NB

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

DynaTemp S

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

DynaTemp VER

Wash Temperature (Minimum)	150 °F/66 °C
Rinse Temperature (Minimum)	180 °F/83 °C
Inlet Water Temperature	40-90 °F/4.4-32.2 °C
Flow Pressure (PSI)	10 ± 2
Water Line Size (NPT)	1/2"
Drain Line Size (NPT)	1 1/2"

ENERGY SPECIFICATIONS

DynaTemp VER

Latent Heat	6047 Btu/Hr
Sensible Heat	5834 Btu/Hr

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



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.



NOTICE

On three-phase machines, imbalanced wild leg goes to L3.
Also see the Motor Rotation section.

DYNATEMP & DYNATEMP VER

Volts	Phase	Freq	Wash Motor	Wash Heater	Rinse Heater	Total Load	MCA	MOP
208	1	60 Hz	5.0 A	19.7 A	50.6 A	75.3 A	76.6 A	80.0 A
230	1	60 Hz	5.0 A	21.8 A	55.9 A	82.7 A	84.0 A	90.0 A
208	3	60 Hz	5.0 A	11.4 A	29.2 A	45.6 A	46.9 A	50.0 A
230	3	60 Hz	5.0 A	12.6 A	32.3 A	49.9 A	51.2 A	55.0 A
460	3	60 Hz	1.8 A	6.3 A	16.1 A	24.2 A	24.7 A	30.0 A

DYNATEMP NB

Volts	Phase	Freq	Wash Motor	Wash Heater	Rinse Heater	Total Load	MCA	MOP
208	1	60 Hz	5.0 A	19.7 A	N/A	24.7 A	26.0 A	30.0 A
230	1	60 Hz	5.0 A	21.8 A	N/A	26.8 A	28.1 A	30.0 A
208	3	60 Hz	5.0 A	11.4 A	N/A	16.4 A	17.7 A	20.0 A
230	3	60 Hz	5.0 A	12.6 A	N/A	17.6 A	18.9 A	20.0 A
460	3	60 Hz	1.8 A	6.3 A	N/A	8.1 A	8.6 A	15.0 A

DYNATEMP S

Volts	Phase	Freq	Wash Motor	Wash Heater	Rinse Heater	Total Load	MCA	MOP
208	1	60 Hz	5.0 A	N/A	N/A	5.0 A	6.3 A	15.0 A
230	1	60 Hz	5.0 A	N/A	N/A	5.0 A	6.3 A	15.0 A
208	3	60 Hz	5.0 A	N/A	N/A	5.0 A	6.3 A	15.0 A
230	3	60 Hz	5.0 A	N/A	N/A	5.0 A	6.3 A	15.0 A
460	3	60 Hz	1.8 A	N/A	N/A	1.8 A	2.3 A	15.0 A

INSPECTION

Do not throw away the container if damage is evident!

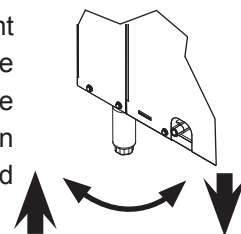
Before installing the machine, check the packaging and machine for damage. If the packaging is damaged, the machine might also be damaged. If there is damage to both the packaging and machine, do not throw away the packaging. The machine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others might result in damage to the machine while in transit. If so, do not return the machine 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 within 48 hours of receiving the machine. Also contact the dealer that sold you the machine.

UNPACKING

While removing the machine from the packaging, ensure there are no missing parts. If an item is missing, contact the manufacturer immediately.

LEVELING

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



PLUMBING

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 machine. 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.

The plumber MUST flush the incoming water line!

DRAIN LINE CONNECTION

The drains for the models covered in this manual are gravity discharge drains. All piping from the 1 1/2" FNPT 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. The air-gap must be at least 1.5 times the diameter of the drain line. If a grease trap is required by code, it should have a flow capacity of 5 GPM.



For machines equipped with the Drain Water Tempering option, click [here](#) for install instructions.

WATER SUPPLY CONNECTION

NOTICE Read the Plumbing section on the previous page before proceeding.

Install the water supply line to the machine 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.

A water hardness test MUST be performed.



If water hardness tests at greater than 3 GPG, install the Scaltrol Water Treatment system (see the Plumbing Options page) into the water line before the machine's incoming water connection point. If water hardness tests at 3 GPG or less, install the water supply line directly to the machine's incoming water connection point.

The water supply line must be capable of 10 ± 2 PSI "flow" pressure at the recommended temperature indicated on the data plate.

Take care not to confuse static pressure with flow pressure!



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.

The manufacturer recommends the installation of a pressure regulating valve (PRV) in the incoming water line to ensure proper flowrate at all times and offers these devices as options. See the Plumbing Options page. The PRV comes standard on the DynaTemp VER but ships inside the machine. Click [here](#) for install instructions.

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

STEAM LINE CONNECTION

DynaTemp S comes with lines to connect the source steam. Connect steam lines to the machine according to all applicable codes. See machine data plate for information concerning steam flow pressure.



Click [here](#) for the Steam Booster manual.

PLUMBING CHECK

1. Slowly turn on the water supply to the machine after the incoming fill line and drain line have been installed.
2. Check for any leaks and repair as required.



CAUTION! All leaks must be repaired before placing the machine in operation.

CHEMICAL CONNECTIONS

Chemical connections should be made by the chemical supplier.

Using deionized water or other aggressive fluids will result in corrosion and failure of components and will void the warranty.

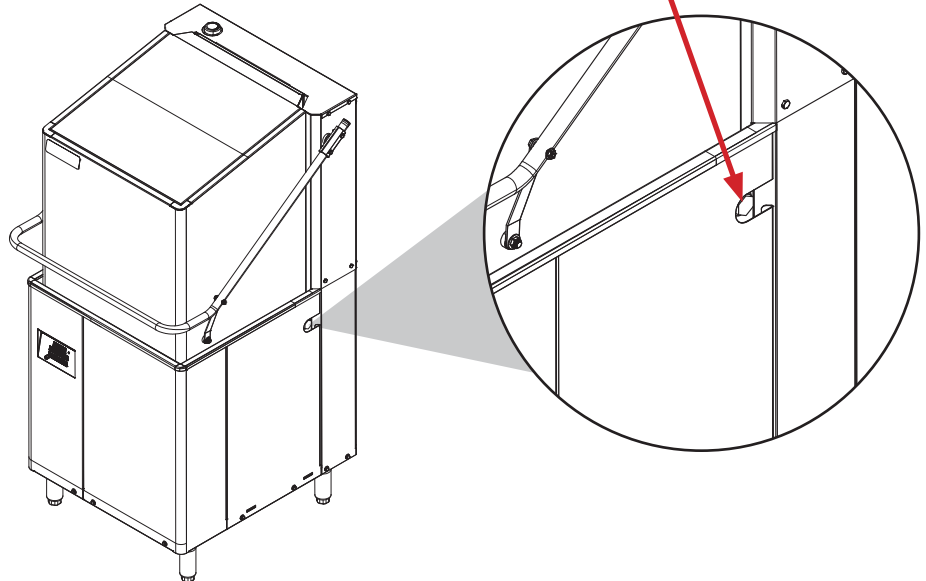


WARNING! Some of the chemicals used in dishwashing may cause chemical burns if they come in contact with skin. Wear protective gear when handling these chemicals. If any skin comes in contact with these chemicals, immediately follow the instructions provided with the chemicals for treatment.



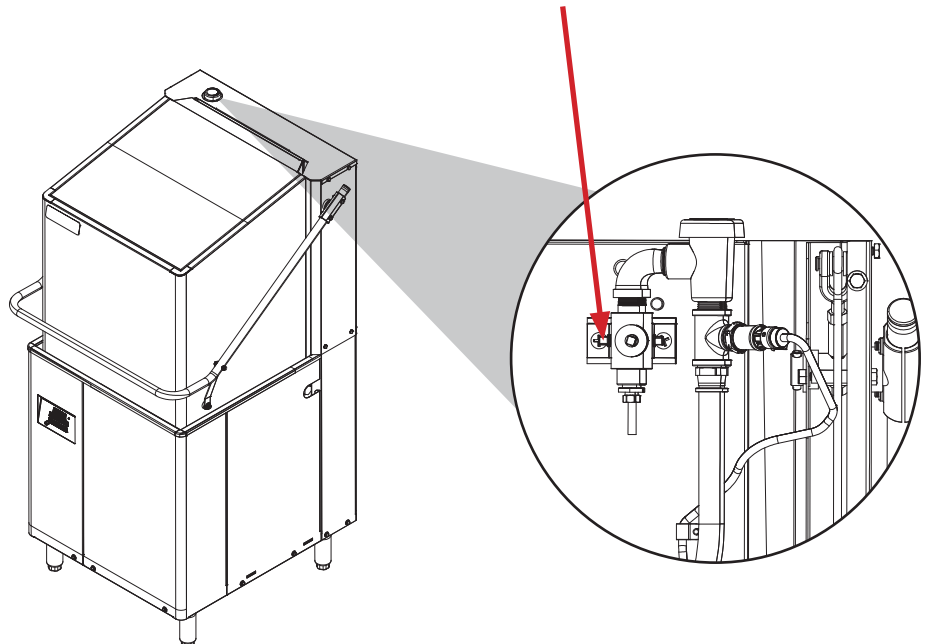
Detergent

Connect detergent by removing the bulkhead fitting on the side of the machine and replacing it with the appropriate dispensing equipment.



Rinse-aid

Connect rinse-aid by removing one of the brass plugs on the side of the rinse injector and replacing it with the appropriate dispensing equipment.



Dispenser Electrical Connections

The electrical connections for chemical dispensers are made on a fuse block inside the control box. Click [here](#) for a depiction of the fuse block and connection locations.

ELECTRICAL POWER CONNECTIONS



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

If necessary, see "Heaters" page for phase conversion kit.

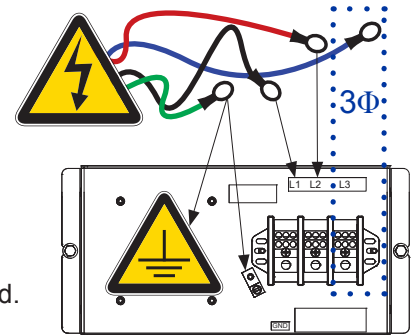


Electrical and grounding conductors must comply with the applicable portions of the National Electric Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

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

1. Open the control box by using a phillips screwdriver to remove the four screws on the front cover.
2. Install 3/4" conduit into the pre-punched holes in the back of the control box.
3. Route incoming-power wires, and connect to power block and grounding lug.
4. Install the service wires (L3 for 3-Phase) 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 "DE-OX" or similar anti-oxidation agent should be used on all power connections.

CAUTION! Improperly connecting external devices can cause damage to the machine and/or electrical infrastructure! Click [here](#) for a wiring guide.

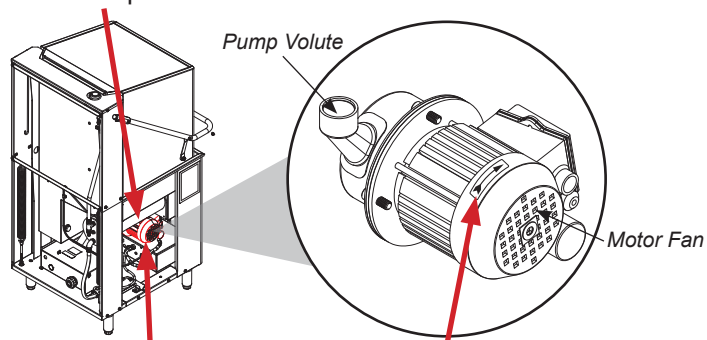
MOTOR ROTATION



CAUTION! On 3-Phase machines only, correct pump motor rotation must be verified before operation!

On 3-Phase machines only, correct pump motor rotation must be verified before the machine is operated. Failure to do so can result in damage to the machine and components.

1. Follow the "Filling the Wash Tub" section.
2. Remove the left side panel of the machine.



3. Locate the wash pump motor and identify the arrow decal which shows the correct motor rotation (if no decal is present, correct rotation is away from the pump volute).
4. Push the Delime Button on the display.
5. Observe the rotation of motor fan and quickly push the Delime Button again.
6. If rotation is incorrect, disconnect electrical power and reverse the L1 and L2 connections at terminal block shown in the section above.

VOLTAGE CHECK



1. Ensure the power switch is in the OFF position and apply power to the machine.
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 machine if the voltage is too high or too low (refer to applicable electrical codes).*

3. Shut off the service breaker and mark it as being for the machine.
4. Advise all proper personnel of any problems and of the location of the service breaker.

EXHAUST FAN TIMER

Determine which exhaust fan timer is on the machine and click the instructions icon below that timer to access programming instructions.



SURROUNDING AREA

This is a commercial machine and reaches temperatures that can exceed those generated by a residential machine. Surrounding countertops, cabinets, flooring, and subflooring must be designed and/or selected with these higher temperatures in mind.

NOTICE *Any damage to surrounding area caused by heat/moisture to materials that are not recommended for higher temperatures will not be covered under warranty or by the manufacturer.*

TEMPERATURE SETPOINTS

The temperature setpoints on this machine have been set at the factory. They should only be adjusted by an authorized service agent.

CORNER INSTALL/ FALSE PANEL

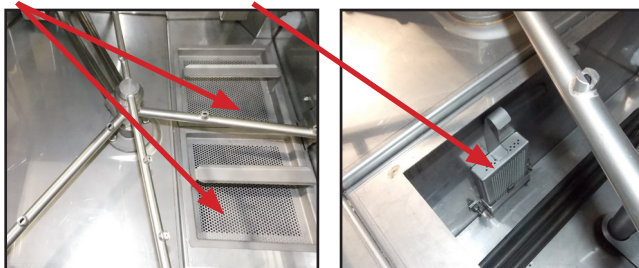
The manufacturer offers an optional False Panel Kit for corner installations. Click [here](#) for corner install and false panel instructions.



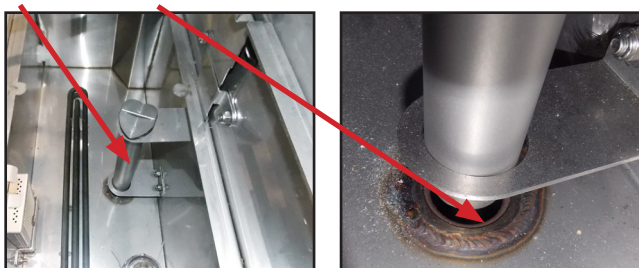
DynaTemp False Panel Kit
05700-004-44-38

PREPARATION Before operating the machine, verify the following:

1. The pan strainers and suction strainer are in place and are clean.



2. The standpipe and o-ring are installed.

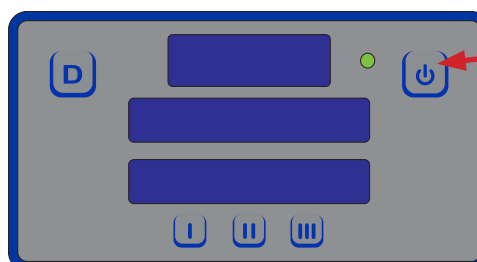


3. The wash and rinse arms are screwed securely into place and the end-caps are tight. The wash and rinse arms should rotate freely.



POWER UP To energize the machine, 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 Press the Power Button and the display will come on. The machine will fill with water automatically until the appropriate water level is reached (just below the pan strainers). The wash tub must be completely filled before operating the wash pump to prevent damage to components.



Power Button

**WARE
PREPARATION**

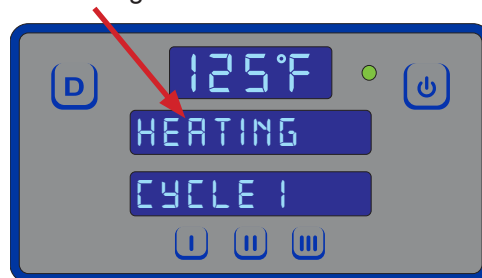
Proper ware preparation will help ensure good results and fewer re-washes. If not done properly, ware might not come out clean and the efficiency of the machine will be reduced. Putting unscrapped dishes into the machine affects its performance, so scraps should always be removed from ware before being 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 machine 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.

When the machine is first powered on for the day/shift, wash tank water must reach the set temperature before being operated:

1. Ensure the door is closed.
2. Press the Power Button.
3. The machine will fill automatically.
4. The display will show "Heating" until wash tank reaches the set temperature.

**WASHING A RACK
OF WARE**

1. Ensure wash tank temperature has reached the set temperature and the display shows "Ready."

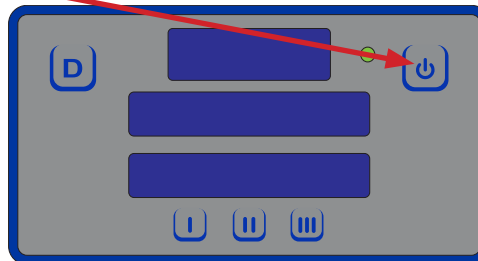


2. Open the door.
3. Slide a loaded rack of ware into the machine.
4. Close the door. Cycle begins automatically and the cycle light comes on.
5. At the end of the cycle, the cycle light will turn off.
6. Open the door and remove the rack.

**SHUTDOWN &
CLEANING**

At the end of the day/shift:

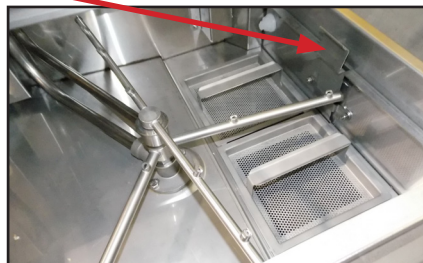
1. Close the door.
2. When the machine completes the cycle, turn the machine off by pressing the Power Button.



3. Open the door.
4. Remove and clean the pan strainers and set aside.

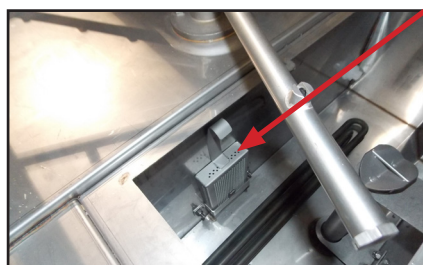


5. Pull the drain handle to the open position and allow the water to drain.



WARNING! *Wash tank
water is hot!*

6. Once the wash tub is drained, remove the suction strainer, clean, and set aside.

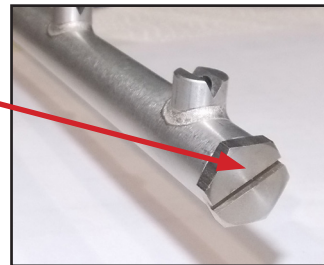
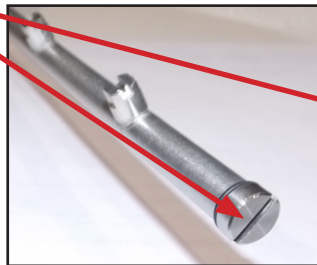


**SHUTDOWN &
CLEANING**

7. Unscrew the wash and rinse arms from their manifolds.



8. Verify the nozzles and arms are free from obstruction. If clogged, remove end-caps, clean nozzles with a brush, and flush with fresh water.



9. Wipe the inside of the machine out, removing all soil and scraps.

10. Reassemble the wash and rinse arms.

11. Replace the wash and rinse arms in the machine. Ensure the end-caps have been tightened.



12. Push the drain handle to the closed position.

13. Replace the pan strainers and suction strainer.

14. Leave the door open so the machine can dry.

**DETERGENT
CONTROL**

Detergent usage and water hardness are two factors that contribute greatly to how efficiently this machine 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.

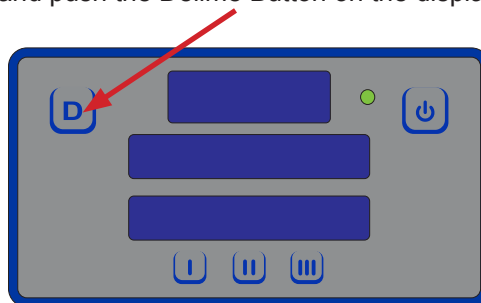
1. Hard water greatly affects the performance of the machine, causing the amount of detergent required for washing to increase. If the machine is installed in an area with hard water, the manufacturer recommends the installation of the Scaltrol Water Treatment system.
2. Deposited solids from hard water can cause spotting that will not be removed with a drying agent. Treated water will reduce this occurrence.
3. Treated water might not be suitable for use in other areas of operation and it might be necessary to install a water treatment system for the water going to the machine only. Discuss this option with a qualified water treatment specialist.
4. Operators should be properly trained on how much detergent is to be used per cycle. Meet with a water treatment specialist and chemical supplier to discuss a complete training program for operators.
5. Chemicals must 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 the machine functions properly, and 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, it's possible that dishes will not be clean or sanitized.
7. Instruct 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 maintain the machine at its optimum performance level, lime and corrosion deposits must be removed. The frequency for deliming will be based on water conditions. A deliming solution is available from your chemical supplier. Read and follow all instructions on the label.

To delime the machine:

1. Disconnect or turn off all chemical feeder equipment.
2. Remove rinse arms and place in sink with deliming solution.
3. Verify the standpipe is in position, turn the machine on, and allow the machine to complete a fill cycle.
4. Open the door and verify water level is above standpipe. Add deliming solution per the solution manufacturer's recommendation (the water capacity of the tank can be verified on the specification page of this manual).
5. Close the door and push the Delime Button on the display.



6. Run the machine for the period of time recommended by the chemical supplier.
7. Press the Delime Button again and the pump will stop.
8. Open the door and remove the standpipe.
9. Wait five minutes, then inspect the inside of the machine. If the machine is not delimed, run again.
10. When clean, drain and refill the machine.
11. Run a cycle to remove residual deliming solution.
12. Replace rinse arms.
13. Drain and refill the machine.

SETTING CYCLES

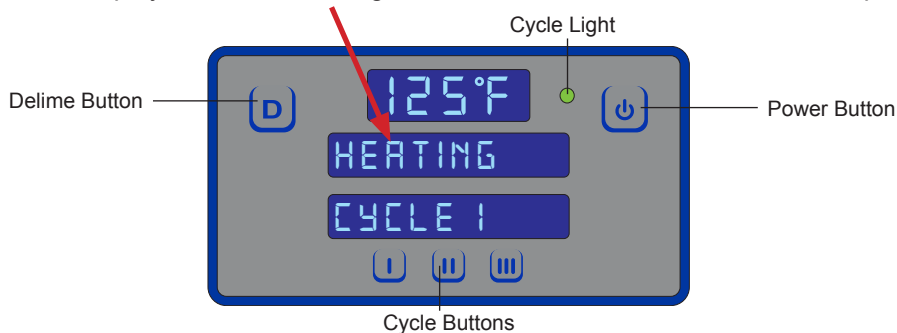
- Press and release the I Button to set cycle 1.
- Press and release the II Button to set cycle 2.
- Press and release the III Button to set cycle 3.

CHECKING CYCLE COUNT

While the machine is powered off, press and hold the Power Button. The total cycle count will display for several seconds, followed by a "power-on" condition.

GENERAL

- When the machine is first connected to the power mains, the display will go through a sequence to show all LEDs are working.
- The machine will then go into standby mode with the display turned off.
- Press the Power Button.
- The display will show "Heating" until the wash tank reaches the set temperature.



- The display will show "Ready" when the machine is ready to use.



OPERATIONAL MESSAGES

DISPLAY	INDICATOR
"Check for open door"	Door is open when the machine needs to fill (float switch is down).
"Filling"	Indicates the initial fill after the machine is first powered on.
"Heating"	The wash tank and booster have not reached operating temperature during the machine's initial heating phase.
"Delime"	The Delime Button has been pressed.
"Ready"	The machine is not in a cycle and ready for the next load.
"Washing"	The machine is in the <i>wash</i> phase of a cycle with power to the wash pump.
"Rinsing"	The machine is in the <i>rinse</i> phase of a cycle with power to the rinse valve; wash pump is turned off.
"Dwelling"	The machine is in the <i>dwelling</i> phase of a cycle. Neither wash pump nor rinse valve are turned on.

PREVENTATIVE MAINTENANCE



The manufacturer highly recommends that any maintenance and repairs not specifically discussed in this manual be performed only by qualified service personnel.

WARNING! *Unqualified personnel performing maintenance on the machine may void the warranty, lead to larger problems, or cause harm to the operator.*

Following the operating and cleaning instructions in this manual will result in the most efficient results from the machine. As a reminder, here are some steps to take to ensure the machine is being used the way it was designed to work:



CAUTION!

Do NOT beat strainers to remove debris!

1. Ensure the water temperatures match those listed on the machine data plate. A loss of temperature can indicate a larger problem.
2. Ensure 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 with water if necessary. Use a toothpick to dislodge any stubborn debris.
3. Ensure all wash and rinse arms are secure in the machine before operating.
4. Ensure the standpipe is in position before operating.
5. Remove as much soil from dishes by hand as possible before loading into racks.
6. Do not overfill racks.
7. Ensure glasses are placed upside-down in the rack.
8. Ensure all chemicals being injected into the machine are at the correct concentrations.
9. Clean the machine at the end of every day/shift 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.

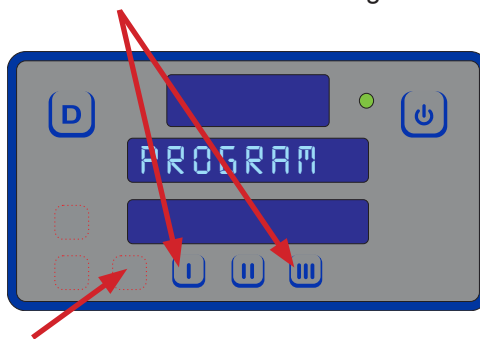
PROGRAMMING

To access programming, the machine should be on and not in cycle.

The programming buttons (Up-arrow, Down-arrow, and Select) are hidden on the display and are shown below as red outlines. There is a full-size display template at the end of the manual to help locate the programming buttons.

Factory Setup (Model Selection)

1. Press and hold the I and III Buttons until "Program" starts flashing (2 - 3 seconds).



2. Press the Select Button.
3. Use the Up-arrow or Down-arrow Button to change the program number to "4."



4. Press the Select Button.
5. "Program" will flash.
6. Press the Delime Button to exit.



PROGRAMMING

To access programming, the machine should be on and not in cycle.

The programming buttons (Up-arrow, Down-arrow, and Select) are hidden on the display and are shown below outlined with red dots. There is a full-size display template at the end of the manual to help locate the programming buttons.

User Setup

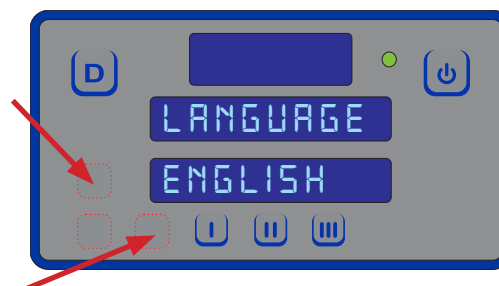
1. Press and hold the Up-arrow and Down-arrow Buttons until "Setup" starts flashing (2 - 3 seconds).



2. The display will then change to "Version" and show the firmware versions of the IO module and PCB, Digital Display.
3. Use the Up-arrow Button to cycle through the categories (will be flashing).
 - Language
 - Temperature Scale
 - Wash Temperature
 - Boost Temperature
 - Wash Offset
 - Rinse Offset
 - Boost Offset
 - Spare Offset



4. Press the Select Button to choose the category you want to change.
 - Regardless of the category, Steps 5 - 7 remain the same.
5. Use the Up-arrow Button to change the options (will be flashing). Numerical options are shown in the top window.



6. Press the Select Button to accept the changes.
7. Press the Delime Button to exit.

DISPLAY SHOWS	POSSIBLE CAUSES	REMEDY
"F1 Service needed," "No water in Booster"	<ol style="list-style-type: none"> 1. Low or no water pressure. 2. Faulty inlet valve or fill relay. 3. Contactor to booster heater not turning off. 4. Faulty temperature input (P12) on IO module. 5. Faulty temperature probe (T3). 6. Faulty float switch allows heaters to operate with no water in tub. 	<ol style="list-style-type: none"> 1. Verify incoming water pressure is 10 ± 2 PSI. 2. Verify that fill relay is supplying voltage to fill solenoid. Replace faulty component. 3. Check for welded contacts. Verify that output from IO module turns off when above the set temperature. 4. Substitute a 1.2 kΩ resistor for T3, and verify that booster heater turns off. If not, replace IO module. 5. Verify that the booster-probe resistance is correct with respect to temperature (see table on pg. 24). If not, replace T3. 6. Replace float switch.
"F2 Service needed," "Check booster thermostat"	<ol style="list-style-type: none"> 1. Contactor to booster heater not turning off. 2. Faulty temperature input (P12) on IO module. 3. Faulty temperature probe (T3). 	<ol style="list-style-type: none"> 1. Check for welded contacts. Verify that output from IO module turns off when above the set temperature. 2. Substitute a 1.2 kΩ resistor for T3, and verify that booster heater turns off. If not, replace IO module. 3. Verify that the booster probe resistance is correct with respect to temperature (see table on pg. 24). If not, replace T3.
"F3 No water in wash tank," "Check inlet water and door"	<ol style="list-style-type: none"> 1. Malfunction of fill solenoid or fill relay. 2. Door is open, which inhibits fill mode. 3. Faulty door switch. 	<ol style="list-style-type: none"> 1. Replace faulty component. 2. Close door to activate door switch. 3. Replace or adjust door switch.
"F4 Service needed," "Check incoming power"	<ol style="list-style-type: none"> 1. Incoming power not properly connected. 2. L3 is missing (3-phase machines only). 	<ol style="list-style-type: none"> 1. Check connections to heater. 2. Verify that L3 is present and connected properly.
"F5 Service needed," "Check booster thermostat and high limit"	<ol style="list-style-type: none"> 1. Faulty temperature input (P12) on IO module. 2. Faulty temperature probe (T3). 3. Faulty high-limit switch. 4. Faulty booster heater. 5. Booster-heater contactor not energizing. 	<ol style="list-style-type: none"> 1. Substitute a 1.8 kΩ resistor for T3, and verify that booster heater turns on. If not, replace IO module. 2. Verify that T3 resistance is consistent with the table on pg. 24. If not, replace T3. 3. Replace high-limit switch. 4. Check booster heater for proper resistance. Replace if incorrect. 5. Verify that drive voltage to contactor coil is present during a call for heat and that contactor closes. If voltage is present, replace contactor. If voltage is not present, check wiring.

DISPLAY SHOWS	POSSIBLE CAUSES	REMEDY
"F6 Service needed," "No water in wash tank"	<ol style="list-style-type: none"> 1. Low or no water pressure. 2. Faulty inlet valve or fill relay. 3. Contactor to wash heater not turning off. 4. Faulty temperature input (T1) on IO module. 5. Faulty temperature probe (T1). 6. Faulty float switch allows heaters to operate with no water in tub. 	<ol style="list-style-type: none"> 1. Verify incoming water pressure is 10 ± 2 PSI. 2. Verify that fill relay is supplying voltage to fill solenoid. Replace faulty component. 3. Check for welded contacts. Verify that output from IO module turns off when above the set temperature. 4. Substitute a 1.2 kΩ resistor for T1, and verify that wash heater turns off. If not, replace IO module. 5. Verify that T1 resistance is correct with respect to temperature (see table on pg. 24). If not, replace T1. 6. Replace float switch.
"F7 Service needed," "Check wash tank thermostat"	<ol style="list-style-type: none"> 1. Contactor to wash heater not turning off. 2. Faulty temperature input (P10) on IO module. 3. Faulty temperature probe (T1). 	<ol style="list-style-type: none"> 1. Check for welded contacts. Verify that output from IO module turns off when above the set temperature. 2. Substitute a 1.2 kΩ resistor for T1, and verify that wash heater turns off. If not, replace IO module. 3. Verify that T1 resistance is correct with respect to temperature (see table on pg. 24). If not, replace T1.
"F8 No water in wash tank," "Check inlet water and door"	<ol style="list-style-type: none"> 1. Malfunction of fill solenoid or fill relay. 2. Door is open, which inhibits fill mode. 3. Faulty door switch. 	<ol style="list-style-type: none"> 1. Replace faulty solenoid or fill relay. 2. Close door to activate door switch. 3. Replace or adjust door switch.
"F9 Service needed," "Check incoming power"	<ol style="list-style-type: none"> 1. Incoming power not properly connected. 2. L3 is missing (3-phase machines only). 	<ol style="list-style-type: none"> 1. Check connections to heater. 2. Verify that L3 is present and connected properly.
"F10 Service needed," "Check wash tank thermostat and high limit"	<ol style="list-style-type: none"> 1. Faulty temperature input (T1) on I/O module. 2. Faulty temperature probe (T1). 3. Faulty high-limit switch. 4. Faulty wash heater. 5. Wash-heater contactor not energizing. 	<ol style="list-style-type: none"> 1. Substitute a 1.8 kΩ resistor for T1, and verify that wash heater turns on. If not, replace I/O module. 2. Verify that T1 resistance is correct with respect to temperature (see table on pg. 24). If not, replace T1. 3. Replace high-limit switch. 4. Check wash heater for proper resistance. Replace if incorrect. 5. Verify that drive voltage to contactor coil is present during a call for heat and that contactor closes. If voltage present, replace contactor. If voltage not present, check wiring.
F11 Service needed —check wash tank thermostat	Faulty temperature probe (T1).	Replace probe that connects to P10.

DISPLAY SHOWS	POSSIBLE CAUSES	REMEDY
F12 - Not Used	N/A	N/A
F13 Communication error. Check 6-pin cable	<ol style="list-style-type: none"> 1. Loose connection in 6-pin cable between display board and I/O module. 2. Faulty 6-pin cable between display board and I/O module. 3. Faulty communication port on I/O module or display board. 	<ol style="list-style-type: none"> 1. Fully disconnect 6-pin cable at each end, and reconnect each end until a click is heard. 2. Inspect for broken wire or unseated terminal by gently pulling on each wire at each end of the cable. Reseat any loose terminals by inserting it fully into the housing using long-nosed pliers. Replace cable if broken wire is found. 3. Temporarily substitute a verified good display board, and check if F13 message recurs. If so, repeat substitution with a good I/O module.

RESISTANCE-TO-TEMPERATURE VALUES

R (kΩ)	°F
11.58	69.8
10.37	75.2
9.30	80.6
7.78	89.6
3.05	140.0
2.54	150.8
2.18	159.8
1.58	179.6
1.45	185.0
1.33	190.4
1.16	199.4
0.96	212.0



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

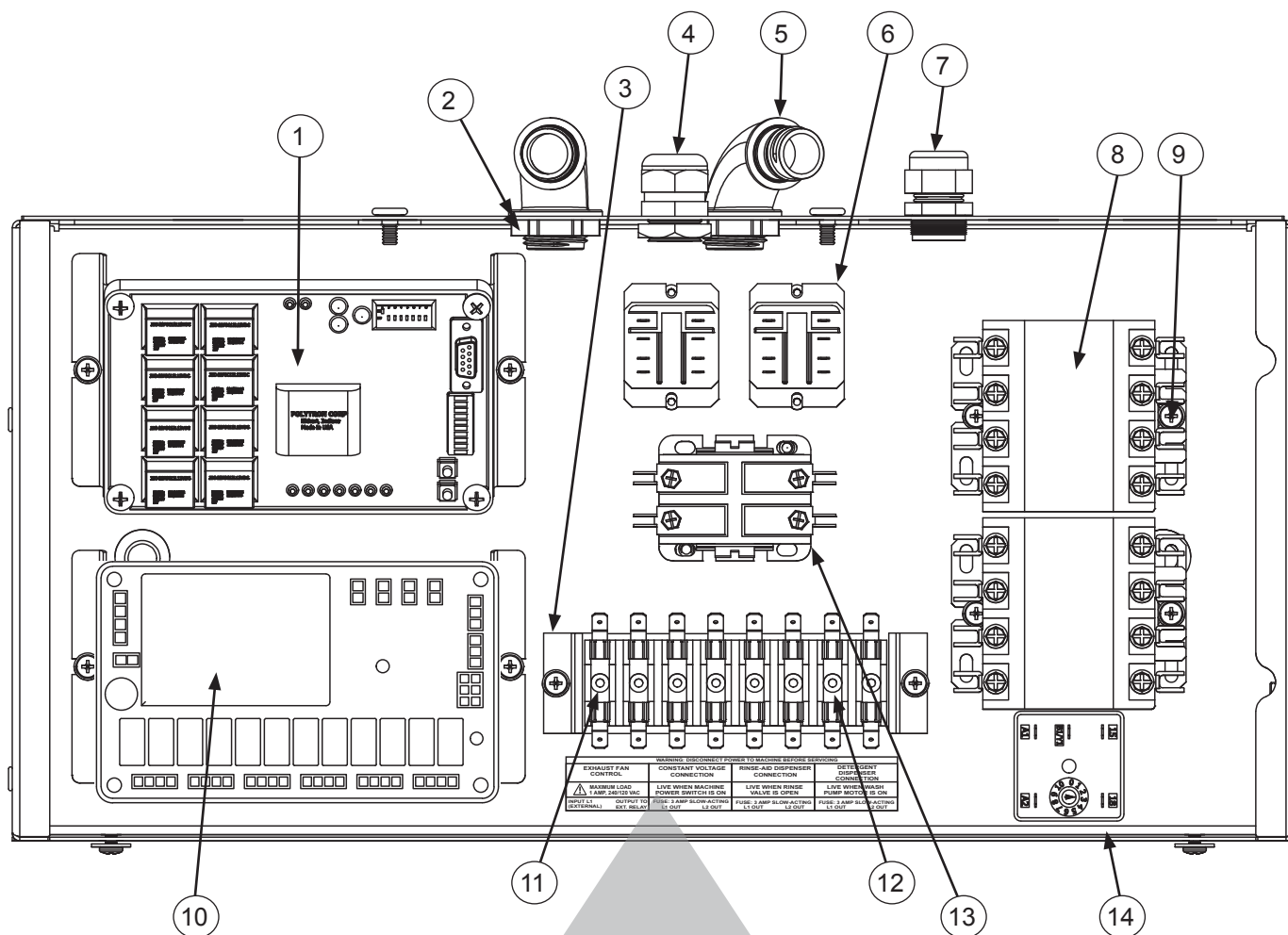
PROBLEM	POSSIBLE CAUSES	REMEDY
Digital display does not illuminate after power button is pressed.	<ol style="list-style-type: none"> 1. Service breaker tripped. 2. Machine not connected to power source. 3. Faulty power source. 	<ol style="list-style-type: none"> 1. Reset breaker. If it trips, again, 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 to the breaker switch.
Machine does not fill when machine is powered on (door must be closed.)	<ol style="list-style-type: none"> 1. Tank already full. 2. Faulty rinse solenoid valve. 3. Faulty door switch. 4. Faulty float switch. 	<ol style="list-style-type: none"> 1. N/A 2. Repair or replace valve as required. 3. Verify the wiring of the switch; if correct, replace switch. 4. Verify the wiring of both float switches; if correct, replace switch.
Machine will not begin wash cycle upon closing the door.	<ol style="list-style-type: none"> 1. Wash motor faulty/damaged. 2. Wash motor contactor faulty. 3. Timer Module is faulty. 4. I/O Module is faulty. 	<ol style="list-style-type: none"> 1. Verify that the wash motor is receiving power; if so, replace the motor. 2. Verify that contactor energizes; if so, then, with contactor energized, verify continuity across poles; if contacts are open, then replace the contactor. 3. Verify that module is receiving power (red LED is on); if so, replace it. 4. Verify that module is receiving power (green LEDs are on); if so, replace it.
Machine continuously washes.	<ol style="list-style-type: none"> 1. Machine is in Delime mode, which will be indicated in the display. 2. Timer Module is faulty. 	<ol style="list-style-type: none"> 1. Turn off Delime mode by pressing Delime key. 2. Verify that module is receiving power (green LEDs are on); if so, replace it.
Wash or rinse heater does not work.	<ol style="list-style-type: none"> 1. Faulty heater element. 2. Faulty heater contactor. 3. Faulty temperature probe (T1-wash tank, T3-rinse tank). 	<ol style="list-style-type: none"> 1. Verify that element has very low resistance ($< 20 \Omega$) across terminals. If high resistance or open, replace the heater. 2. Verify that contactor energizes; if so, then, with contactor energized, verify continuity across poles; if contacts are open, then replace the contactor. 3. Measure probe's resistance with ohmmeter, which should be $\sim 10 \text{ k}\Omega$ at 77°F. Replace probe is much different than this value. Reference: resistances at 70°F & 85°F are $\sim 11.9 \text{ k}\Omega$ & $7.4 \text{ k}\Omega$, respectively.
Machine 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 water-pressure regulator to $10 \pm 2 \text{ PSI}$. 3. Clean Y-strainer.



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

PROBLEM	POSSIBLE CAUSES	REMEDY
Rinse water is heated, but not reaching required temperature.	<ol style="list-style-type: none"> 1. Faulty rinse heater. 2. Faulty temperature probe (T2- rinse injector, T3-rinse tank). 3. I/O Module is faulty. 	<ol style="list-style-type: none"> 1. Verify that element has very low resistance ($< 20 \Omega$) across terminals. If high resistance or open, replace the heater. 2. Measure probe's resistance with ohmmeter, which should be $\sim 10 \text{ k}\Omega$ at 77°F. Replace probe is much different than this value. Reference: resistances at 70°F & 85°F are $\sim 11.9 \text{ k}\Omega$ & $7.4 \text{ k}\Omega$, respectively. 3. Verify that module is receiving power (green LEDs are on); if so, replace it.
Incorrect water pressure displayed during Fill or Rinse modes.	<ol style="list-style-type: none"> 1. Water turned off or disconnected. 2. Pressure sensor disconnected. 3. Pressure sensor defective. 	<ol style="list-style-type: none"> 1. Ensure water is connected & turn on valve. 2. Verify connection to I/O Module at P9. 3. Verify output (P9, WHT wire to BLK wire) to be $\sim 1 \text{ VDC}$ at $10 \pm 2 \text{ PSI}$. If not, then replace pressure sensor.
Wash water is not reaching required temperature.	<ol style="list-style-type: none"> 1. Faulty wash heater. 2. Faulty temperature probe (T1). 3. I/O Module is faulty. 	<ol style="list-style-type: none"> 1. Verify that element has very low resistance ($< 20 \Omega$) across terminals. If high resistance or open, replace the heater. 2. Measure probe's resistance with ohmmeter, which should be $\sim 10 \text{ k}\Omega$ at 77°F. Replace probe is much different than this value. Reference: resistances at 70°F & 85°F are $\sim 11.9 \text{ k}\Omega$ & $7.4 \text{ k}\Omega$, respectively. 3. Verify that module is receiving power (green LEDs are on); if so, replace it.
Doors will not close completely.	<ol style="list-style-type: none"> 1. Improper spring tension. 2. Obstruction in door roller channel. 	<ol style="list-style-type: none"> 1. Adjust spring tension to desired stiffness by loosening (not removing) spring bolt nuts near bottom of machine, and adjusting the tension. Tighten nuts back when done. 2. Remove the obstruction.
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. 3. Tighten the hose clamps.
Will not rinse during the cycle.	<ol style="list-style-type: none"> 1. Defective rinse solenoid. 2. Timer Module is faulty. 3. No incoming water pressure. 4. Machine temperatures are below minimum requirements. 	<ol style="list-style-type: none"> 1. Repair or replace the rinse solenoid. 2. Verify that module is receiving power (green LEDs are on); if so, replace it. 3. Verify $10 \pm 2 \text{ PSI}$ water pressure to the machine. 4. Verify that incoming water, rinse water, and wash water match the required temperatures as listed on the machine data plate.
Dishes are not coming clean.	<ol style="list-style-type: none"> 1. Machine temperatures are below minimum requirements. 2. No detergent or 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.

Control Box shown with cover (05700-004-27-52) removed.

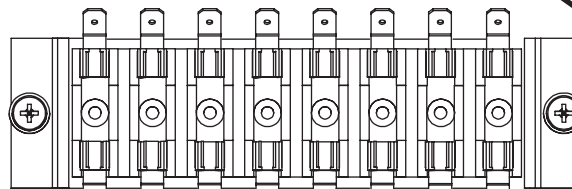
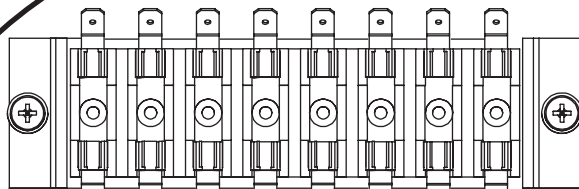


Fuses

208/230 V

or

460 V



WARNING: DISCONNECT POWER TO MACHINE BEFORE SERVICING			
EXHAUST FAN CONTROL	CONSTANT VOLTAGE CONNECTION	RINSE-AID DISPENSER CONNECTION	DETERGENT DISPENSER CONNECTION
MAXIMUM LOAD 1 AMP, 240/230 VAC	LIVE WHEN MACHINE POWER SWITCH IS ON	LIVE WHEN RINSE VALVE IS OPEN	LIVE WHEN WASH PUMP MOTOR IS ON
INPUT L1 (EXTERNAL)	FUSE: 3 AMP SLOW-ACTING L1 OUT	FUSE: 3 AMP SLOW-ACTING L1 OUT	FUSE: 3 AMP SLOW-ACTING L1 OUT
OUTPUT TO EXT. RELAY	L2 OUT	L2 OUT	L2 OUT

Fuse, 1 A, Fast-acting
05999-004-47-87
Littelfuse P/N - 0312001.HXP
Qty - 2 (2 per output)

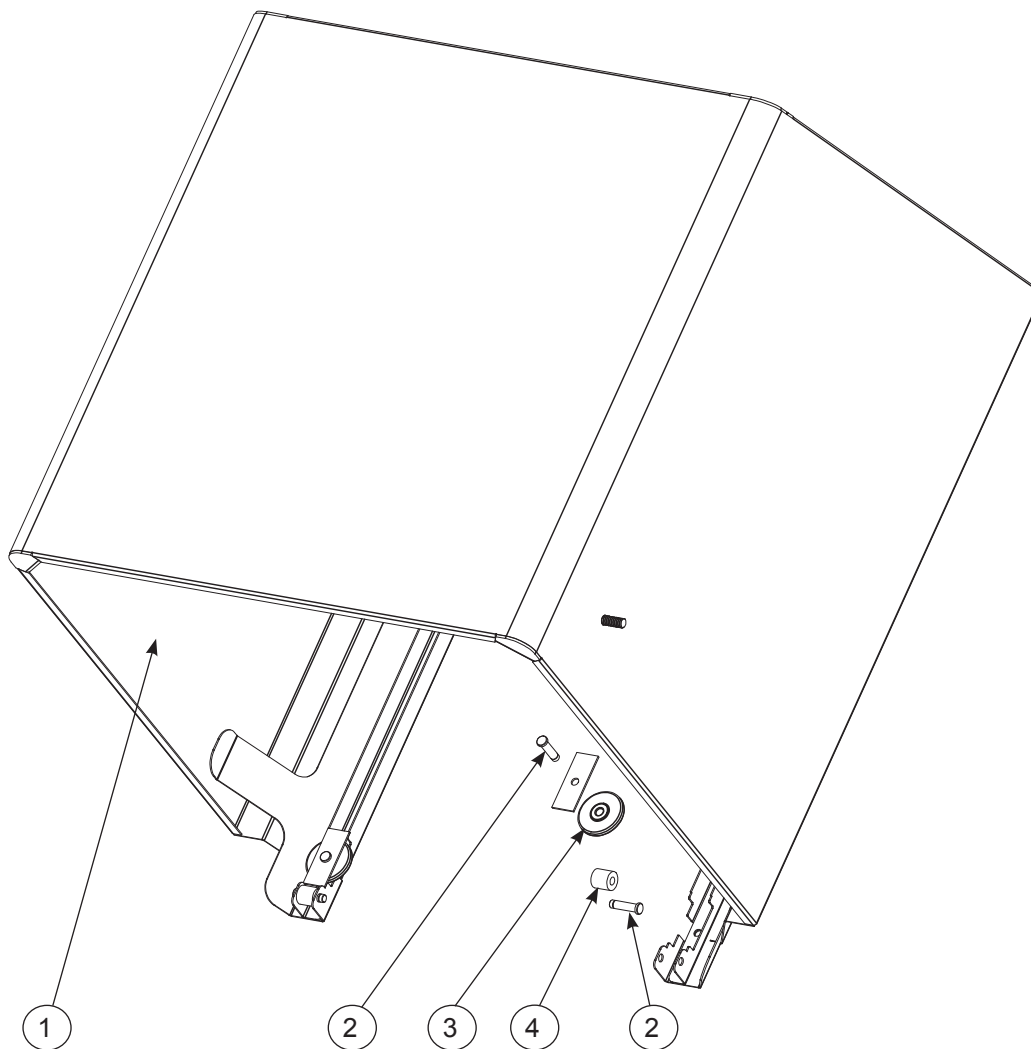
Fuse, 3 A, Slow-acting
05999-004-44-34
Littelfuse P/N - 0313003.HXP
Qty - 6 (2 per output)

WARNING: DISCONNECT POWER TO MACHINE BEFORE SERVICING			
EXHAUST FAN CONTROL	CONSTANT VOLTAGE CONNECTION	RINSE-AID DISPENSER CONNECTION	DETERGENT DISPENSER CONNECTION
MAXIMUM LOAD 1 AMP, 240/230 VAC	LIVE WHEN MACHINE POWER SWITCH IS ON	LIVE WHEN RINSE VALVE IS OPEN	LIVE WHEN WASH PUMP MOTOR IS ON
INPUT L1 (EXTERNAL)	FUSE: 200 mA SLOW-ACTING L1 OUT	FUSE: 200 mA SLOW-ACTING L1 OUT	FUSE: 200 mA SLOW-ACTING L1 OUT
OUTPUT TO EXT. RELAY	L2 OUT	L2 OUT	L2 OUT

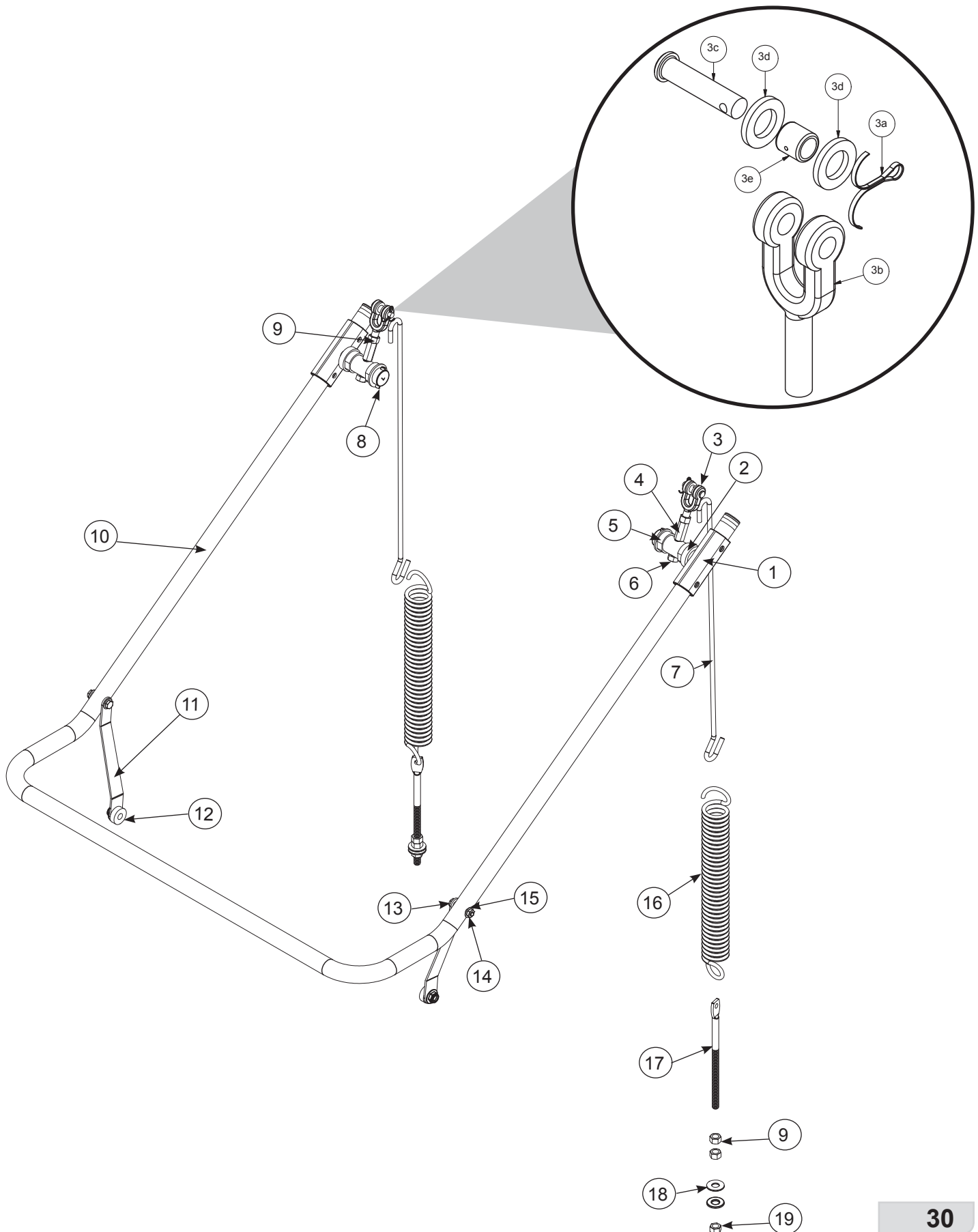
Fuse, 1 A, Fast-acting
05999-004-47-87
Littelfuse P/N - 0312001.HXP
Qty - 2 (2 per output)

Fuse, 200 mA, Slow-acting
05999-004-44-33
Littelfuse P/N - 0313.200HXP
Qty - 6 (2 per output)

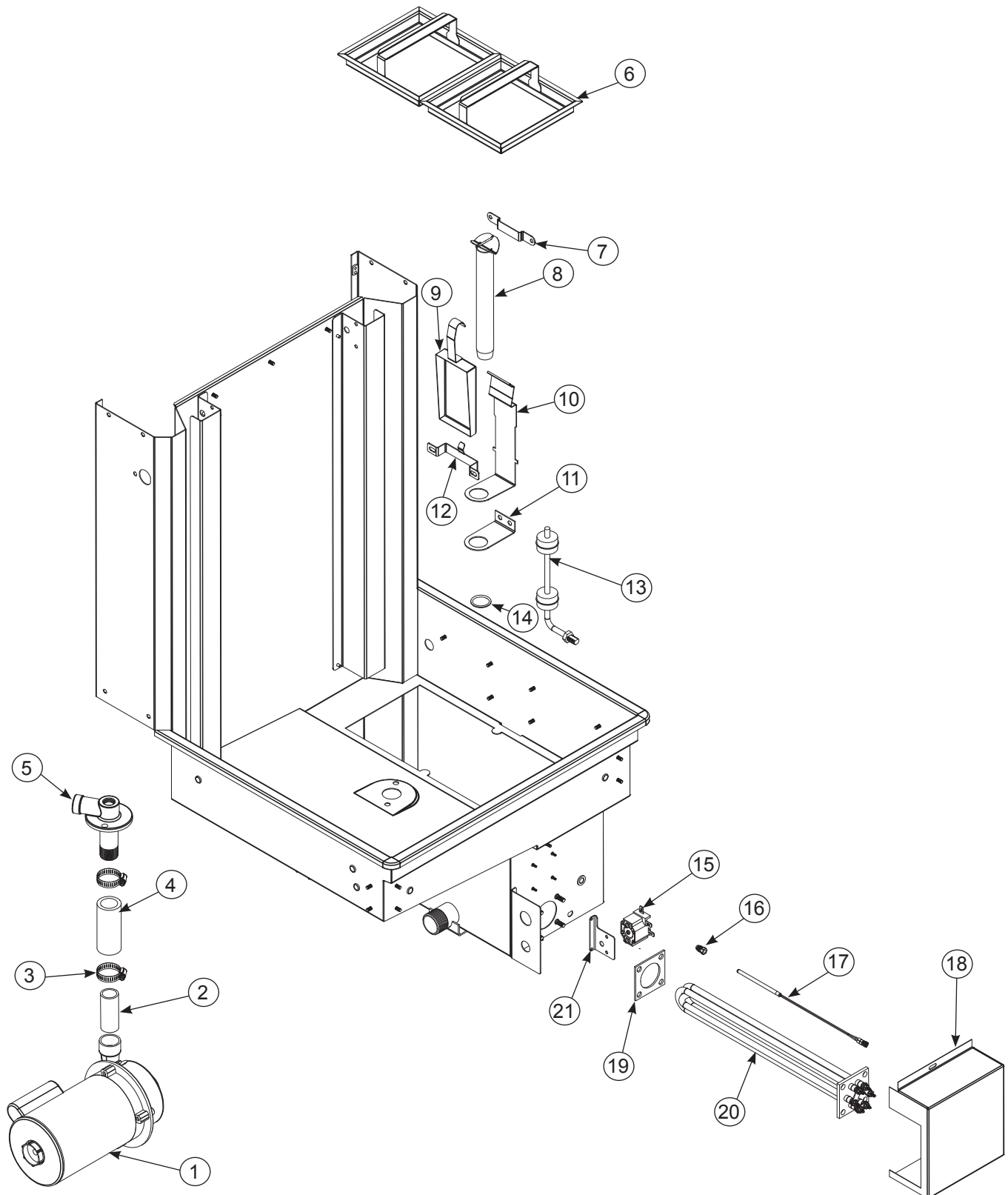
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Timer, Universal	05945-003-75-23
2	2	Nut, Conduit Black Nylon 3/4"	05975-003-81-29
3	1	Bracket, Fuse Strip	05700-002-42-03
4	1	Fitting	05975-011-65-51
5	2	Fitting, 3/4" 90° Twist HFC	05975-004-19-42
6	2	Relay	05945-111-47-51
7	1	Fitting	05975-011-59-50
8	2	Contactor, 4-Pole	05945-004-43-74
9	12	Screw, 10-32 x 1/2"	05305-011-44-52
10	1	I/O Module	05945-004-47-81
		I/O Module Kit (Not Shown)	06401-004-55-93
11	1	Fuse Holder, 6-Pole	05920-002-42-13
12	1	Fuse Holder, 2-Pole	05920-401-03-14
13	1	Contactor, 30 A 240 V	05945-002-74-20
14	1	Exhaust Fan Timer, One-Shot	05945-004-34-92
14a	1	Din Rail, One-Shot Timer (Not Shown)	05935-004-47-77
14b	1	Screw, Phillips Pan Washer (Not Shown)	05305-004-47-78
15	1	Transformer, 460 V Machine Only (Not Shown)	05950-111-65-93
15a	1	Fuse Holder, Single, 460 V Machine Only (Not Shown)	05920-011-72-89
15b	1	Fuse, 1 A, Bussman P/N FNQ-R-1, 460 V Machine Only (Not Shown)	05920-002-67-23
16	1	Pump Contactor, 460 V Machine Only (Not Shown)	05945-002-65-00
17	1	Overload, 4NK0AKY 1.7-2.6, 460 V Machine Only (Not Shown)	05945-002-65-02



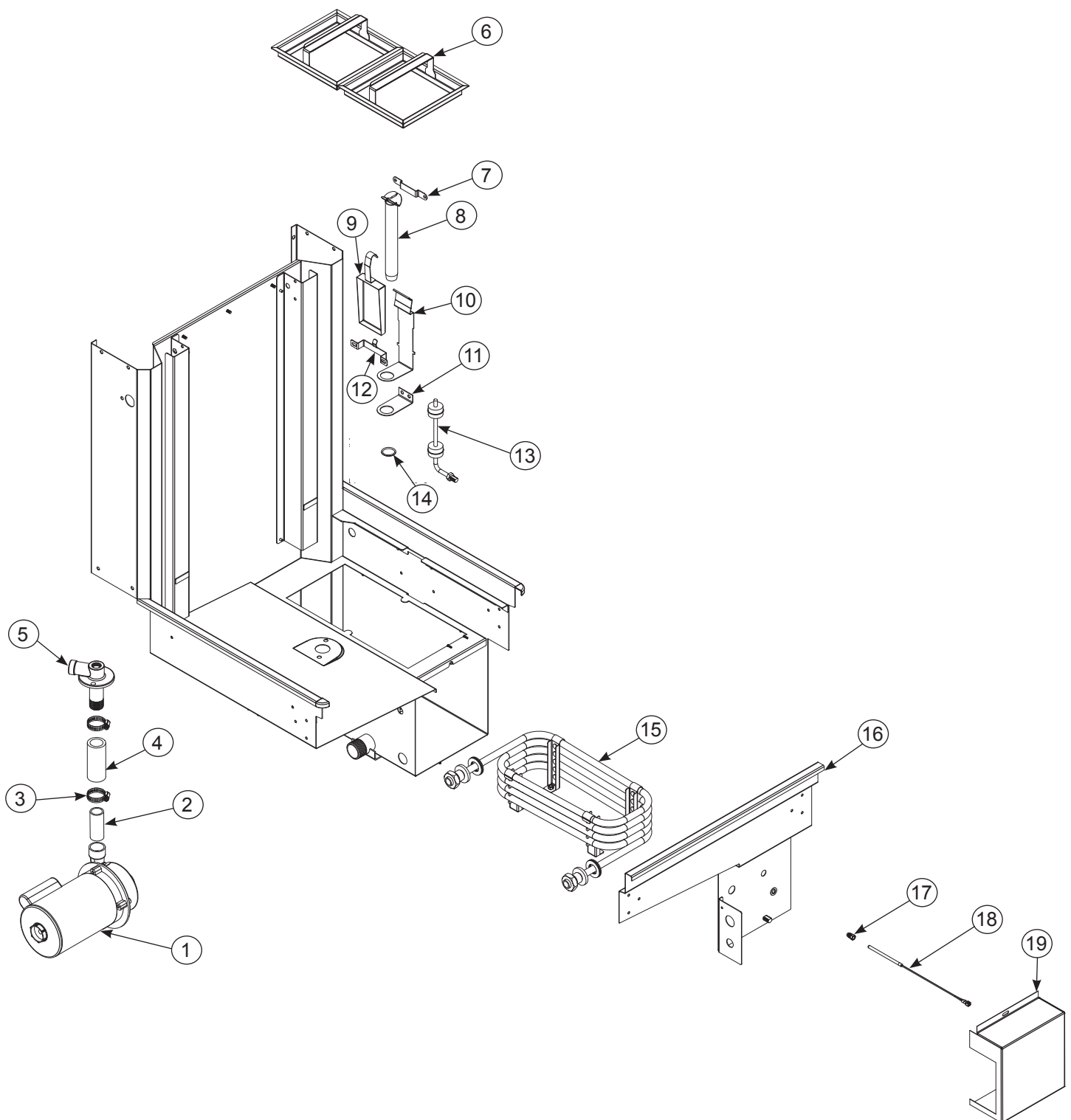
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Hood	05700-004-20-68
2	4	Pin, Clevis 5/16" x 1 1/4"	05315-004-07-24
3	2	Roller, Bottom Hood Lateral	09330-004-07-30
4	2	Roller, Bottom Rear	09330-004-07-29
5	1	Door Stop Block (Not Shown)	05700-004-41-95



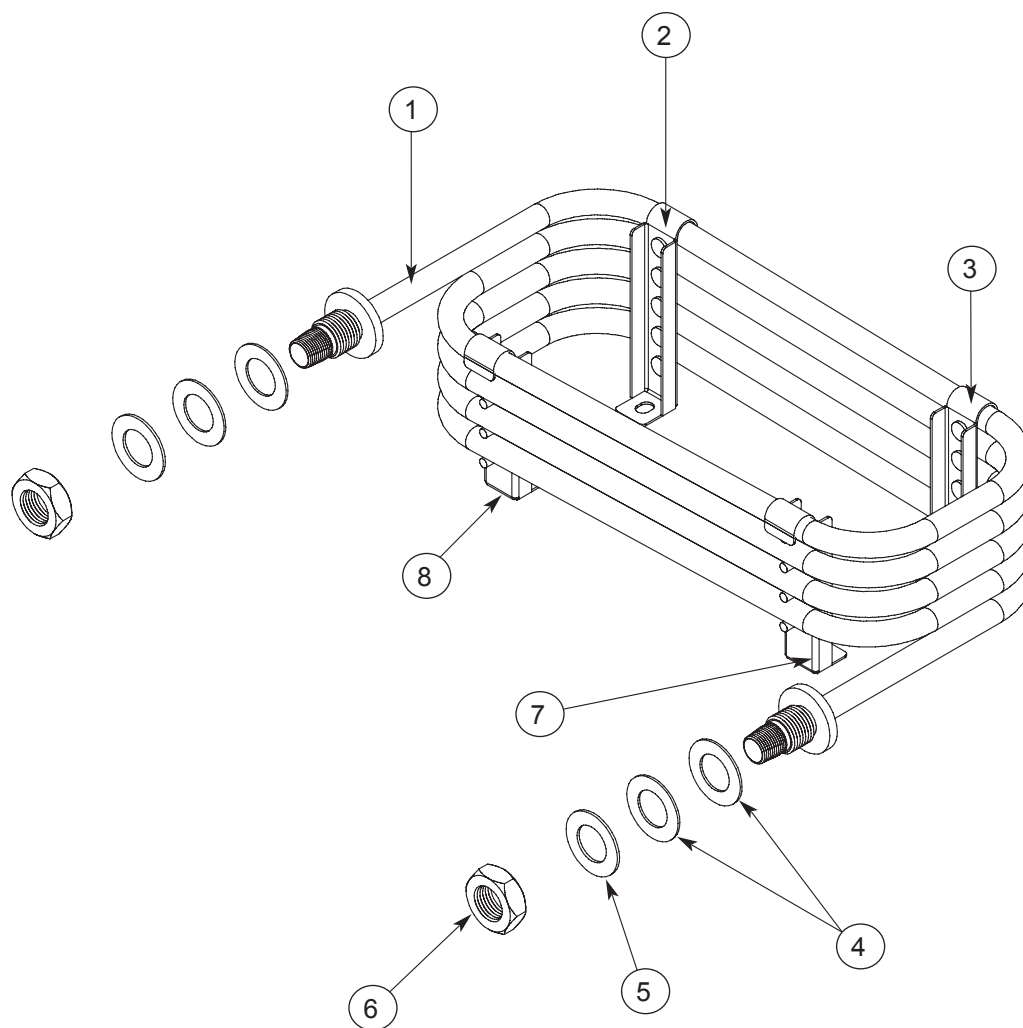
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Pivot, Cantilever Arm Right	09515-004-25-38
	1	Pivot, Cantilever Arm Left	09515-004-25-91
2	2	Bushing, Door Pivot Outer	09330-004-26-71
3	2	Yoke Assembly	05700-004-54-74
3a	1	Cotter Pin	05315-207-01-00
3b	1	Yoke	05700-004-97-94
3c	1	Clevis Pin, 5/16" x 1 3/8"	05315-700-01-00
3d	2	Nylon Washer	05311-369-03-00
3e	1	Bushing	03120-100-03-00
4	2	Nut, Hex Coupling 3/8-16	05310-004-26-85
5	2	Bushing, Door Pivot Inner	09330-004-25-63
6	2	Bolt, Hex 3/8-16 x 1 1/4"	05305-276-10-00
7	2	Spring Link	05700-004-26-81
8	2	Spring Pin, 1/4" DIA x 1 1/4" Long	05315-407-06-00
9	6	Nut, Hex 3/8-16 SS	05310-276-01-00
10	1	Cantilever Arm	05700-004-20-70
11	2	Link, Hood to Handle	05700-004-20-69
12	2	Standoff, Door Pivot	05700-004-22-75
13	2	Screw, 1/4-20 x 1 1/2" Hex Head	05305-274-23-00
14	2	Locknut, 1/4-20 Low Profile with Nylon Insert	05310-374-02-00
15	4	Washer, SS 1/4-20 ID	05311-174-01-00
16	2	Springs, Cantilever	05340-004-33-86
17	2	Bolt, Cantilever Hang Eye	05306-956-05-00
18	4	Washer, Impeller 3/8" Flat SS	05311-176-02-00
19	2	Locknut, 3/8-16 with Nylon Insert	05310-011-72-55



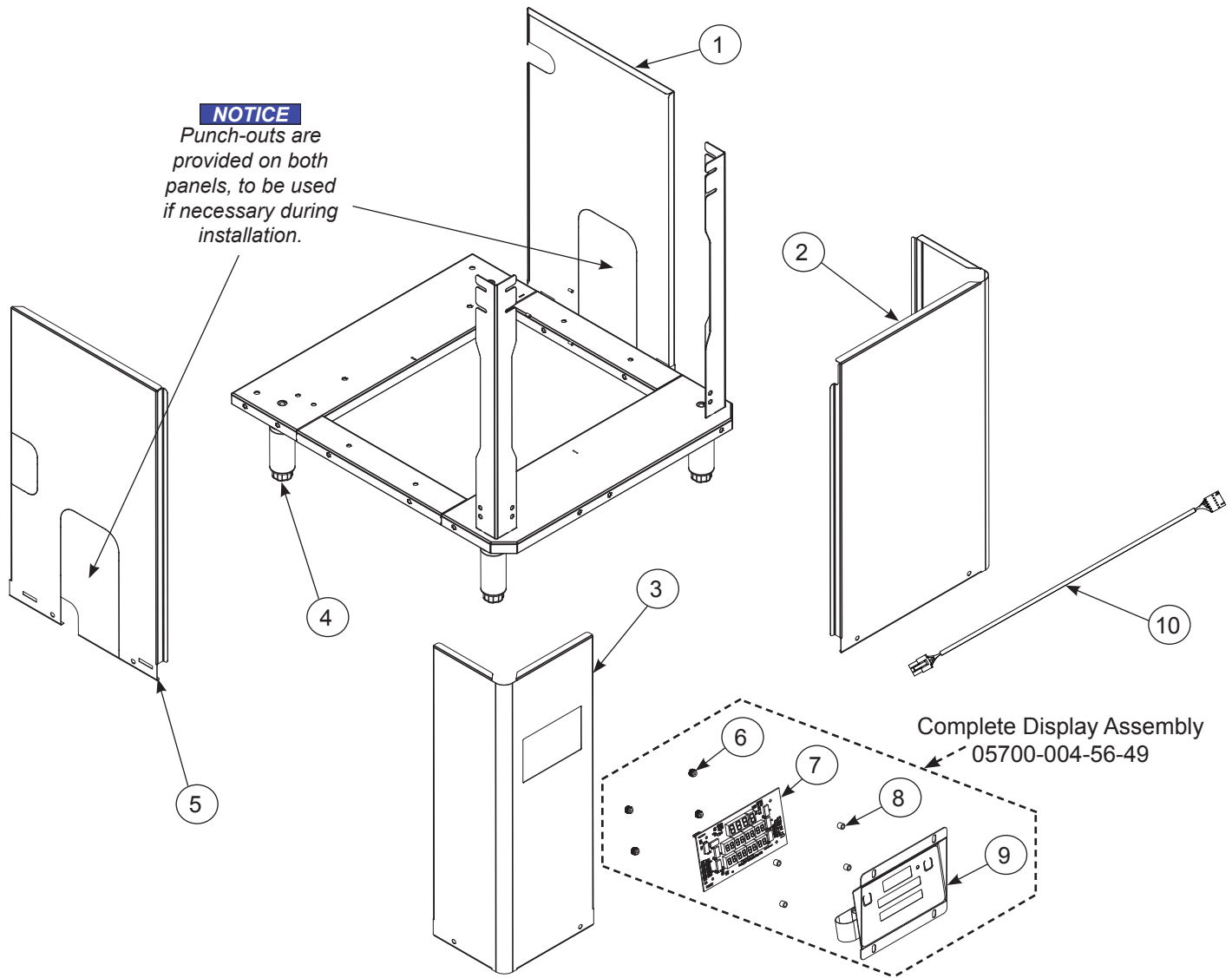
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Wash Motor	See Wash Motors pg.
2	1	Wash Lower Manifold Nipple	05700-021-34-84
3	2	Clamp	04730-719-18-00
4	1	Discharge Hose	05700-011-88-24
5	1	Lower Wash Manifold	05700-031-46-00
6	2	Strainer	05700-004-26-21
7	1	Standpipe Bracket	05700-004-26-24
8	1	Standpipe	05700-001-25-69
9	1	Suction Strainer	05700-001-22-23
10	1	Standpipe Lift Handle	05700-004-26-23
11	1	Standpipe Support	05700-001-27-55
12	1	Suction Strainer Bracket	05700-001-22-24
13	1	Dual Float Switch	06680-121-70-71
14	1	O-ring	05330-400-05-00
15	1	Thermostat	05930-004-33-12
16	1	Probe Fitting	05310-924-02-05
17	1	Thermistor Probe	06685-004-17-26
	1	Plug (NB Only) (Not Shown)	05700-004-47-32
18	1	Wash Tank Heater Cover	05700-031-47-57
19	1	Wash Heater Gasket	05330-011-47-79
20	1	Wash Heater	04540-121-47-39
21	1	Thermostat Bracket	05700-004-36-37



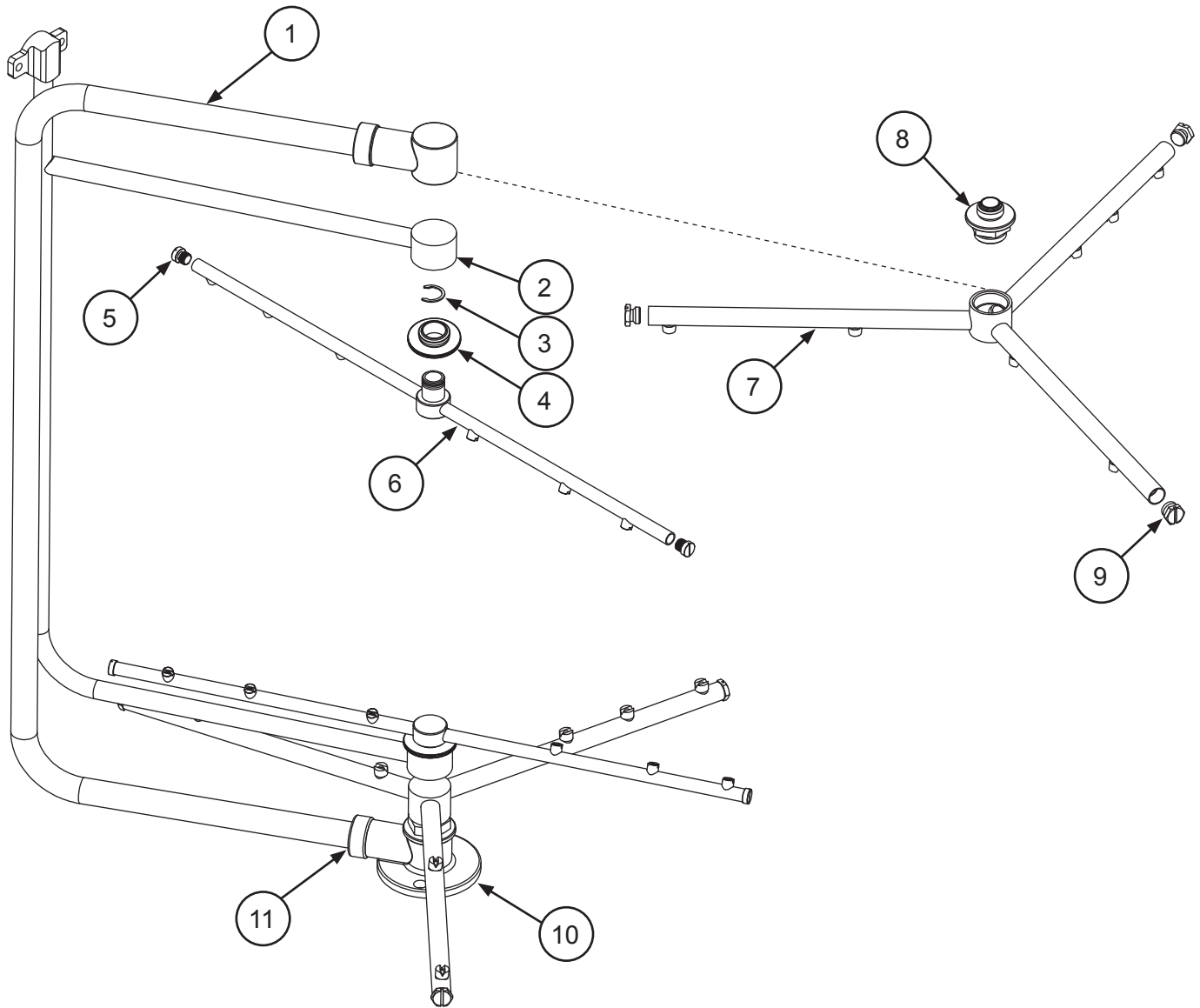
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Wash Motor	See Wash Motors
2	1	Wash Lower Manifold Nipple	05700-021-34-84
3	2	Clamp	04730-719-18-00
4	1	Discharge Hose	05700-011-88-24
5	1	Lower Wash Manifold	05700-031-46-00
6	2	Strainer	05700-004-26-21
7	1	Standpipe Bracket	05700-004-26-24
8	1	Standpipe	05700-001-25-69
9	1	Suction Strainer	05700-001-22-23
10	1	Standpipe Lift Handle	05700-004-26-23
11	1	Standpipe Support	05700-001-27-55
12	1	Suction Strainer Bracket	05700-001-22-24
13	1	Dual Float Switch	06680-121-70-71
14	1	O-ring	05330-400-05-00
15	1	Steam Coil	See "Steam Coil" page.
16	1	Tub Front, DynaTemp Steam	05700-004-32-87
17	1	Probe Fitting	05310-924-02-05
18	1	Thermistor Probe	06685-004-17-26
19	1	Wash Tank Heater Cover	05700-031-47-57



ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Steam Coil Assembly	05700-004-34-98
1	1	Steam Coil Weldment	05700-004-34-97
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



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Panel, Right	05700-004-20-80
2	1	Panel, Front	05700-004-10-02
3	1	Panel, Control	05700-004-27-88
4	4	Bullet Foot	05340-004-14-99
5	1	Panel, Left	05700-004-20-83
6	4	Nut, Thumb, 6-32 Nylon	05310-002-83-12
7	1	PCB, Digital Display	05945-004-52-53
8	4	Spacer, Unthreaded, 9/32" Nylon	05975-004-47-89
9	1	Panel and Membrane Switch Assembly	05700-004-58-72
10	1	Communication Cable, Display	05700-004-33-64



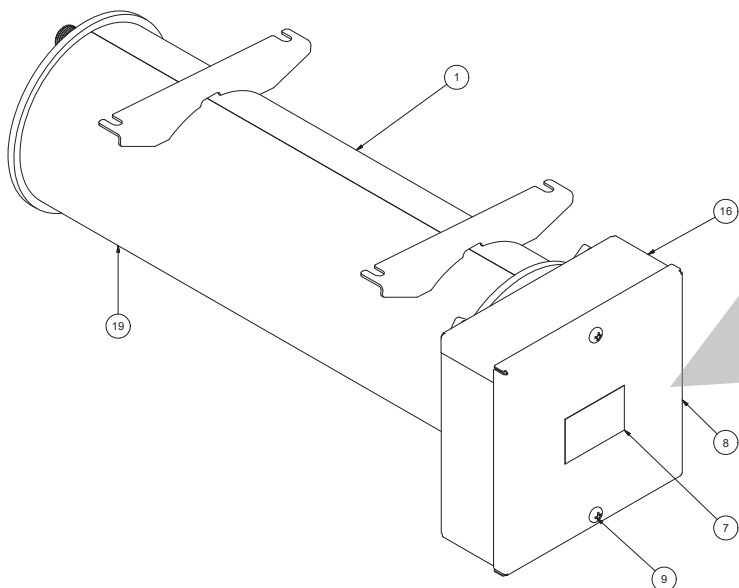
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Wash Manifold	05700-004-28-58
2	1	Rinse Manifold	05700-004-26-07
3*	2	Retaining Ring, Rinse Head Bushing	05340-112-01-11
4*	2	Bearing Assembly, Rinse Arm	05700-004-54-71
5	4	End-cap, Rinse Arm	05700-004-34-62
6	2	Complete Rinse Arm Assembly	05700-004-32-58
		Rinse Arm	05700-004-27-62
7	2	Complete Wash Arm Assembly	05700-004-32-59
		Wash Arm	05700-004-24-81
8	2	Wash Arm Bearing Assembly	05700-021-35-97
9	1	End-cap, Wash Arm	05700-011-35-92
10	1	Lower Wash Manifold	05700-031-46-01
11	1	O-ring (Not Shown)	05330-111-35-15

*Rinse Arm Bearing Kit
(Includes items 3 and 4)
06401-004-57-50

Complete Assemblies

208-230 V, 14 kW 70° Rise - 05700-004-43-33

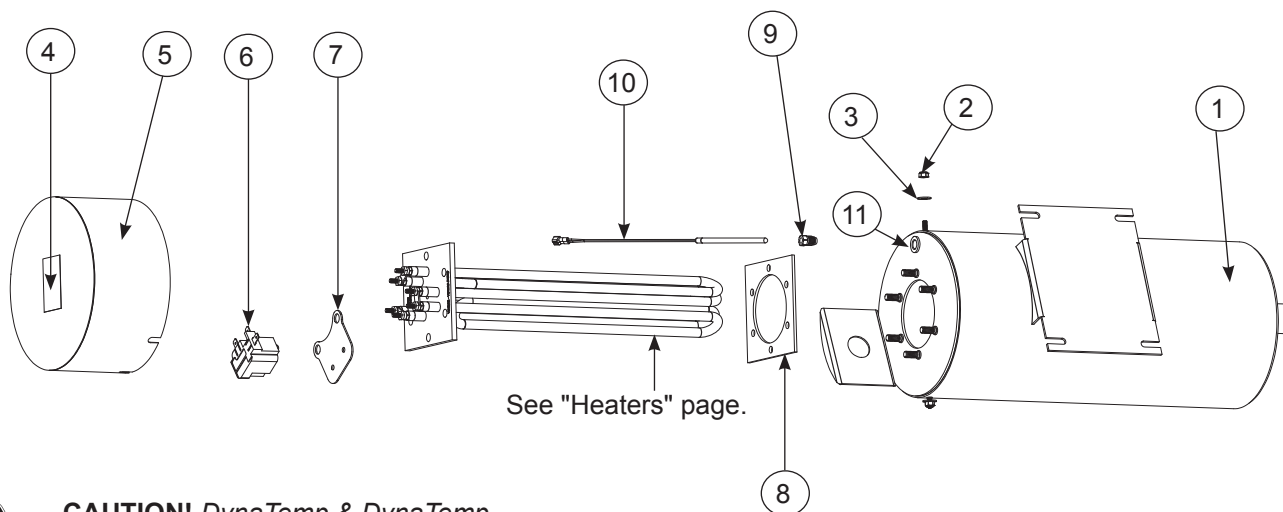
460 V, 14 kW 70° Rise - 05700-004-53-22



CAUTION! DynaTemp & DynaTemp VER machines with serial numbers before 18B354991 have the rinse tank on the next page.

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Tank, Rinse	05700-004-50-86
2	1	Heater, Rinse	See "Heaters" page.
3	6	Lockwasher, Split 5/16"	05311-275-01-00
4	1	Fitting, 1/4", Brass Nut/Sleeve	05310-924-02-05
5	1	Gasket, Rinse Heater	05330-200-02-70
6	6	Nut, Hex 5/16-18	05310-275-01-00
7	1	Decal, Warning-Disconnect Power	09905-100-75-93
8	1	Cover, Heater	05700-004-51-34
9	2	Screw	05305-004-27-82
10	1	Thermostat, High-limit	05930-004-33-12
11	1	Bracket, High-limit Thermostat	05700-004-36-84
12	2	Nut, 1/4-20	05310-004-23-96
13	4	Washer, 1/4-20	05311-174-01-00
14	4	Nut, Lock 1/4-20 Hex with Nylon Insert	05310-374-01-00
15	1	Clamp, Wire 1/8", P-clip	05975-601-10-15
16	1	Cover, Booster, Common, Door	05700-004-52-21
17	1	Washer, Flat	05311-173-02-00
18	1	Nut, Hex 8-32, Locking	05310-272-02-00
19	1	Plug, 1/4", Brass (Not Shown)	04730-209-01-00

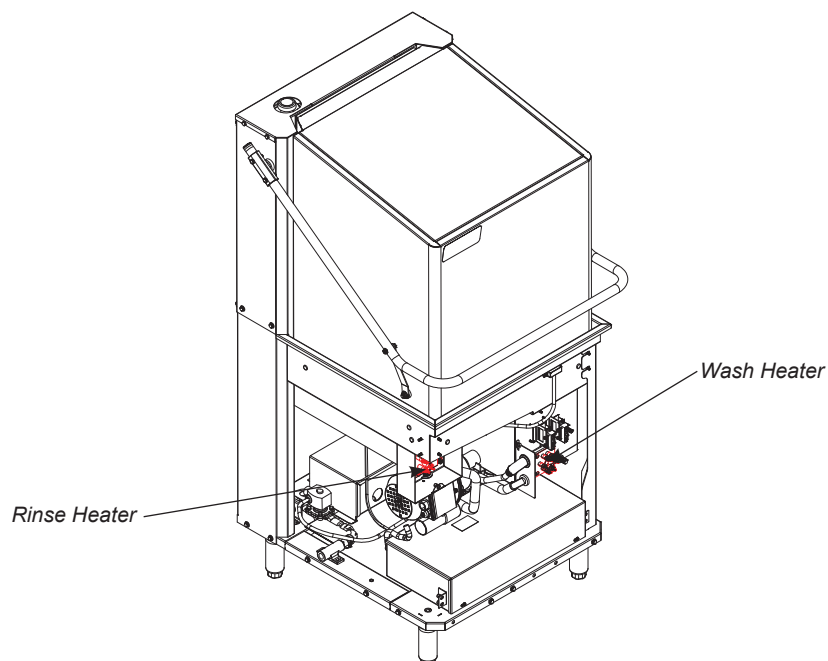
Complete Rinse Tank Assembly*
05700-002-29-36



CAUTION! *DynaTemp & DynaTemp
VER machines with serial numbers
after 18B354991 have the rinse tank
on the previous page.*

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Rinse Tank	05700-004-47-07
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	09905-100-75-93
5	1	Cover, Rinse Tank	05700-004-46-81
6	1	Thermostat, High-Limit	05930-004-33-12
7	1	Thermostat Bracket	05700-004-36-84
8	1	Gasket, Rinse Heater	05330-200-02-70
9	1	Fitting, 1/4" Imperial Brass	05310-924-02-05
10	1	Thermistor Probe	06685-004-34-58
11	1	Fitting, Thermostat	05700-001-23-96

*Does not include items 6 and 7, which can be ordered together using P/N 06401-004-39-09.



The models covered in this manual come supplied with various heaters, depending on the characteristics of the machine. To ensure you order the correct heater for the model you are servicing, please refer to the following tables:

MODEL	VOLTS	Hz	PHASE	WASH HEATER	RINSE HEATER
DynaTemp/VER	208	60	1	04540-121-47-39	04540-121-63-38
DynaTemp/VER	208	60	3	04540-121-47-39	04540-121-63-38
DynaTemp/VER	230	60	1	04540-121-47-39	04540-121-63-38
DynaTemp/VER	230	60	3	04540-121-47-39	04540-121-63-38
DynaTemp/VER	460	60	3	04540-121-65-99	04540-121-63-39

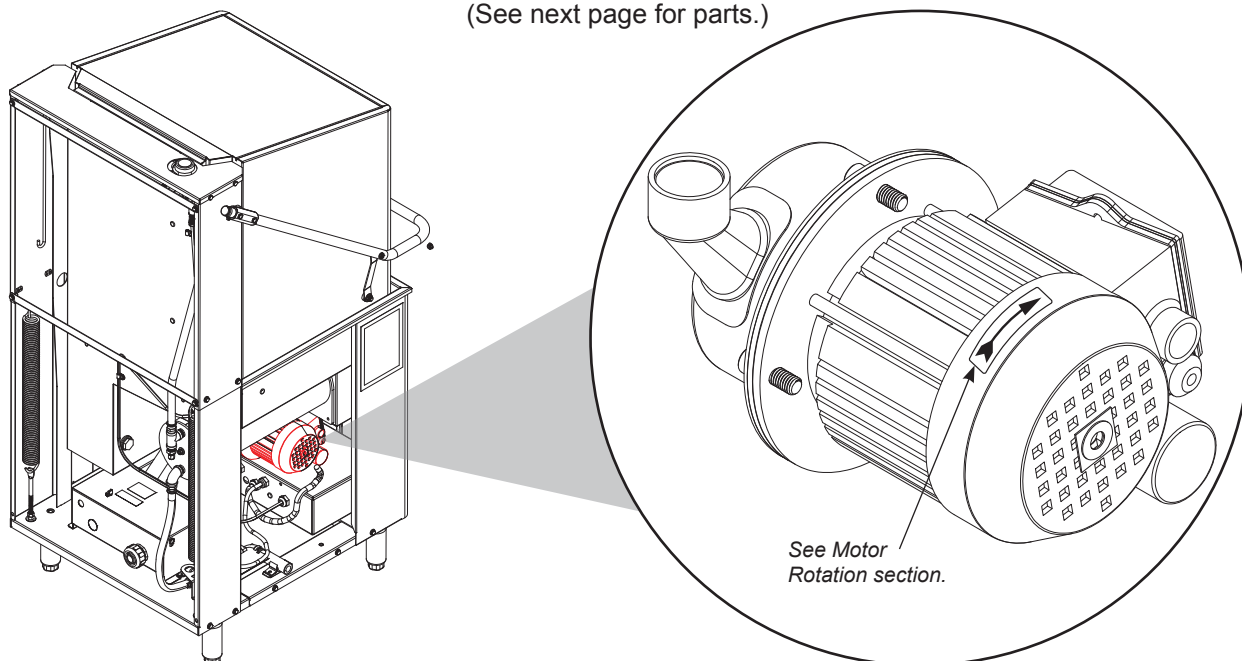
MODEL	VOLTS	Hz	PHASE	WASH HEATER
DynaTemp NB	208	60	1	04540-121-47-39
DynaTemp NB	208	60	3	04540-121-47-39
DynaTemp NB	230	60	1	04540-121-47-39
DynaTemp NB	230	60	3	04540-121-47-39
DynaTemp NB	460	60	3	04540-121-65-99

Heater Phase Conversion Kit

06401-004-00-22

Complete Assemblies

(See next page for parts.)



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

MODEL	VOLTS	Hz	PHASE	WASH MOTOR ASSEMBLY
All	208	60	1	06105-004-24-80 ¹
All	208	60	3	06105-004-24-80 ¹
All	230	60	1	06105-004-24-80 ¹
All	230	60	3	06105-004-24-80 ¹
All	460	60	3	06105-121-64-21 ²

¹Use P/N 06105-004-32-04 to order the motor only.

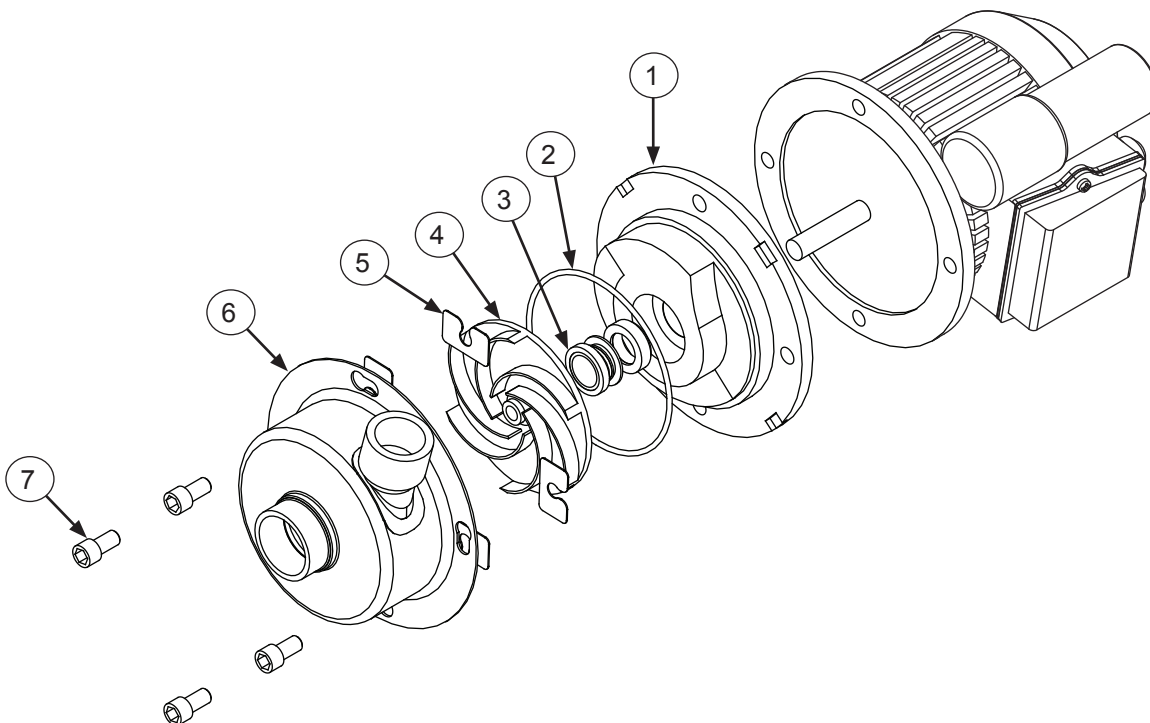
²Use P/N 06105-002-62-71 to order the motor only.

NOTICE

When servicing a wash motor, it is important to refer to the wiring schematic found on the motor to ensure the motor is wired correctly. Different manufacturers of motors might not use the same wire color codes and your new motor might not connect using the same wires. Always refer to the wiring diagrams on the motor you are installing. If the motor you are installing has had the schematic removed, contact the manufacturer immediately for technical support.

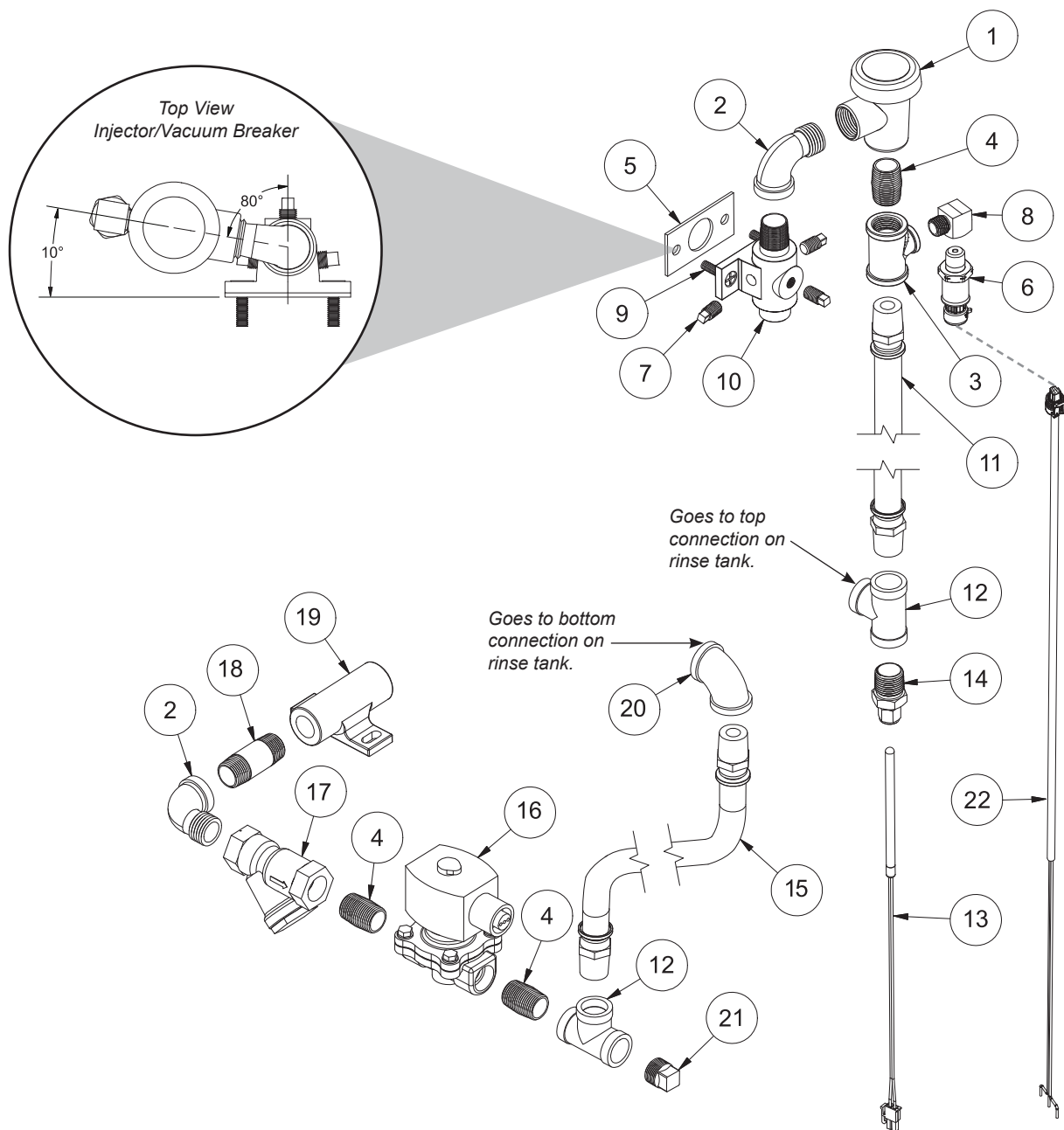
Parts

(See previous page for complete assemblies.)



The models covered in this manual come supplied with various wash motors (see previous page), depending on the characteristics of the machine. To ensure you order the correct parts for the model you are servicing, please refer to the following table:

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Seal Plate, 208/230 V	05700-002-81-87
	1	Seal Plate, 460 V	05700-002-06-22
2	1	Case O-ring, 208/230 V	05330-002-81-83
	1	Case O-ring, 460 V	05330-002-87-02
3	1	Mechanical Seal, 208/230 V	05330-002-34-22
	1	Mechanical Seal, 460 V	05330-002-87-16
4	1	Impeller Assembly, 208/230 V	05700-002-81-86
	1	Impeller Assembly, 460 V	05700-002-06-19
5	1	Shim Kit, 208/230 V	05700-002-82-58
	1	Shaft Adapter, 460 V	05700-011-95-19
6	1	Pump Casing 208/230 V	05700-002-85-01
7	1	Case Capscrew, 208/230 V	05305-002-81-88



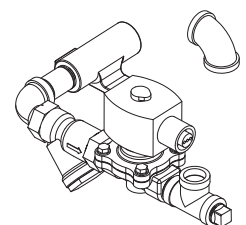
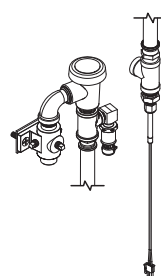
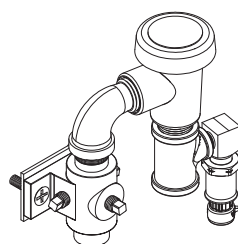
To order complete assemblies:

Complete Plumbing Assembly
05700-004-52-71
(Everything above
except item 22.)

Rinse Injector Plumbing
05700-004-28-49

Rinse Tank Out Plumbing
05700-004-52-66
(Includes 05700-004-28-49.)

Rinse Tank In Plumbing
05700-004-52-70

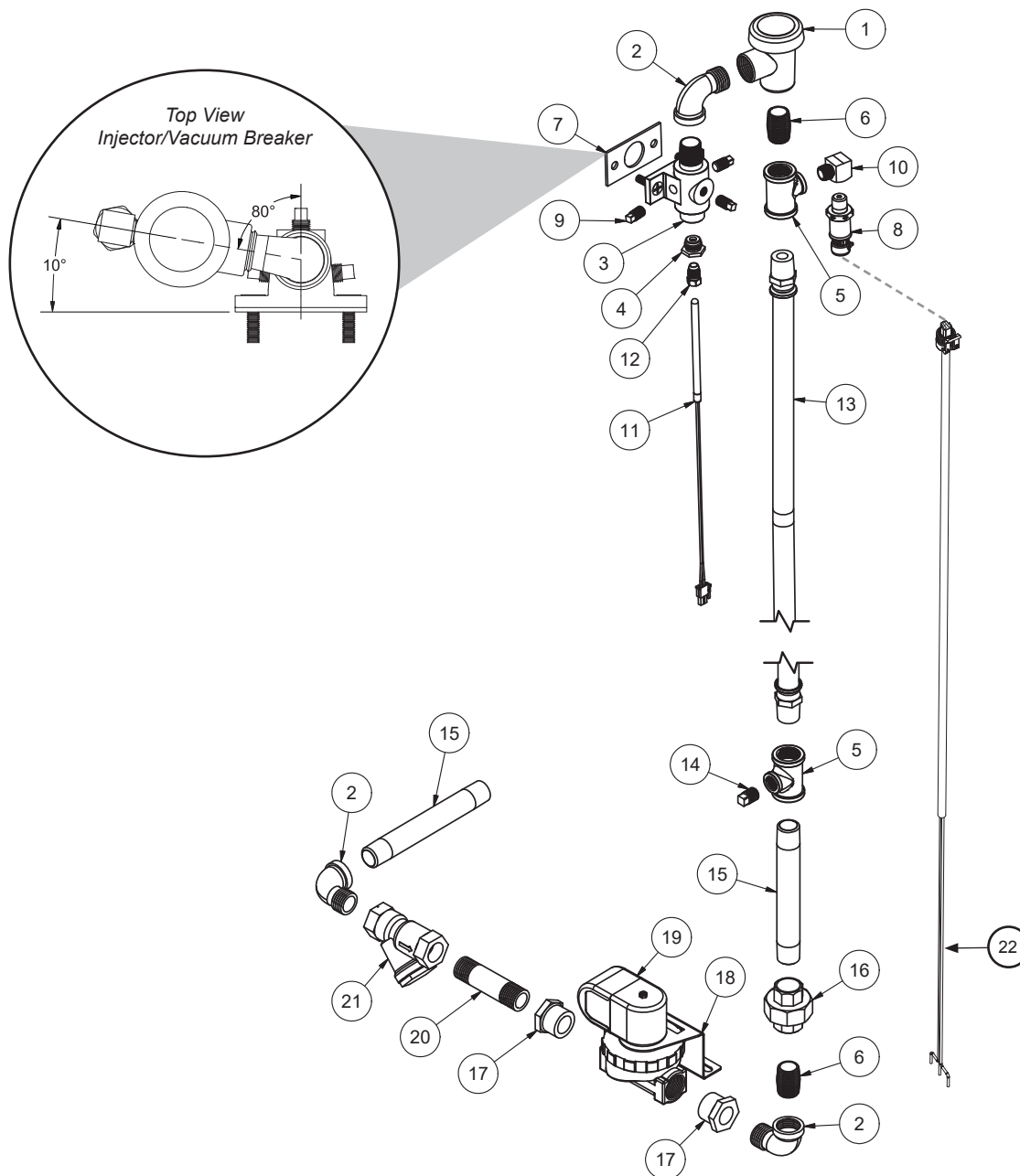


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Vacuum Breaker, 1/2" Brass	04820-003-06-13
2	2	Elbow, 90-Degree 1/2" Street Brass	04730-206-08-00
3	1	Tee	04730-002-22-56
4	3	Nipple, 1/2" Close Brass	04730-207-15-00
5	1	Gasket, Rinse Manifold	05330-003-75-91
6	1	Pressure Transducer	05945-004-17-01
7	3	Plug, 1/8" NPT Brass	04730-209-07-37
8	1	Elbow, 90-Degree 1/4" x 1/4"	04730-003-77-83
9	2	Screw, 1/4-20 x 1"	05305-011-81-58
10	1	Injector, Rinse Manifold	05700-004-26-98
11	1	Red Hose, 1/2" x 28"	05700-004-31-75
12	2	Tee, 1/2" Brass	04730-211-27-00
13	1	Thermistor Probe	06685-004-34-58
14	1	Compression Fitting, 1/2" x 1/4"	05700-004-36-74
15	1	Blue Hose, 1/2" x 13 1/2"	05700-004-52-69
16	1	Solenoid Valve, 1/2"	04810-003-71-56
17	1	Y-Strainer, 1/2"	04730-217-01-10
18	1	Nipple, 1/2" x 2" Long	04730-207-19-00
19	1	Casting, 1/2" Flanged Coupling	05700-004-47-97
20	1	Elbow, 90-Degree 1/2" Brass	04730-011-42-96
21	1	Plug, 1/2" Brass	04730-209-03-00
22*	1	Harness	05999-004-21-58

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 DynaTemp machine. It is strongly recommended that teflon thread tape—used in conservative amounts—be applied to threads when joining components together. It is not advised to 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 isolation ball valves.

**Part must be ordered separately.*



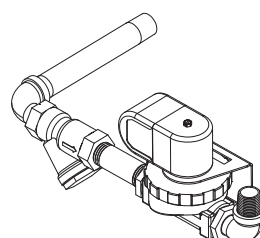
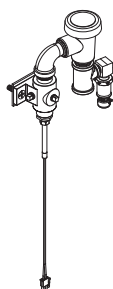
To order complete assemblies:

Complete Plumbing Assembly
05700-004-31-51
(Everything above
except item 22.)

Rinse Injector Plumbing
05700-004-46-48

Inlet Plumbing
05700-004-30-43

Lower Plumbing
05700-004-31-52

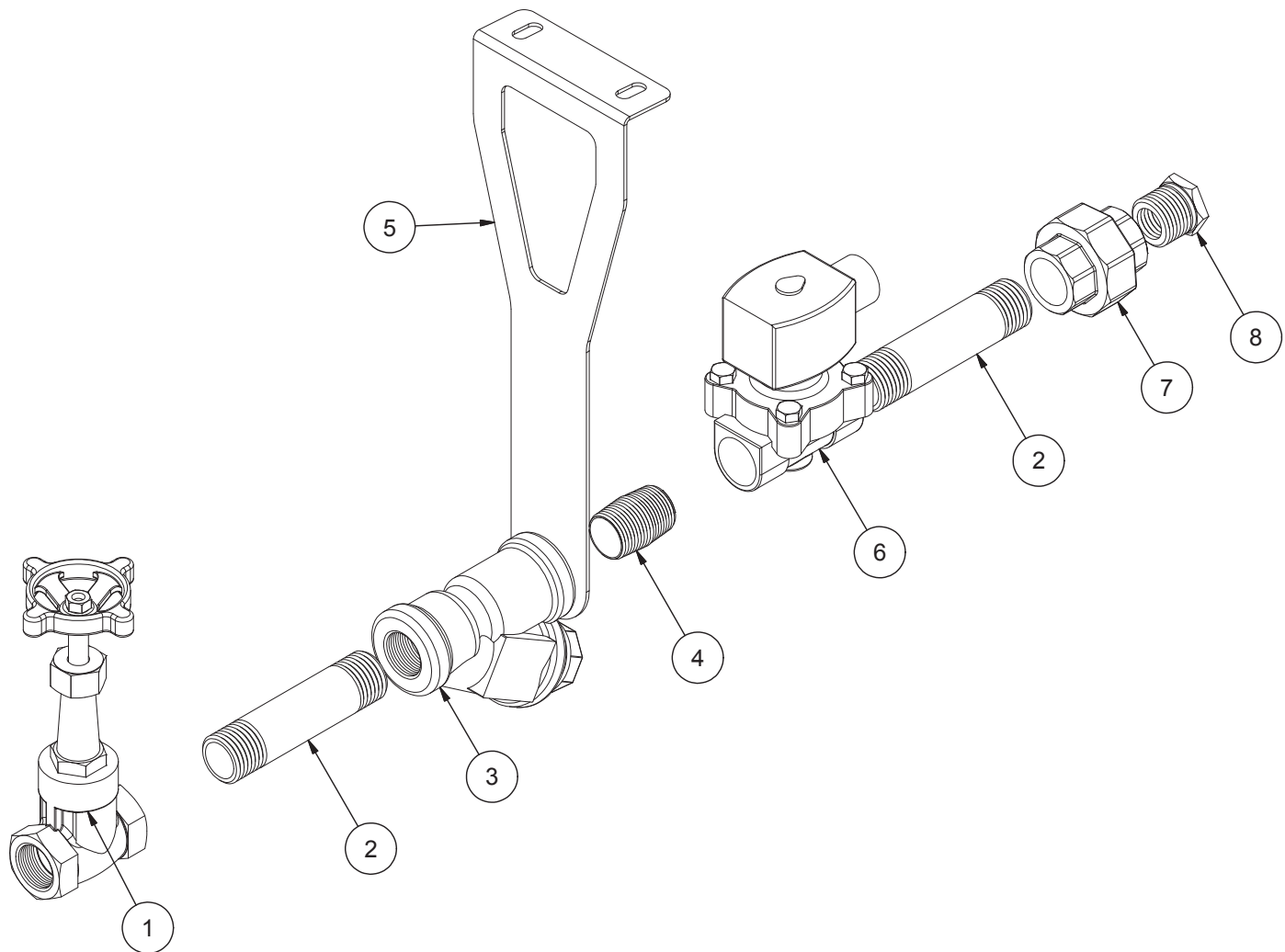


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Vacuum Breaker, 1/2" Brass	04820-003-06-13
2	3	Elbow, 90-Degree 1/2" Street Brass	04730-206-08-00
3	1	Injector, Rinse Manifold	05700-004-26-98
4	1	Adapter	05700-002-29-75
5	2	Tee	04730-002-22-56
6	2	Nipple, 1/2" Close Brass	04730-207-15-00
7	1	Gasket, Rinse Manifold	05330-003-75-91
8	1	Pressure Transducer	05945-004-17-01
9	3	Plug, 1/8" NPT Brass	04730-209-07-37
10	1	Elbow, 90-Degree 1/4" x 1/4"	04730-003-77-83
11	1	Thermistor Probe	06685-004-34-58
12	1	Probe Fitting	05310-924-02-05
13	1	Red Hose, 1/2" x 38"	05700-004-31-81
14	1	Plug, 1/4" Brass	04730-209-01-00
15	2	Nipple, 1/2" x 6" Brass	04730-003-62-38
16	1	Union, 1/2" x 1/2" Brass	04730-003-62-44
17	2	Bushing, Hex, 3/4" to 1/2" Brass	04730-002-56-27
18	1	Bracket, Plumbing	05700-004-34-28
19	1	Solenoid Valve, 3/4"	04810-100-03-18
20	1	Nipple, 1/2" x 3" Brass	04730-004-20-10
21	1	Y-Strainer, 1/2"	04730-217-01-10
22*	1	Harness	05999-004-21-58

NOTICE

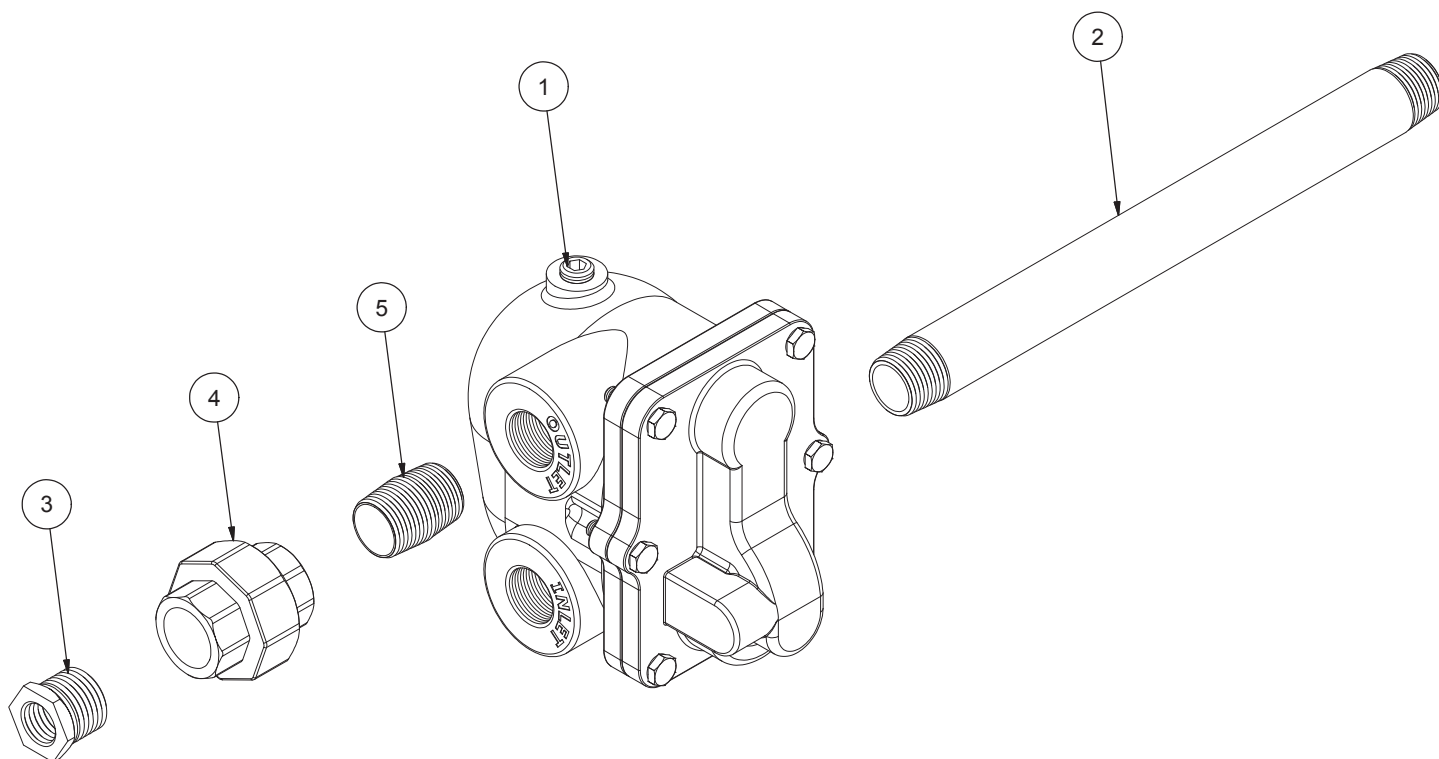
When servicing plumbing components, take care not to damage the threads of each individual item. Damaged threads can cause leaks and loss of pressure, which could adversely affect the performance of the DynaTemp machine. It is strongly recommended that teflon thread tape—used in conservative amounts—be applied to threads when joining components together. It is not advised to 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 isolation ball valves.

*Part must be ordered separately.



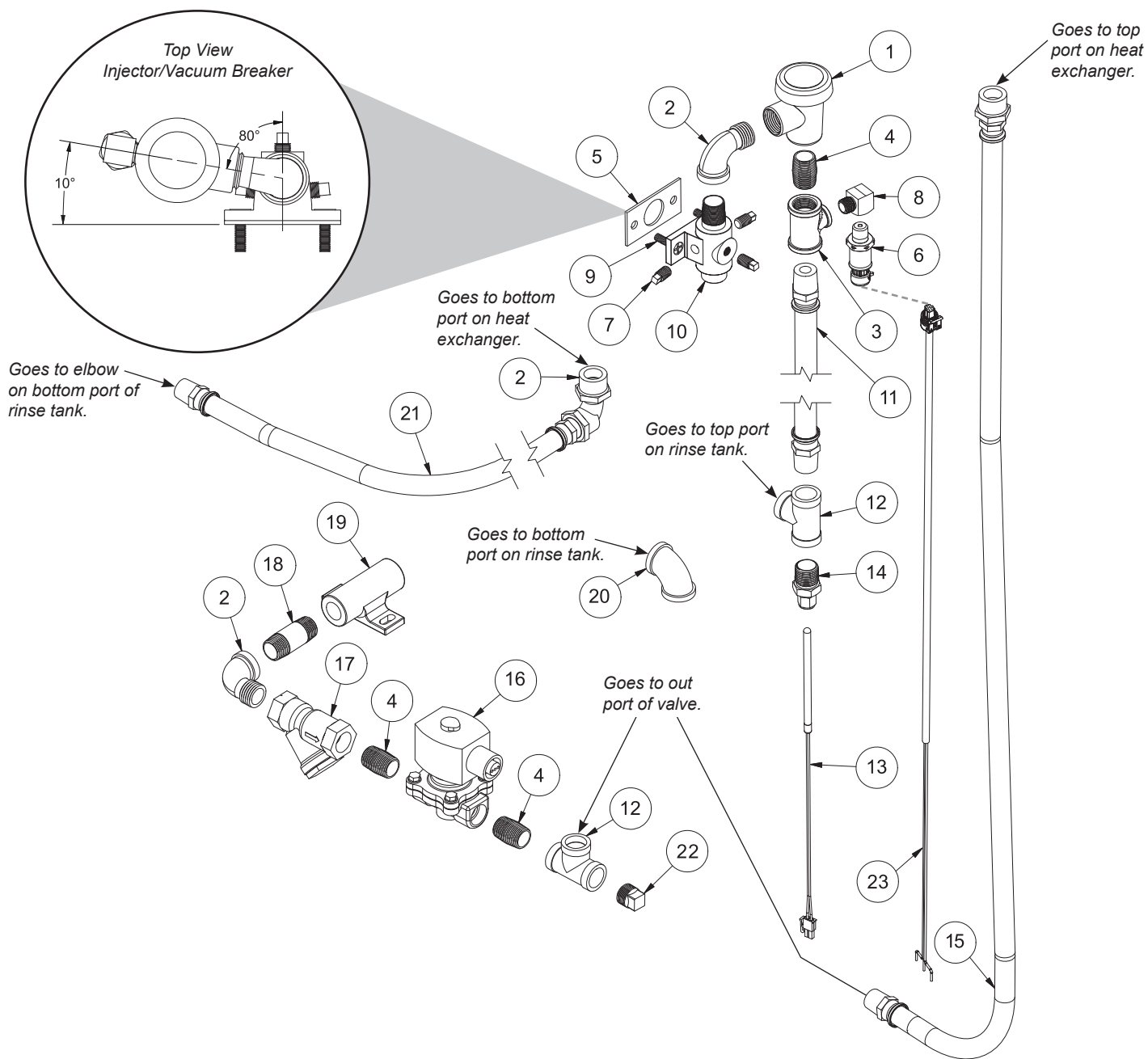
Click [here](#) for the Steam Booster manual.

ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Assembly	05700-004-35-03
1	1	Valve, Gate 3/4" NPT, Steam	04820-100-19-00
2	2	Nipple, 3/4" NPT x 4" Long, Black Iron	04730-907-02-34
3	1	Y-Strainer, 3/4" NPT, Steam	04730-217-01-32
4	1	Nipple, Close 3/4" Black Iron	04730-907-01-00
5	1	Bracket, Plumbing Support	05700-004-37-42
6	1	Solenoid Valve, 3/4" 240/60-220/50 Steam	04820-002-01-56
7	1	Union, 3/4" Black Iron	04730-912-01-00
8	1	Reducer, 3/4" NPT to 1/2" NPT Black Iron	04730-911-02-34



Click [here](#) for the Steam Booster manual.

ITEM	QTY	DESCRIPTION	PART NUMBER
		Complete Assembly	05700-004-36-50
1	1	Trap, Steam, 3/4" NPT	06680-500-02-77
2	1	Nipple, 3/4" x 11" Black Iron	05700-002-21-24
3	1	Reducer, 3/4" NPT to 1/2" NPT Black Iron	04730-911-02-34
4	1	Union, 3/4" Black Iron	04730-912-01-00
5	1	Nipple, Close 3/4" Black Iron	04730-907-01-00



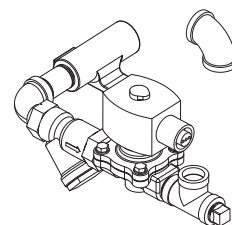
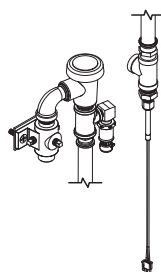
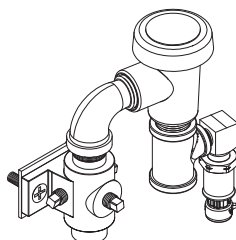
To order complete assemblies:

Complete Plumbing Assembly
05700-004-53-45
(Everything above
except item 23.)

Rinse Injector Plumbing
05700-004-28-49

Rinse Tank Out Plumbing
05700-004-52-66
(Includes 05700-004-28-49.)

Rinse Tank In Plumbing
05700-004-52-70



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Vacuum Breaker, 1/2" Brass	04820-003-06-13
2	2	Elbow, 90-Degree 1/2" Street Brass	04730-206-08-00
3	1	Tee	04730-002-22-56
4	3	Nipple, 1/2" Close Brass	04730-207-15-00
5	1	Gasket, Rinse Manifold	05330-003-75-91
6	1	Pressure Transducer	05945-004-17-01
7	3	Plug, 1/8" NPT Brass	04730-209-07-37
8	1	Elbow, 90-Degree 1/4" x 1/4"	04730-003-77-83
9	2	Screw, 1/4-20 x 1"	05305-011-81-58
10	1	Injector, Rinse Manifold	05700-004-26-98
11	1	Red Hose, 1/2" x 28"	05700-004-31-75
12	2	Tee, 1/2" Brass	04730-211-27-00
13	1	Thermistor Probe	06685-004-34-58
14	1	Compression Fitting, 1/2" x 1/4"	05700-004-36-74
15	1	Blue Hose, 1/2" x 48"	05700-004-48-23
16	1	Solenoid Valve, 1/2"	04810-003-71-56
17	1	Y-Strainer, 1/2"	04730-217-01-10
18	1	Nipple, 1/2" x 2" Long	04730-207-19-00
19	1	Casting, 1/2" Flanged Coupling	05700-004-47-97
20	1	Elbow, 90-Degree 1/2" Brass	04730-011-42-96
21	1	Red Hose, 1/2" x 23 1/2"	05700-004-41-52
22	1	Plug, 1/2" Brass	04730-209-03-00
23*	1	Harness	05999-004-21-58

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 DynaTemp machine. It is strongly recommended that teflon thread tape—used in conservative amounts—be applied to threads when joining components together. It is not advised to 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 isolation ball valves.

*Part must be ordered separately.

WATER HAMMER ARRESTOR OPTION

DynaTemp/NB/VER

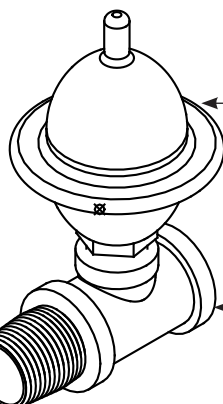
Complete 1/2" Water Hammer Arrestor
05700-002-64-67

DynaTemp S

Complete 3/4" Water Hammer Arrestor
05700-002-61-29

Nipple, 1/2", Close, Brass
04730-207-15-00

Nipple, 3/4" NPT, Close, Brass
04730-207-34-00



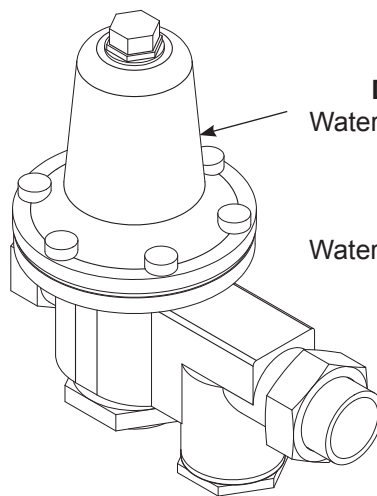
Water Arrestor, 1/2"
06685-100-05-00

Tee, 1/2" x 1/2" x 1/2"
04730-211-27-00

Tee, 3/4" x 3/4" x 1/2"
04730-211-06-00

PRESSURE REGULATING VALVE OPTION*

*PRV comes standard on the DynaTemp VER but ships inside the machine. Click [here](#) for install instructions.

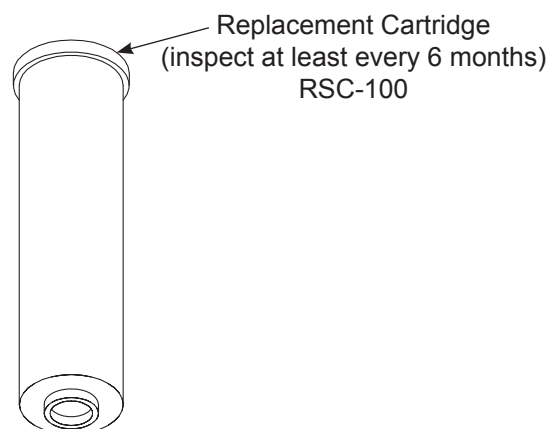
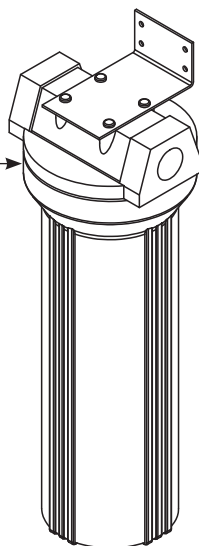


DynaTemp/NB/VER
Water Pressure Regulator, 1/2"
04820-100-04-07

DynaTemp S
Water Pressure Regulator, 3/4"
06685-011-58-22

WATER TREATMENT OPTION

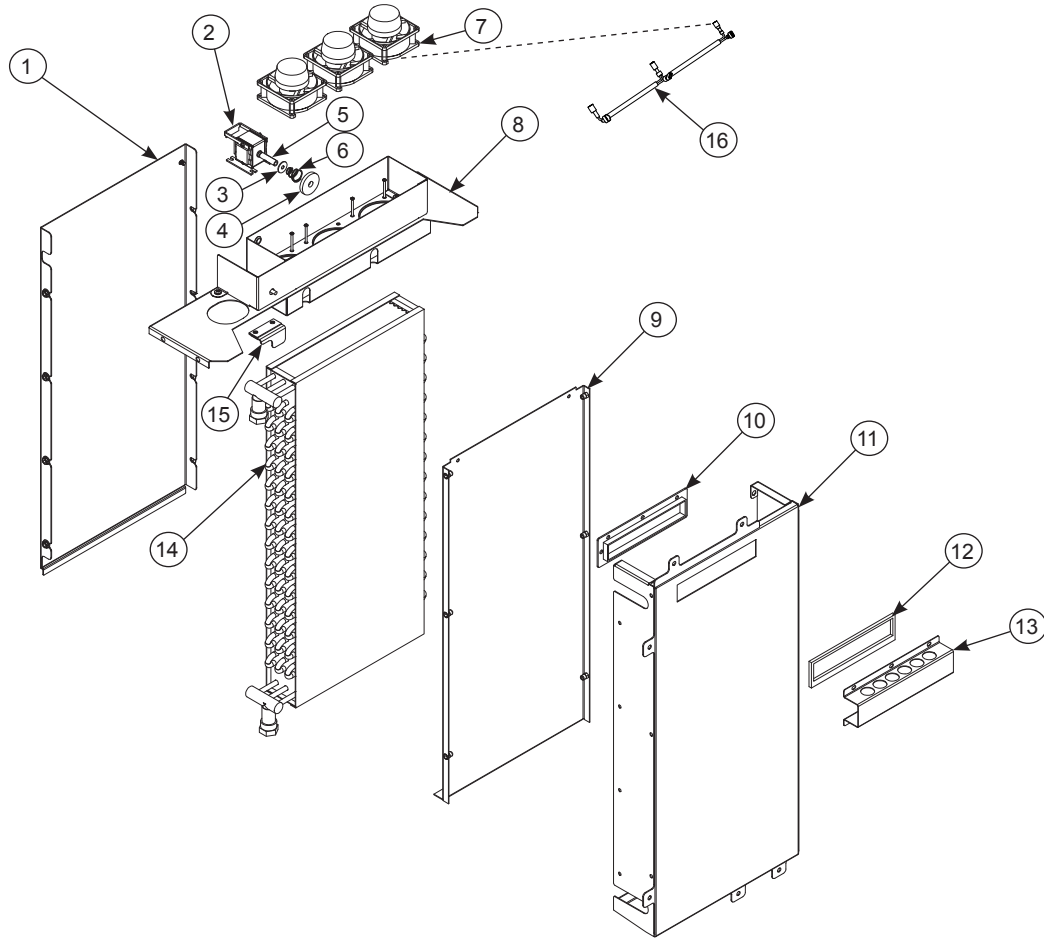
Scaltrol System
04730-003-05-76



Replacement Cartridge
(inspect at least every 6 months)
RSC-100

NOTICE

Must be installed vertically. The provided bracket is secured to the wall. Observe proper inlet/outlet water directions (flow directions are molded into the top of the head). Line pressure should be released before changing cartridges. Machine should be delimed before installation.

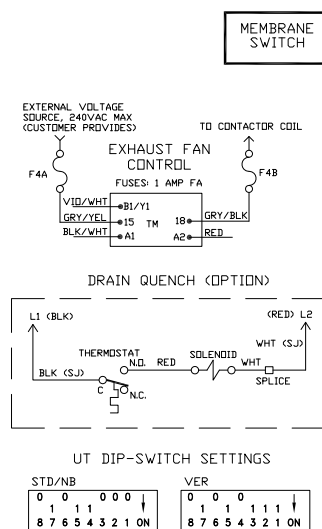
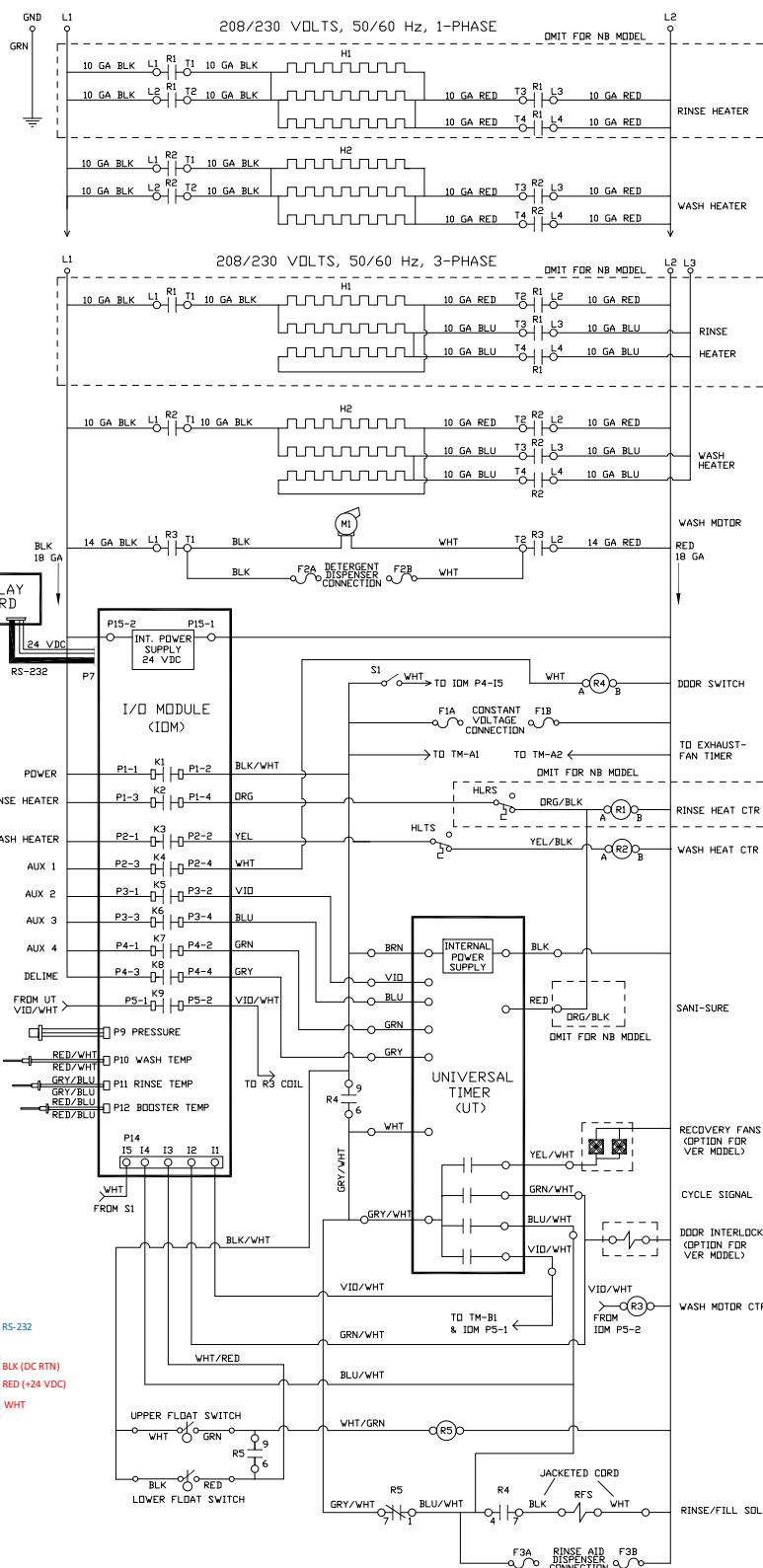


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Cover, Coil	05700-004-35-52
2	1	Solenoid, Horizontal 1" Push	04820-004-24-11
3	1	Washer, Oversized 1/4" Screw	05311-004-23-13
4	1	Plate, Pin Alignment	05700-004-40-72
5	1	Pipe, Door Interlock	05700-004-40-82
6	1	Compression Spring, 1"	05935-004-40-95
7	3	Fan, 85-236 V AC	05999-004-19-46
8	1	Top Cover Complete Assembly, VER	05700-004-40-78
9	1	Plate, Air-gap	05700-004-35-50
10	1	Air Transfer Seal	05700-004-40-24
11	1	Box, VER	05700-004-39-45
12	1	Gasket, Air Transfer Seal	05330-004-40-25
13	1	Cover, Air-gap	05700-004-40-27
14	1	Coil, VER	04420-004-35-56
15	1	Bracket, Top Vent	05700-004-44-64
16	1	Wiring Harness, Fan	05700-004-45-41

DYNATEMP SCHEMATIC
STD/NB/VER

LEGEND

L1,L2,L3	POWER DISTRIBUTION BLOCK
GND	EARTH 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	FUSE- CONSTANT VOLTAGE CONN.
F2	FUSE- DETERGENT DISPENSER
F3	FUSE- RINSE DISPENSER
F4	FUSE- EXHAUST FAN
S1	DOOR SWITCH
HLTS	WASH HEATER HIGH LIMIT
HLRS	RINSE HEATER HIGH LIMIT
RFS	RINSE/FILL SOLENOID
UT	UNIVERSAL TIMER
TM	EXHAUST FAN TIMER



Connection Diagram for IO Module

Input Assignments

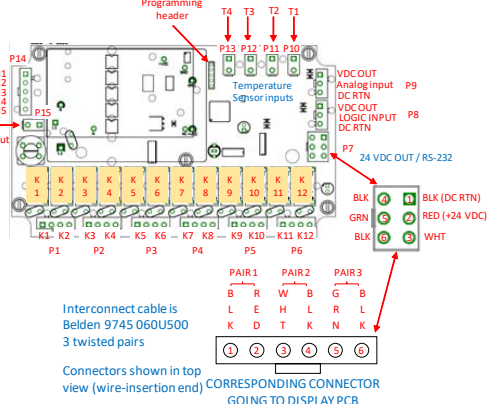
- 11 Wash
- 12 Cycle
- 13 Float
- 14 Rinse
- 15 Door/Chemicals

AC signals

- L1 L2/N
- AC powerinput

Relay Assignments

- K1 Power
- K2 Booster heater
- K3 Wash heater
- K4 Varies by model
- K5 Varies by model
- K6 Varies by model
- K7 Varies by model
- K8 Varies by model
- K9 Varies by model
- K10 Varies by model
- K11 Varies by model
- K12 Varies by model

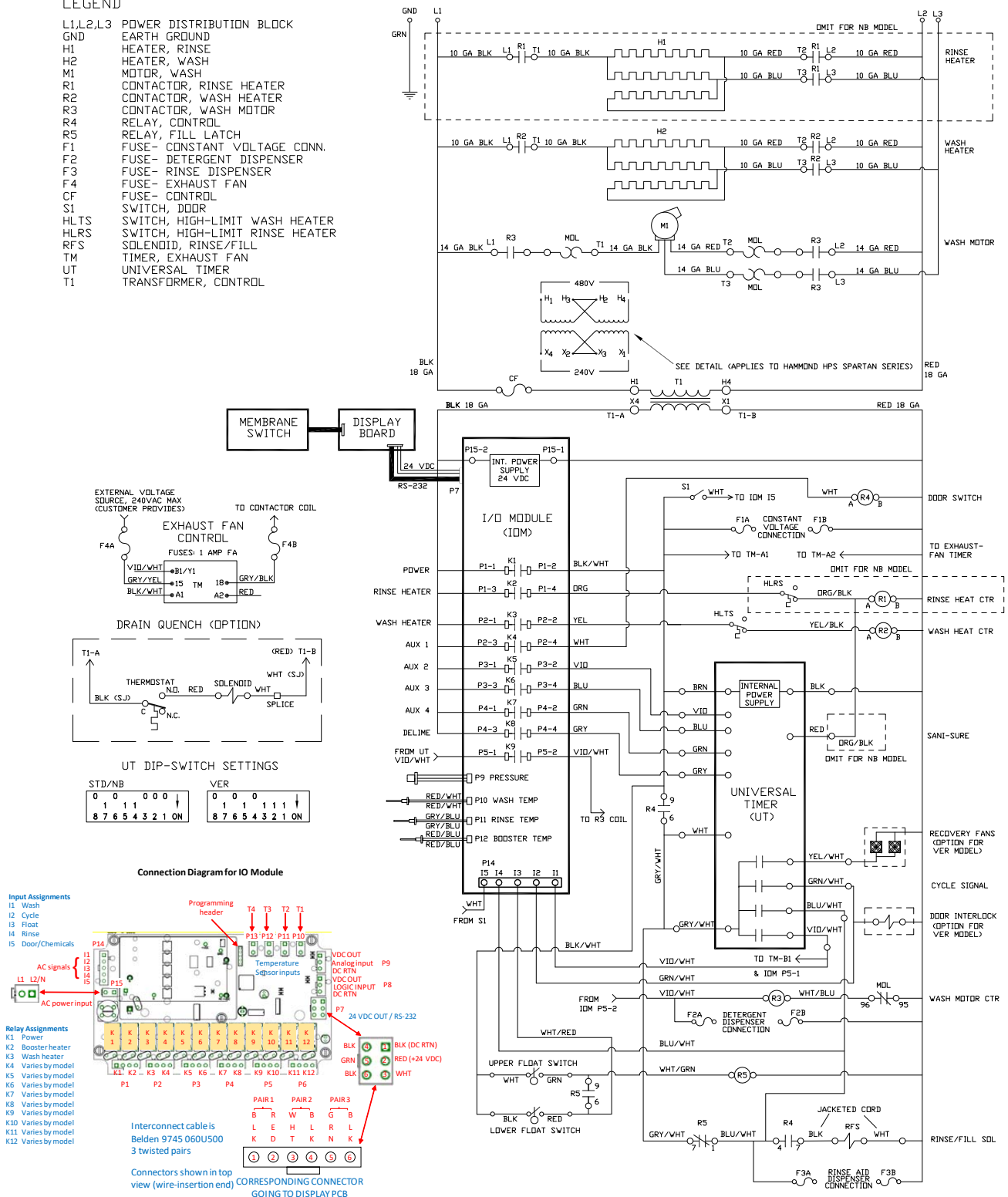
Interconnect cable is
Belden 9745 060U500
3 twisted pairsConnectors shown in top
view (wire-insertion end)CORRESPONDING CONNECTOR
GOING TO DISPLAY PCB

DYNATEMP SCHEMATIC
STD/NB/VER

460 VOLTS, 50/60 Hz, 3-PHASE

LEGEND

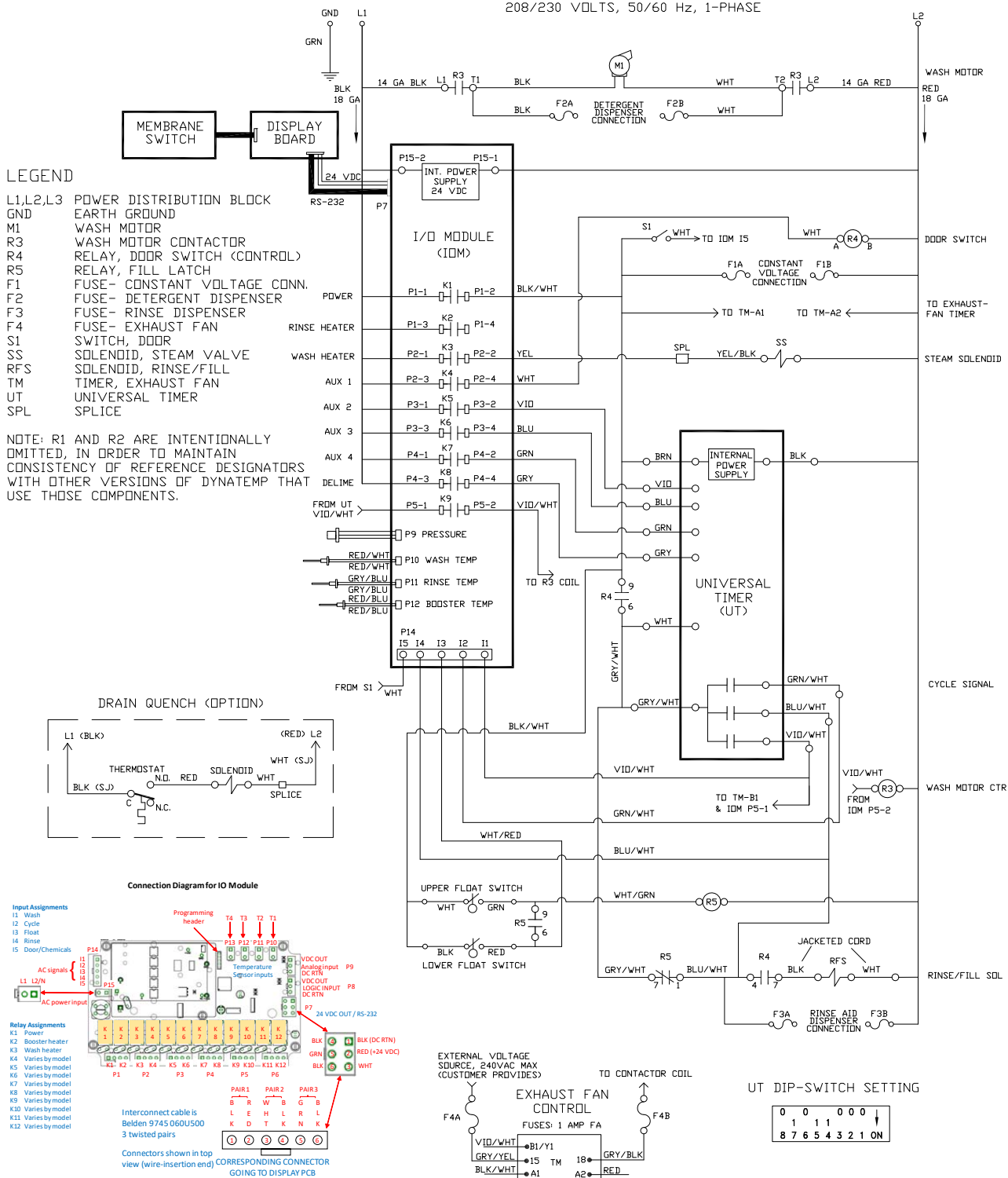
L1,L2,L3	POWER DISTRIBUTION BLOCK
GND	EARTH GROUND
H1	HEATER, RINSE
H2	HEATER, WASH
M1	MOTOR, WASH
R1	CONTACTOR, RINSE HEATER
R2	CONTACTOR, WASH HEATER
R3	CONTACTOR, WASH MOTOR
R4	RELAY, CONTROL
R5	RELAY, FILL LATCH
F1	FUSE- CONSTANT VOLTAGE CONN.
F2	FUSE- DETERGENT DISPENSER
F3	FUSE- RINSE DISPENSER
F4	FUSE- EXHAUST FAN
CF	FUSE- CONTROL
S1	SWITCH, DOOR
HLTS	SWITCH, HIGH-LIMIT WASH HEATER
HLRS	SWITCH, HIGH-LIMIT RINSE HEATER
RFS	SOLENOID, RINSE/FILL
TM	TIMER, EXHAUST FAN
UT	UNIVERSAL TIMER
T1	TRANSFORMER, CONTROL



PART NUMBER: 09905-004-37-04 REV G

DYNATEMP STEAM SCHEMATIC

208/230 VOLTS, 50/60 Hz, 1-PHASE

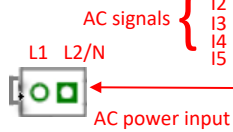


PART NUMBER: 09905-004-37-03 REV D

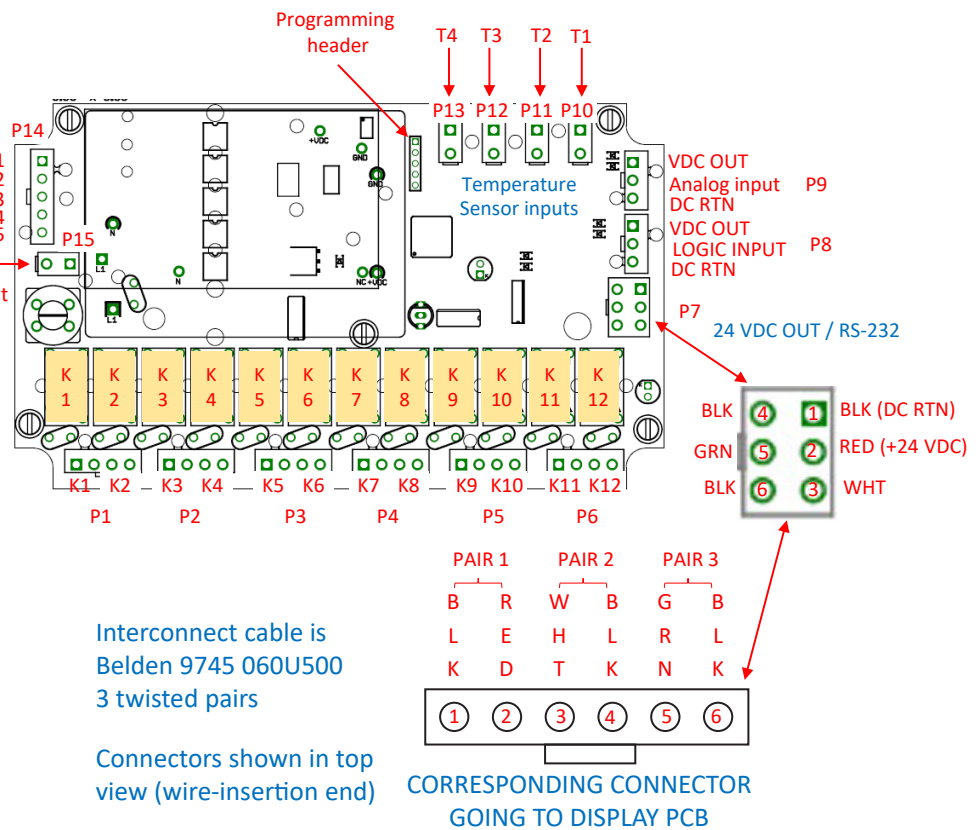
Connection Diagram for IO Module 05945-004-47-81

Input Assignments

- I1 Wash
- I2 Cycle
- I3 Float
- I4 Rinse
- I5 Door/Chemicals

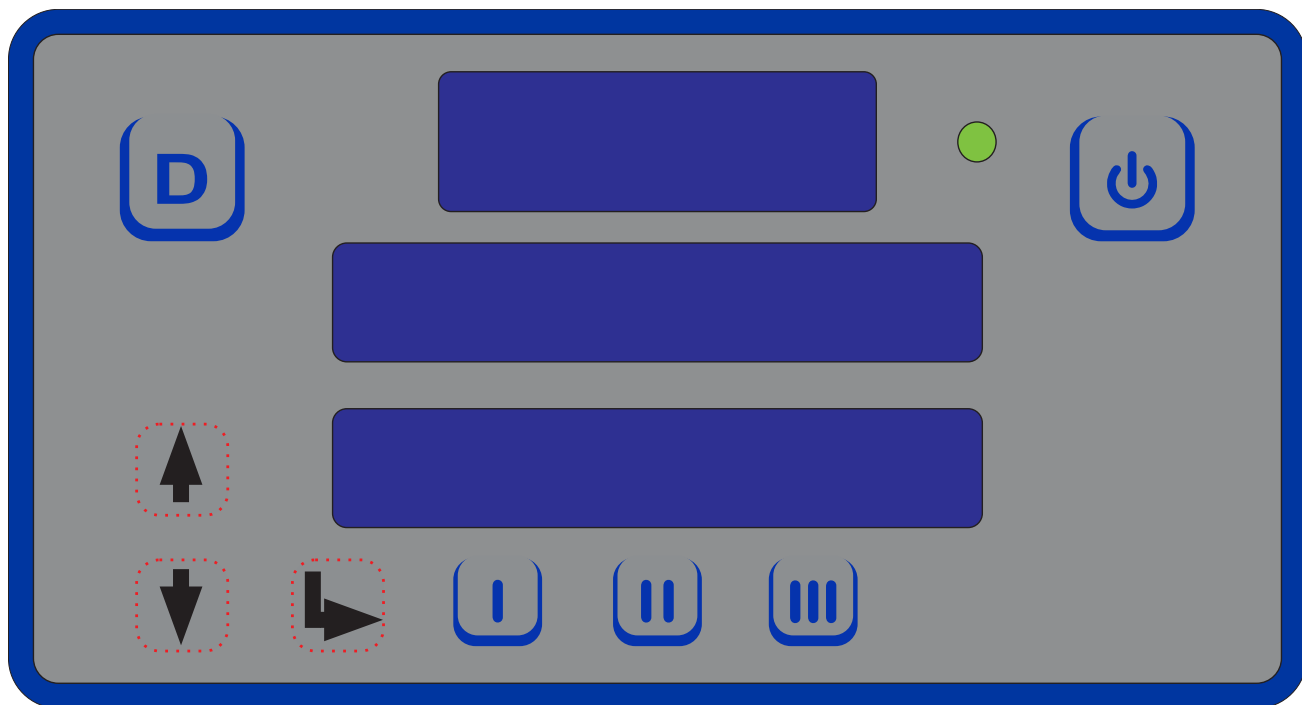
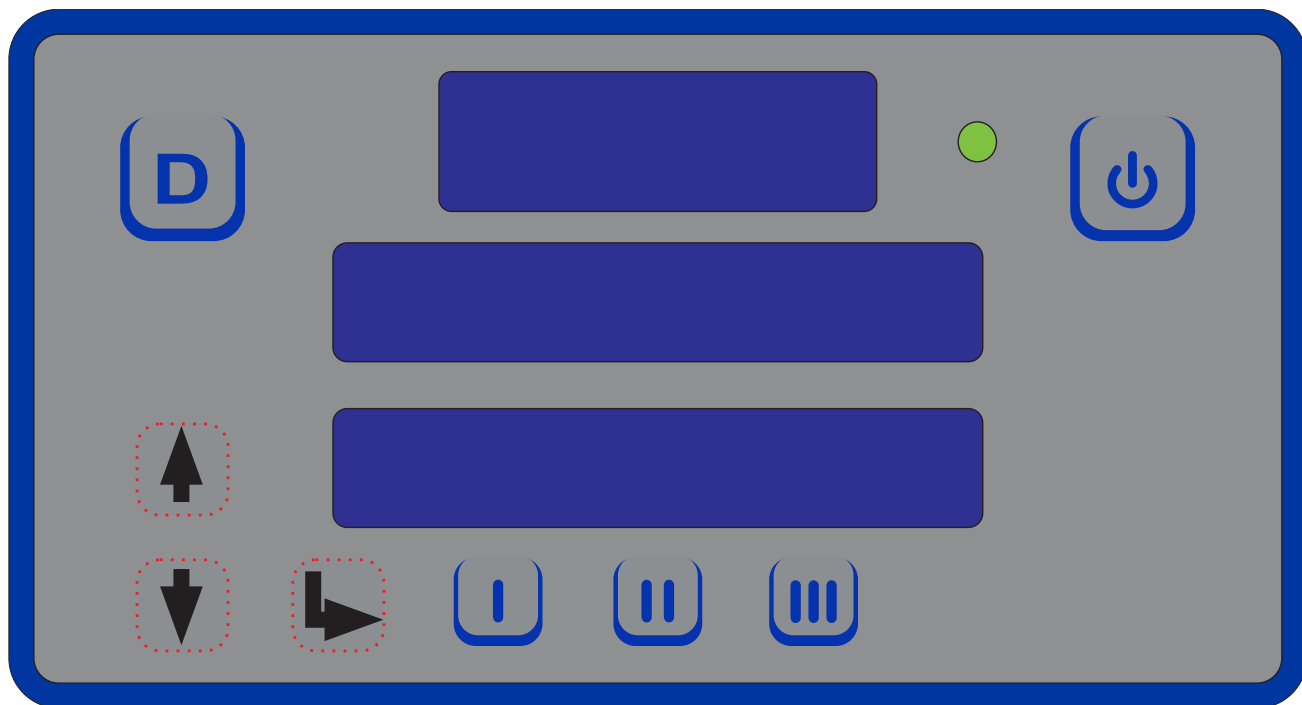
**Relay Assignments**

- K1 Power
- K2 Booster heater
- K3 Wash heater
- K4 Varies by model
- K5 Varies by model
- K6 Varies by model
- K7 Varies by model
- K8 Varies by model
- K9 Varies by model
- K10 Varies by model
- K11 Varies by model
- K12 Varies by model



09905-004-36-23-D

This page can be printed and the display templates cut-out. Lay the cut-out over the display and use the Up-arrow, Down-arrow, and Select Buttons to locate the hidden programming buttons.





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