



Warewashing Systems

INSTALLATION, OPERATION, AND SERVICE MANUAL



NXP-HTD[®]

NXP-HTD[®] DOOR-TYPE DISHMACHINE

NXP-HTD Manual • 07610-004-91-86-A

**MANUFACTURER'S LIMITED WARRANTY
(APPLICABLE ONLY IN THE UNITED STATES AND CANADA)**

WARRANTY REGISTRATION:

To register your Jackson Dishmachine's warranty go to www.jacksonwws-warranty.com or call 1-888-800-5672. Failure to register the Dishmachine will void the warranty.

ONE YEAR LIMITED PARTS AND LABOR WARRANTY

For a period of one (1) year from date of original installation of a new Jackson Dishmachine (but in no event to exceed eighteen (18) months from date of shipment from Jackson's factory), Jackson WWS, Inc. (Jackson) will repair or replace, at its discretion, any original part that proves defective in materials or workmanship at the time the Dishmachine was purchased; provided that (i) the Dishmachine has not been altered, (ii) the Dishmachine has been properly installed, maintained, and operated under normal use conditions and in accordance with the applicable installation, operation and service manual available on the Jackson website, and (iii) a warranty claim is reported to a Jackson Authorized Service Agency within the warranty period. This warranty includes replacement with Jackson 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 shall void this warranty.

THIS WARRANTY DOES NOT APPLY OUTSIDE THE UNITED STATES AND CANADA.

Jackson will pay the labor to repair or replace a defective original part as a part of the warranty, provided that a Jackson Authorized Service Agency performs the labor. Any repair or replacement work by anyone other than a Jackson Authorized Service Agency is the sole responsibility of the purchaser. Labor coverage is limited to regular hourly rates; Jackson will not pay overtime premiums or emergency service charges.

Accessory components (such as table limit switches, pressure regulators, and drain water tempering kits) that are not installed by Jackson at the factory and are shipped with the Dishmachine carry only a (1) one-year parts warranty. Labor to repair or replace these components is not included in the warranty or covered by Jackson. Booster heaters not manufactured by Jackson are not covered by this warranty but are warranted by their respective manufacturers.

This warranty is void if any defect or failure is a direct result from shipping, handling, fire, water, accident, alteration, modification, misuse, abuse, flood, acts of God, burglary, casualty, attempted repair by unauthorized persons, use of replacement parts not authorized by Jackson, improper installation, installation not in accordance with local electrical and plumbing codes, if the serial number has been removed or altered, if the Dishmachine is used for any purpose other than originally intended, or if the equipment is installed for residential use.

Jackson does not authorize any other entity or person, including, without limitation, any entity or person who deals in Jackson Dishmachines, to change this warranty or create any other obligation in connection with Jackson Dishmachines.

TRAVEL LIMITATIONS:

Jackson limits warranty travel time to the customer site within 50 miles of the Jackson authorized service agent's office and during regular business hours. Jackson will not pay for travel time and mileage that exceeds these limits, or any fees such as those for air or boat travel without prior authorization.

REPLACEMENT PARTS WARRANTY:

For a period of (90) ninety days from the date of installation by a Jackson Authorized Service Agency (but in no event to exceed (180) one-hundred-eighty days from the date of purchase from a Jackson Authorized Parts Distributor or Service Agency), Jackson will repair or replace, at its discretion, any Jackson genuine replacement parts that prove defective in materials or workmanship at the time the replacement parts were installed. This warranty does not include paying the labor to repair or replace the replacement part. This warranty is subject to all conditions, exclusions and limitations applicable to the Dishmachine.

**MANUFACTURER'S LIMITED WARRANTY (CONT.)
(APPLICABLE ONLY IN THE UNITED STATES AND CANADA)**

PRODUCT CHANGES:

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

DISCLAIMER OF WARRANTIES:

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, THAT ARE NOT SET FORTH HEREIN, OR THAT EXTEND BEYOND THE DURATION HEREOF.

LIMITATION OF REMEDIES AND LIABILITIES:

YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY SHALL BE PRODUCT REPAIR OR REPLACEMENT AS PROVIDED HEREIN.

UNDER NO CIRCUMSTANCES WILL JACKSON BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THE NATURE OF PENALTIES. JACKSON'S LIABILITY ON ANY CLAIM OF ANY KIND 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.

ITEMS NOT COVERED:

THIS WARRANTY DOES NOT COVER (1) ADJUSTMENTS INCLUDING, BUT NOT LIMITED TO, TIMER CAMS, THERMOSTATS, DOORS, TANK HEATER ADJUSTMENTS OR CLUTCHES; (2) AIR FREIGHT OR OVERNIGHT FREIGHT; (3) ANY AMOUNT EXCEEDING ORIGINAL PURCHASE PRICE; (4) CLEANING OF DRAIN VALVES, GAS LINES, RINSE/WASH NOZZLES, STRAINERS, SCREENS, OR SPRAY PIPES; (5) CLEANING OR DELIMING OF THE DISHMACHINE OR ANY COMPONENT INCLUDING, BUT NOT LIMITED TO, WASH ARMS, RINSE ARMS AND STRAINERS; (6) CONDITIONS CAUSED BY THE USE OF INCORRECT (NON-COMMERCIAL) GRADE DETERGENTS; (7) CORROSION FROM CHEMICALS DISPENSED IN EXCESS OF RECOMMENDED CONCENTRATIONS; (8) COSMETIC DAMAGE, INCLUDING BUT NOT LIMITED TO, SCRATCHES, DENTS, CHIPS, AND OTHER DAMAGE TO THE DISHMACHINE FINISHES, UNLESS SUCH DAMAGE RESULTS FROM DEFECTS IN MATERIALS AND WORKMANSHIP AND IS REPORTED TO JACKSON WITHIN (30) THIRTY DAYS FROM THE DATE OF INSTALLATION; (9) DAMAGE CAUSED BY LABOR DISPUTE; (10) DAMAGES RESULTING FROM IMPROPER CONNECTION TO UTILITY SERVICE; (11) DAMAGES RESULTING FROM WATER CONDITIONS, INADEQUATE OR EXCESSIVE WATER PRESSURE, ACCIDENTS, ALTERATIONS, IMPROPER USE, ABUSE, HANDLING, OVERLOADS, TAMPERING, IMPROPER INSTALLATION OR FAILURE TO FOLLOW MAINTENANCE AND OPERATING PROCEDURES; (12) DISCOLORATION, RUST OR OXIDATION OF SURFACES RESULTING FROM CAUSTIC OR CORROSIVE ENVIRONMENTS, INCLUDING, BUT NOT LIMITED TO, HIGH SALT CONCENTRATIONS, HIGH MOISTURE OR HUMIDITY, OR EXPOSURE TO CHEMICALS; (13) ELECTRIC BOOSTERS, FEED LINES, FLEX HOSE, FUSES, GARBAGE DISPOSALS, OR GAS PILOTS; (14) EXCESSIVE LIME, MINERAL, OR ALKALINE BUILDUP; (15) EXPENSES DUE TO DISCONNECTION, DELIVERY, RETURN AND REINSTALLATION; (16) FAILURE OF ELECTRICAL COMPONENTS DUE TO CONNECTION OF CHEMICAL DISPENSING EQUIPMENT INSTALLED BY OTHERS; (17) FAILURE OF FACILITY WATER HEATER TO MAKE TEMPERATURE; (18) FAILURE TO MAINTAIN WATER HARDNESS LOWER THAN 3.0 GRAINS, PH BETWEEN 7.0 AND 8.5 AND TOTAL DISSOLVED SOLIDS BELOW 250 PPM; (19) FAILURE TO COMPLY WITH LOCAL ELECTRICAL BUILDING CODES; (20) LEAKS OR DAMAGE RESULTING FROM SUCH LEAKS CAUSED BY THE INSTALLER, INCLUDING THOSE AT MACHINE TABLE CONNECTIONS, OR BY CONNECTION OF CHEMICAL DISPENSING EQUIPMENT INSTALLED BY OTHERS; (21) OPENING OR CLOSING OF UTILITY SUPPLY VALVES OR SWITCHING OF ELECTRICAL SUPPLY CURRENT; (22) PERFORMANCE OF REGULAR MAINTENANCE AND CLEANING AS OUTLINED IN THE OPERATOR'S GUIDE; (23) REMOVAL OR REINSTALLATION OF INACCESSIBLE DISHMACHINES OR BUILT-IN FIXTURES THAT INTERFERE WITH SERVICING, REMOVAL OR REPLACEMENT OF THE DISHMACHINE; (24) REPLACEMENT WEAR ITEMS INCLUDING, BUT NOT LIMITED TO, CURTAINS, DRAIN BALLS, DOOR GUIDES, GASKETS, O-RINGS, SEALS, SQUEEZE TUBES, AND BEARINGS; (25) RESIDENTIAL USE; (26) USE WITH UTILITY SERVICE OTHER THAN THAT DESIGNATED ON THE RATING PLATE.

REVISION HISTORY

| Revision Letter | Revision Date | Made by | Applicable ECNs | Details |
|-----------------|---------------|---------|-----------------|----------------------------|
| A | 10-9-20 | JH | N/A | Initial release of manual. |

Jackson[®]

Warewashing Systems

NXP-HTD[®]

**Door-type dishmachine; ENERGY STAR[®] qualified,
electric-heated, high-temp, hot-water sanitizing,
with booster heater.**

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 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.

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SCHEMATICS

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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

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

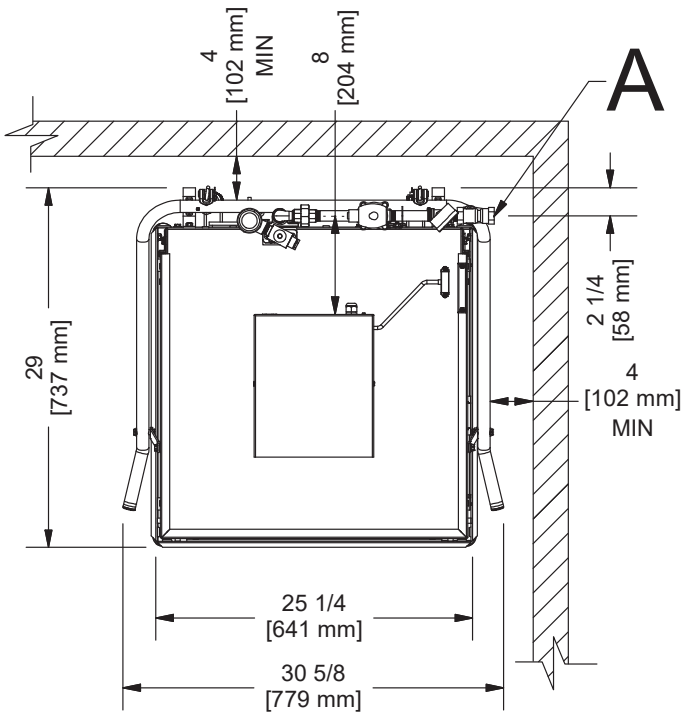
NPT - National Pipe Thread

OD - Outside Diameter

PRV - Pressure Regulating Valve

PSI - Pounds per Square Inch

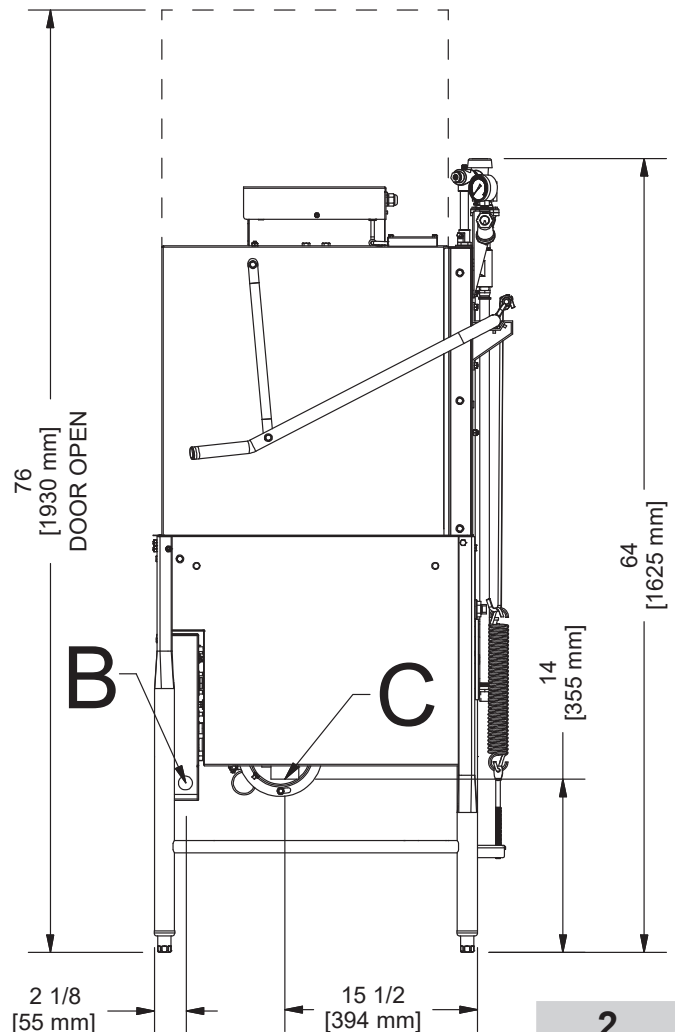
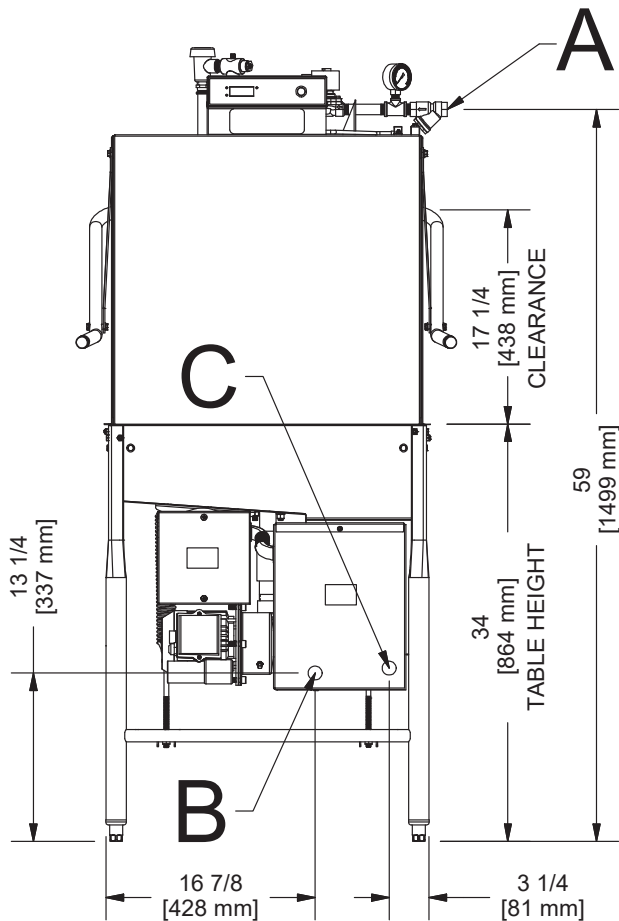
V - Volts



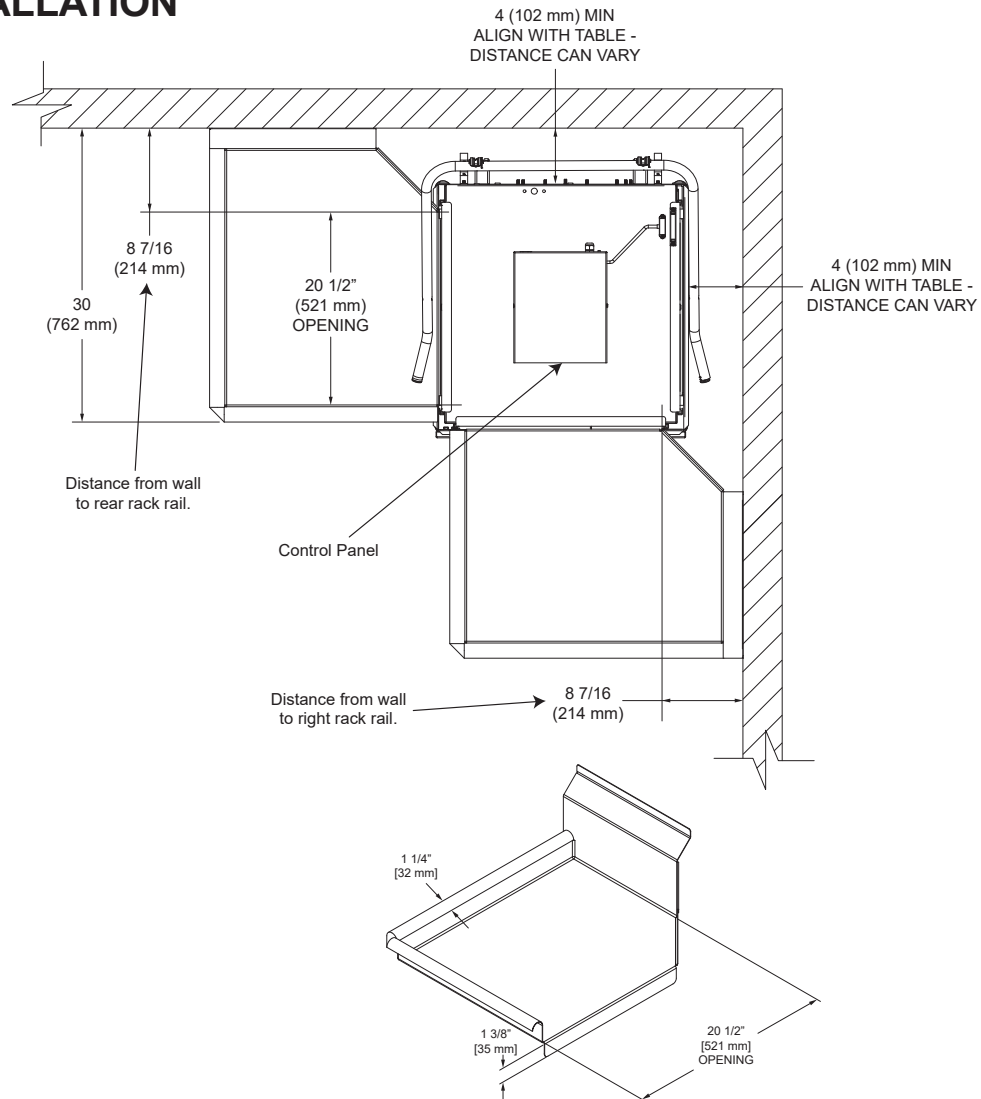
LEGEND

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

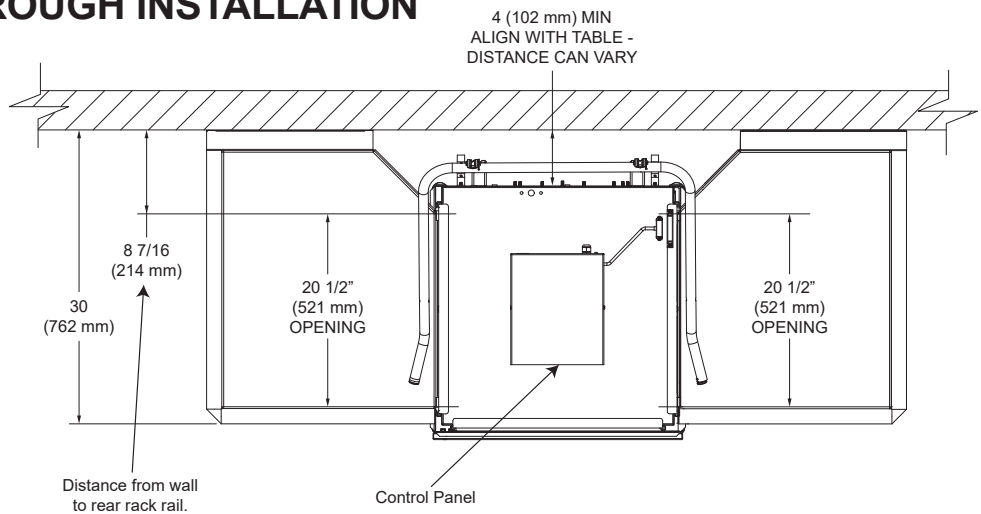
All dimensions from the floor can be increased 1 1/8" using the machine's adjustable feet.



CORNER INSTALLATION



STRAIGHT-THROUGH INSTALLATION



PERFORMANCE/CAPABILITIES

Operating Capacity:

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

Minimum Operating Cycle (Seconds):

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

Tank Capacity (Gallons/Liters):

| | |
|------------|----------|
| Wash Tank | 8.0/30.3 |
| Rinse Tank | 2.0/7.6 |

WATER REQUIREMENTS

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

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 is subject to change without notice.

Local codes may require more stringent protection than what is displayed here and on the data plate. 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.



| 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 |

INSPECTION

Do not throw away packaging 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 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 and the dealer that sold you the machine 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 machine must be level in its operating location to prevent damage to the machine 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 that the machine 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 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.

A water hardness test MUST be performed.

A water hardness test must be performed to determine if a water treatment system needs to be installed.

WATER SUPPLY CONNECTION: WATER HARDNESS GREATER THAN 3 GPG

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. A water shut-off valve should be installed to allow access for service.

WATER SUPPLY CONNECTION: WATER HARDNESS LOWER THAN 3 GPG

If water hardness tests at lower than 3 GPG, install the water supply line directly to the machine's incoming water connection point. A water shut-off valve should be installed to allow access for service.

PRESSURE REGULATOR

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).

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.

SHOCK ABSORBER

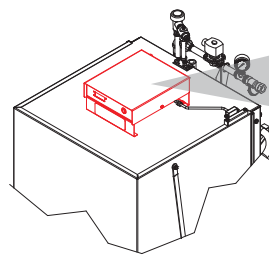
The manufacturer also recommends the installation of a shock absorber in the incoming water line and offers these devices as options (see the Plumbing Options page). This prevents line hammer/hydraulic shock—induced by the solenoid valve as it operates—from causing damage to the equipment.

CONNECTING THE DRAIN LINE

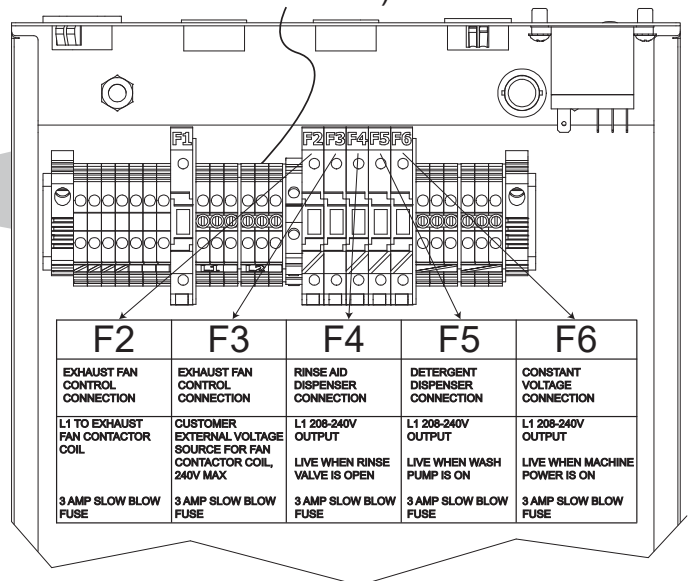
The machine's drain is a gravity-discharge drain. All piping from the 1 1/2” NPT connection on the wash tank must be pitched (1/4” per foot) to the floor or sink drain. All piping from the machine to the drain must be a minimum 1 1/2” NPT and must not be reduced. There must also be an air-gap between 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.

CHEMICAL & EXHAUST FAN ELECTRICAL CONNECTIONS

Remove control box lid and make chemical and exhaust fan connections at the points shown below:



L2 (TO CHEMICAL DISPENSERS)



CHEMICAL CONNECTIONS

Chemical connections should be made by the chemical supplier.

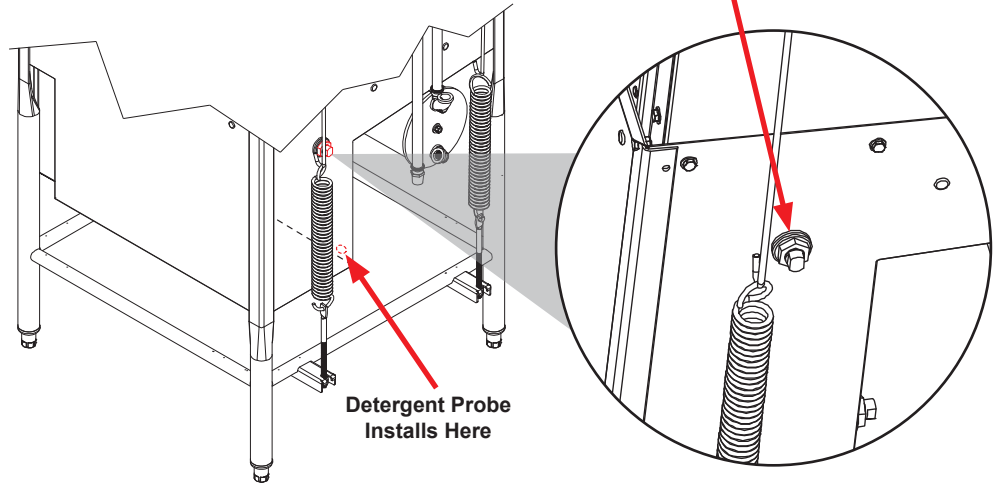
Using deionized water or other aggressive fluids will result in corrosion and failure of components and will void the warranty.



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.

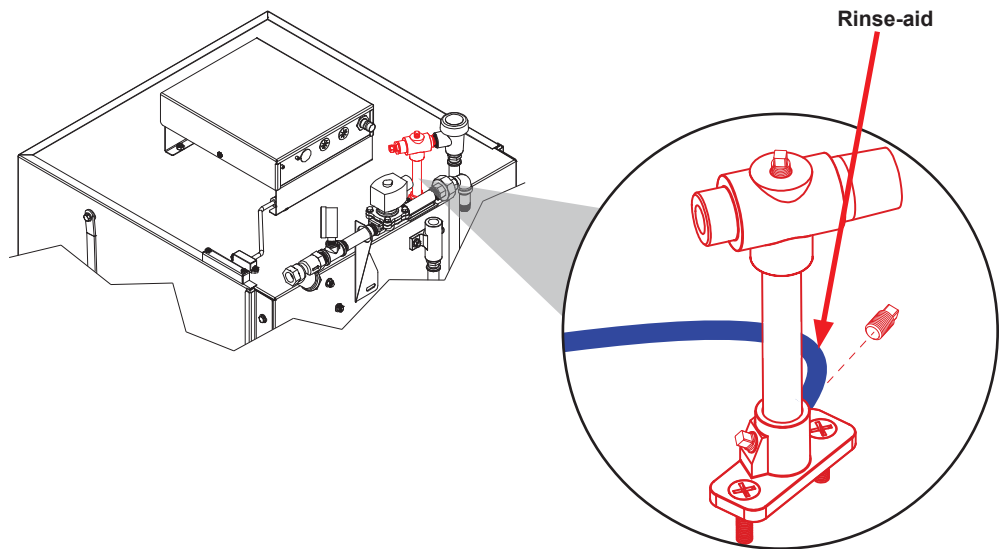
Detergent

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



Rinse-aid

Connect rinse-aid by removing the brass plug at the base of the rinse injector and replacing it with the appropriate dispensing equipment.



PLUMBING CHECK

Slowly turn on the water supply to the machine after the incoming fill line and 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

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.

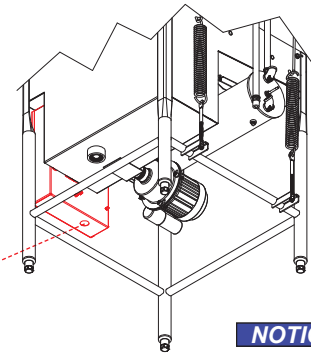
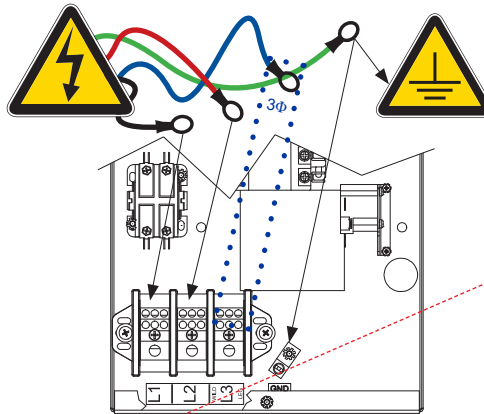


Disconnect electrical power supplies and lockout/tagout in accordance with appropriate procedures and codes at the disconnect switch.

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

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

1. Open electrical box at bottom-front of machine by using a phillips screwdriver to remove the two screws.
2. Install 3/4" conduit into the pre-punched hole in bottom of electrical box.
3. Route power wires and connect to power block and grounding lug.
4. Install service wires (L3 for 3-Phase only) to the appropriate terminal.



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.

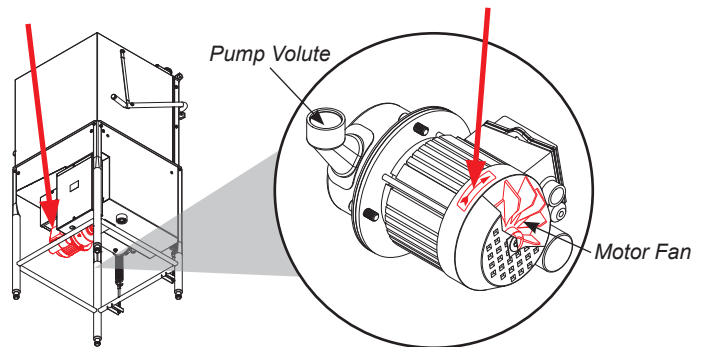
MOTOR ROTATION

On 460 V 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.



CAUTION! On 460 V 3-Phase machines only, correct pump motor rotation must be verified before operation!

1. Follow the "Filling the Wash Tub" section.
2. 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).



3. Start the machine.
4. Observe the rotation of motor fan and quickly stop the machine.
5. If rotation is incorrect, disconnect electrical power and reverse the L1 and L2 connections at terminal block shown in the section above.

VOLTAGE CHECK Apply power to machine. Check the incoming power at the terminal block and ensure it corresponds with the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem. Do not run the machine if voltage is too high or too low. Shut off the service breaker and advise all proper personnel of the location of the breaker and any problems. Replace the control box cover and tighten-down the screws.



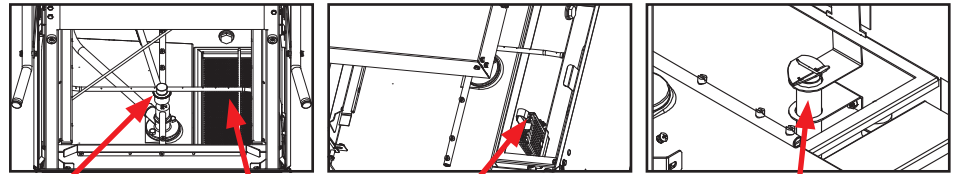
SURROUNDING AREA This is a commercial dishmachine and reaches temperatures that can exceed those generated by a residential machine. Surrounding countertops, cabinets, flooring material, and subflooring material must be designed and/or selected with these higher temperatures in mind.

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.

PREPARATION Before operating the machine, verify the following:

1. Tank is clean and free of debris.
2. Wash arms, rinse arms, and scrap screen are installed correctly.
3. Sump strainer and standpipe (located under scrap screen) are installed correctly and standpipe is down.



Wash & Rinse Arms, Scrap Screen

Sump Strainer

Standpipe

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

1. Close door.
2. Press power button.



3. LED ring on power button will turn red.
4. Machine will start filling automatically.
5. Wait until wash temperature on display reaches a minimum of 150 °F.

WARE PREPARATION Proper ware preparation will help ensure good results and fewer re-washes. If not prepared 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.

DAILY MACHINE PREPARATION 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.

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.

WASHING A RACK OF WARE

1. Ensure wash temperature has reached a minimum of 150 °F.
2. Open door completely.
3. Slide rack of ware into the machine.
4. Close door and cycle starts automatically. LED ring on power button will turn green.



5. When LED ring on power button turns red, cycle is complete.
6. Open door and remove rack of clean ware.
7. Replace with a rack of soiled ware and close door. Repeat this process.

OPERATIONAL INSPECTION

Based on use, the scrap screen might 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. Do NOT beat strainers to remove debris.

SHUTDOWN & CLEANING

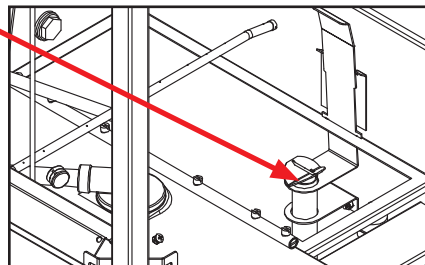
1. Turn machine off by pushing power button. Display and LED will turn off.



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

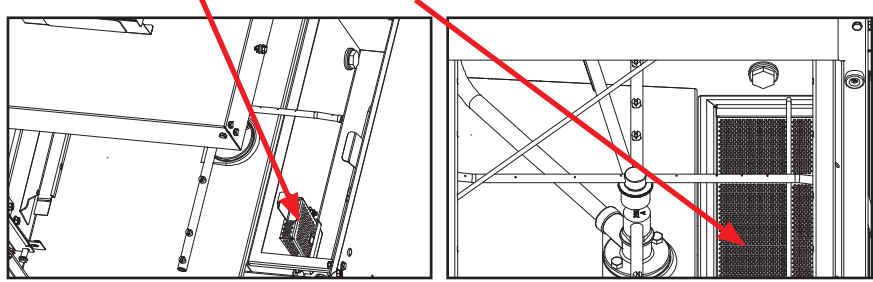


WARNING! Wash tank water will be hot!

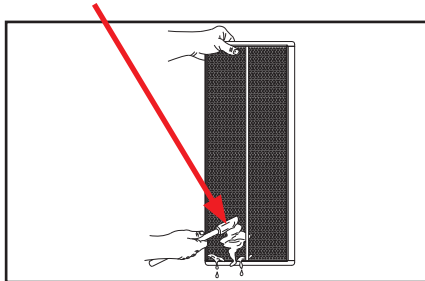


**SHUTDOWN &
CLEANING**

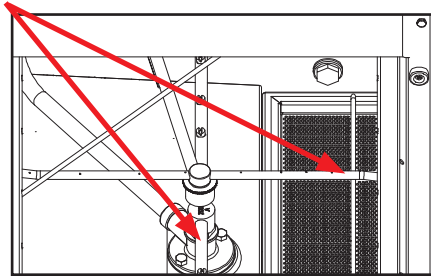
4. Remove sump strainer and scrap screen.



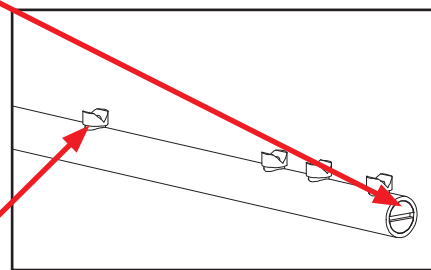
5. Use a hand-scraper to scrape foodsoil into a trash basket.



6. Rinse with pre-rinse hose and replace.
7. Remove all wash and rinse arms.



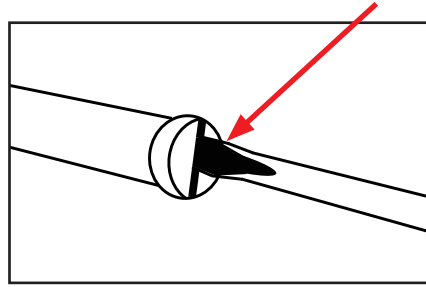
8. Remove the end-caps from the arms.



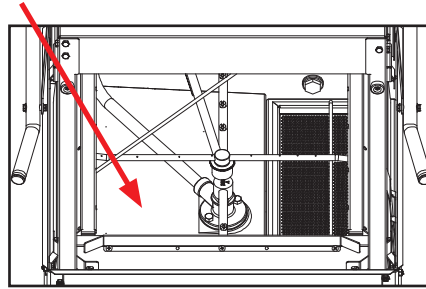
9. Clean nozzles with a brush.
10. Use a small wire or toothpick to remove remaining debris or lime deposits from the nozzles.
11. Flush the arms with water.

SHUTDOWN & CLEANING

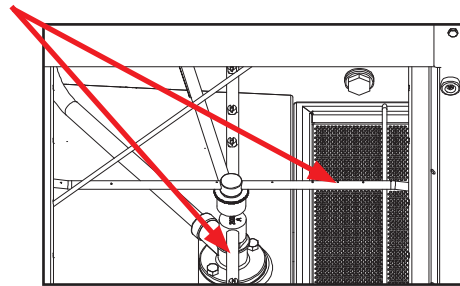
12. Replace end-caps and ensure they have been tightened.



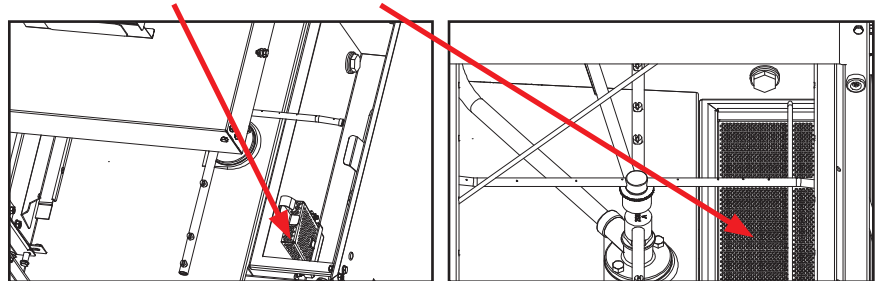
13. Spray or wipe out interior of the machine.



14. Replace wash and rinse arms.



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



16. Use stainless steel polish to clean and protect outside of the machine.

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.

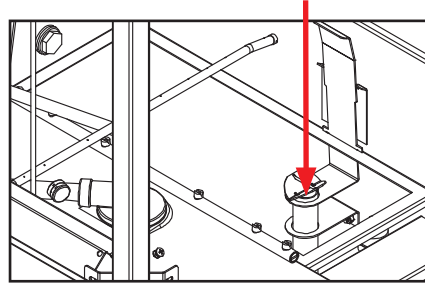
See "Water Supply Connection" section for more information on water treatment.

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 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 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. Machine 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 machines 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 machine 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 machine 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 Tank capacities of the machine can be found on the Operating Parameters page.

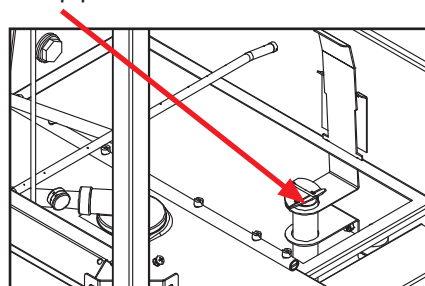
1. With power button on, raise door and lift standpipe to drain the machine.



2. Allow machine to completely drain.
3. Add deliming solution to tub per chemical supplier's instructions.
4. Close door. The machine will fill and turn on heaters.
5. Once filling has stopped, press and hold power button until blue delime button turns on (about three seconds). Release button and machine will start delime cycle.



6. Display will count down the delime cycle and shut off once complete. If the machine is not delimed, run delime cycle again.
7. Raise door and lift standpipe to drain the machine.



8. Once drained, put standpipe back in place and close door to refill the machine.
9. The machine is ready to wash ware once minimum wash temperature is reached.



CAUTION! This equipment is not recommended for use with deionized water or other aggressive fluids. Using deionized water or other aggressive fluids will result in corrosion and failure of components and will void the 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.

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 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 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.



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.

| OBSERVATION | POSSIBLE CAUSE | REMEDY |
|--|--|--|
| Machine will not fill after the door is closed. Power "ON" light is illuminated. | <ol style="list-style-type: none"> 1. Faulty rinse solenoid valve. 2. Faulty door switch. 3. Fouled/faulty float switch. | <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 float switch if fouled. If clean and still not working, replace. |
| Machine 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 the machine has been properly connected to the power source. 3. Verify the wiring of the switch; if correct, replace switch. |
| Machine will not run after the door is closed. Power "ON" light is illuminated and the machine is filling. | <ol style="list-style-type: none"> 1. Wash motor faulty/damaged. 2. Wash motor contactor faulty. | <ol style="list-style-type: none"> 1. Verify the wash motor is getting power. If so, replace the motor. 2. Check for continuity; if contacts are open, replace the contactor. |
| Machine runs continuously in the wash cycle. | <ol style="list-style-type: none"> 1. Machine is in Delime mode. 2. Timer faulty. 3. Wash motor contactor faulty. | <ol style="list-style-type: none"> 1. Exit Delime cycle. 2. Replace timer module. 3. Check for continuity; if contacts are open, replace the contactor. |
| Wash or rinse heater does not work. | <ol style="list-style-type: none"> 1. Faulty heater element. 2. Faulty heater contactor. 3. Misadjusted thermostat. 4. Faulty heater probe. | <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. 4. Replace probe. |
| 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 the water pressure regulator to ensure 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. Misadjusted thermostat. 3. Rinse thermometer is defective. 4. Faulty rinse tank probe. | <ol style="list-style-type: none"> 1. Check element for continuity; if open, replace heater. 2. Verify operation and setting of thermostats. 3. Replace thermometer. 4. Replace probe. |

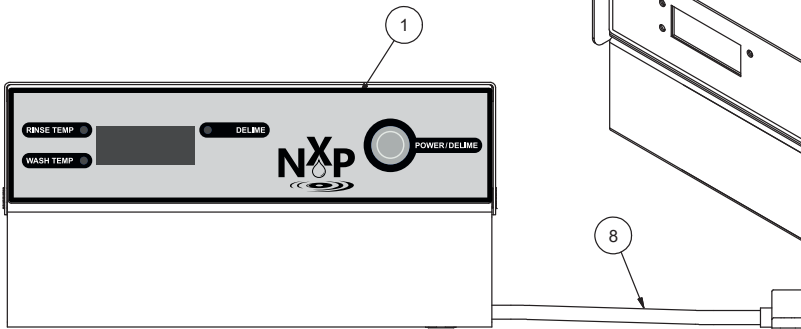
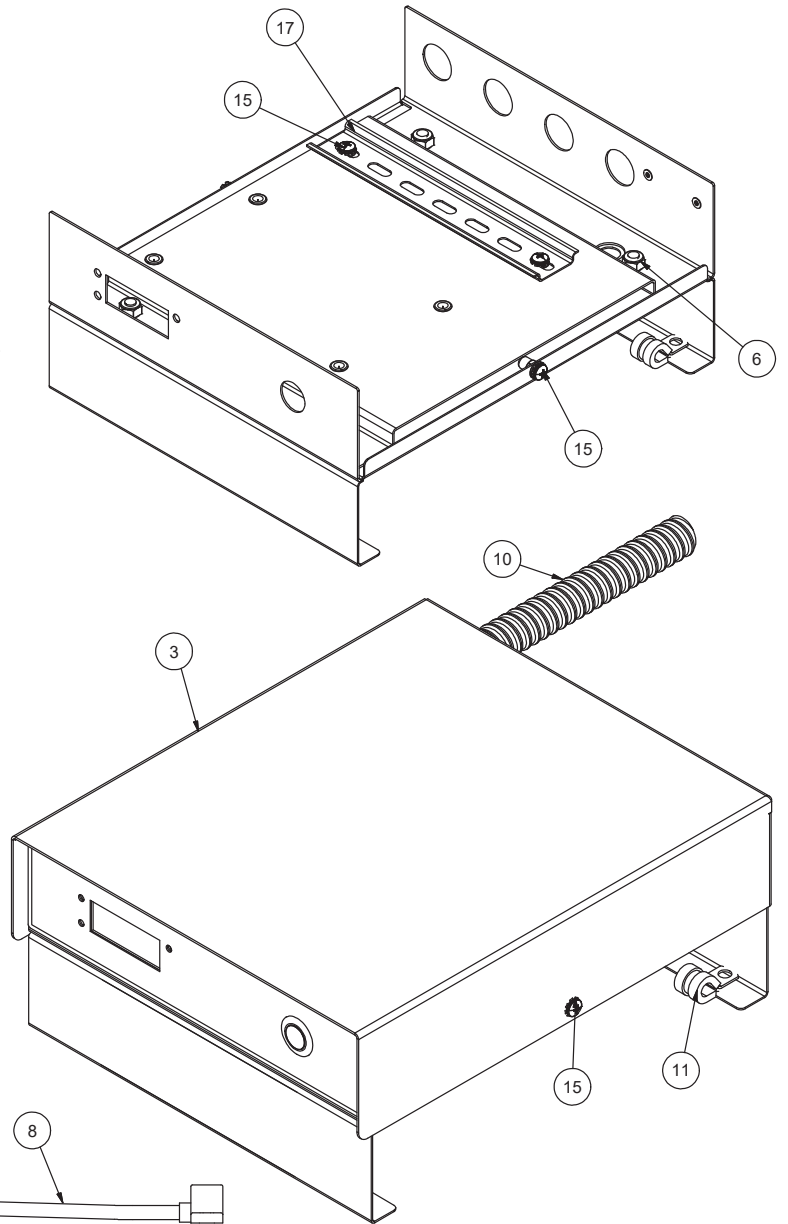
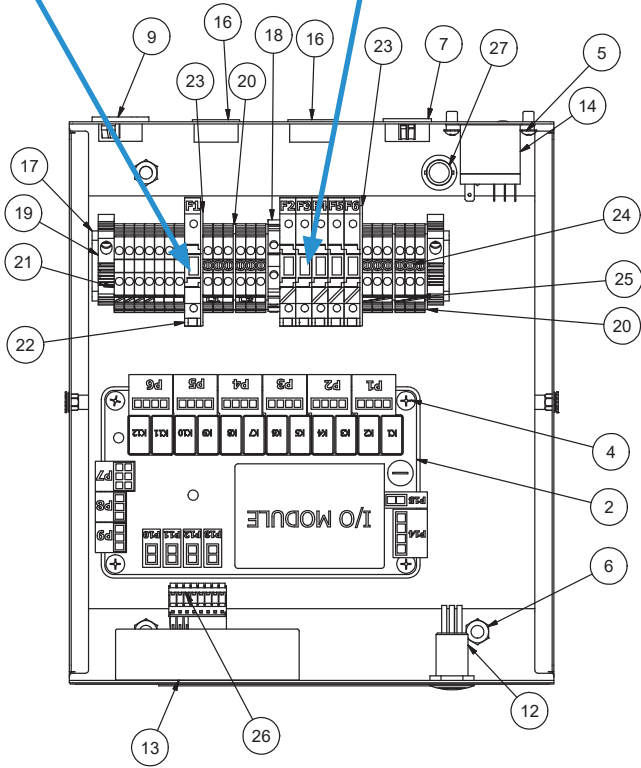


WARNING! Inspection, testing, and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the machine have power to it and live electrical components be exposed. **USE EXTREME CAUTION WHEN TESTING THE MACHINE.**

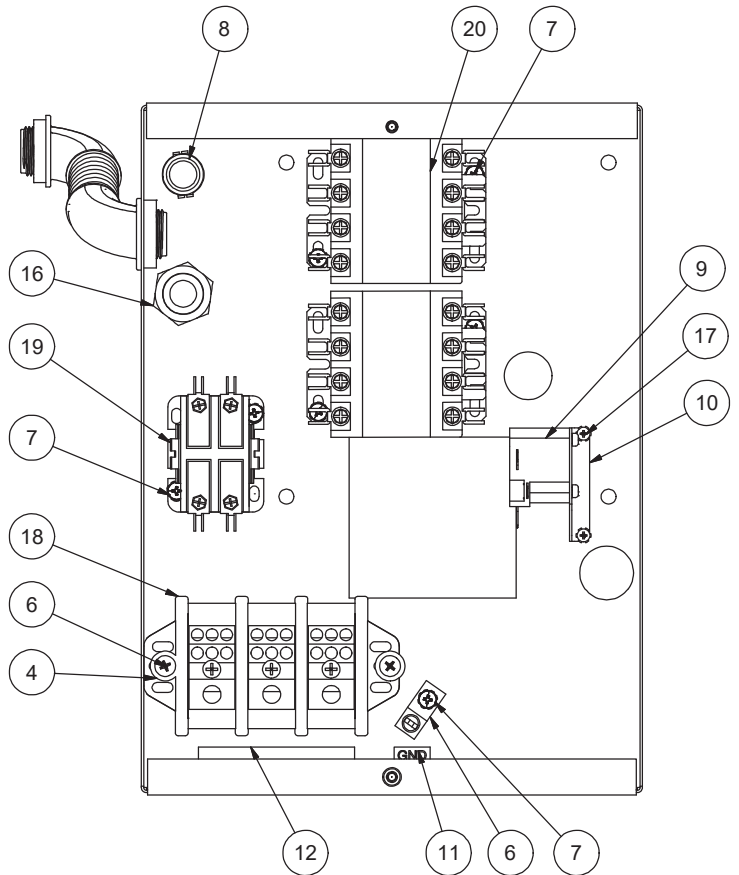
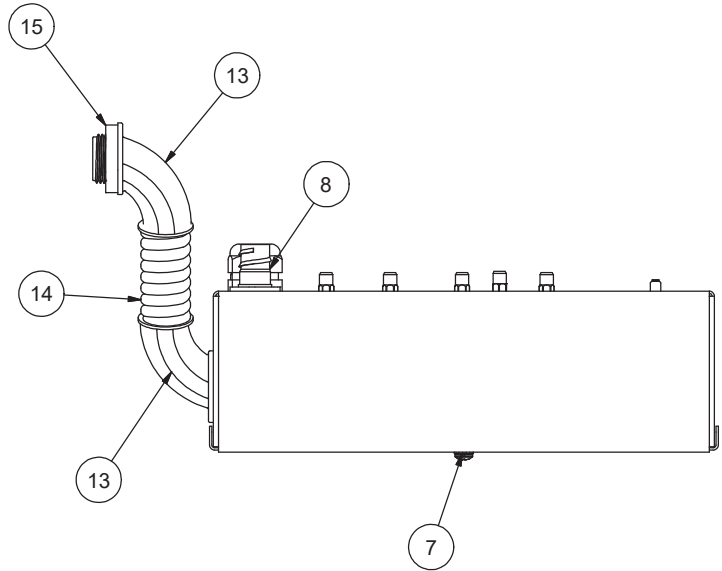
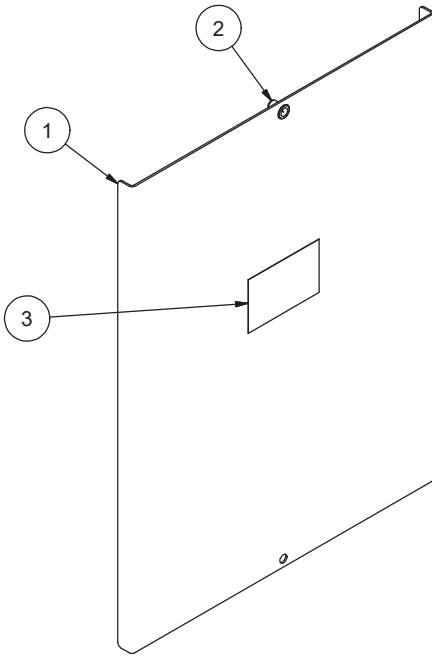
| OBSERVATION | POSSIBLE CAUSE | REMEDY |
|--|---|--|
| Machine doesn't drain. | <ol style="list-style-type: none"> 1. Drain clogged. 2. Standpipe not removed before draining. | <ol style="list-style-type: none"> 1. Remove obstruction. 2. Remove standpipe. |
| Incorrect water pressure displayed during Fill or Rinse modes. | <ol style="list-style-type: none"> 1. Water turned off. | <ol style="list-style-type: none"> 1. Turn water on. |
| Wash water is not reaching required temperature. | <ol style="list-style-type: none"> 1. Faulty wash heater. 2. Misadjusted thermostat. 3. Wash probe 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. 3. Replace probe. |
| Door will not close completely. | <ol style="list-style-type: none"> 1. Improper spring tension. 2. Obstruction in door channel. 3. Door panels 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 door panels. |
| Water leaks at the wash pump. | <ol style="list-style-type: none"> 1. Wash pump seal defective. 2. Plug 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 autocycle. | <ol style="list-style-type: none"> 1. Defective rinse solenoid. 2. No water to the machine. | <ol style="list-style-type: none"> 1. Repair or replace the rinse solenoid as required. 2. Verify 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. | <ol style="list-style-type: none"> 1. Verify 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. |

Fuse, 6.3 A, Slow-acting
05920-004-90-73
250 V, 5ST 6.3-R
Qty - 1

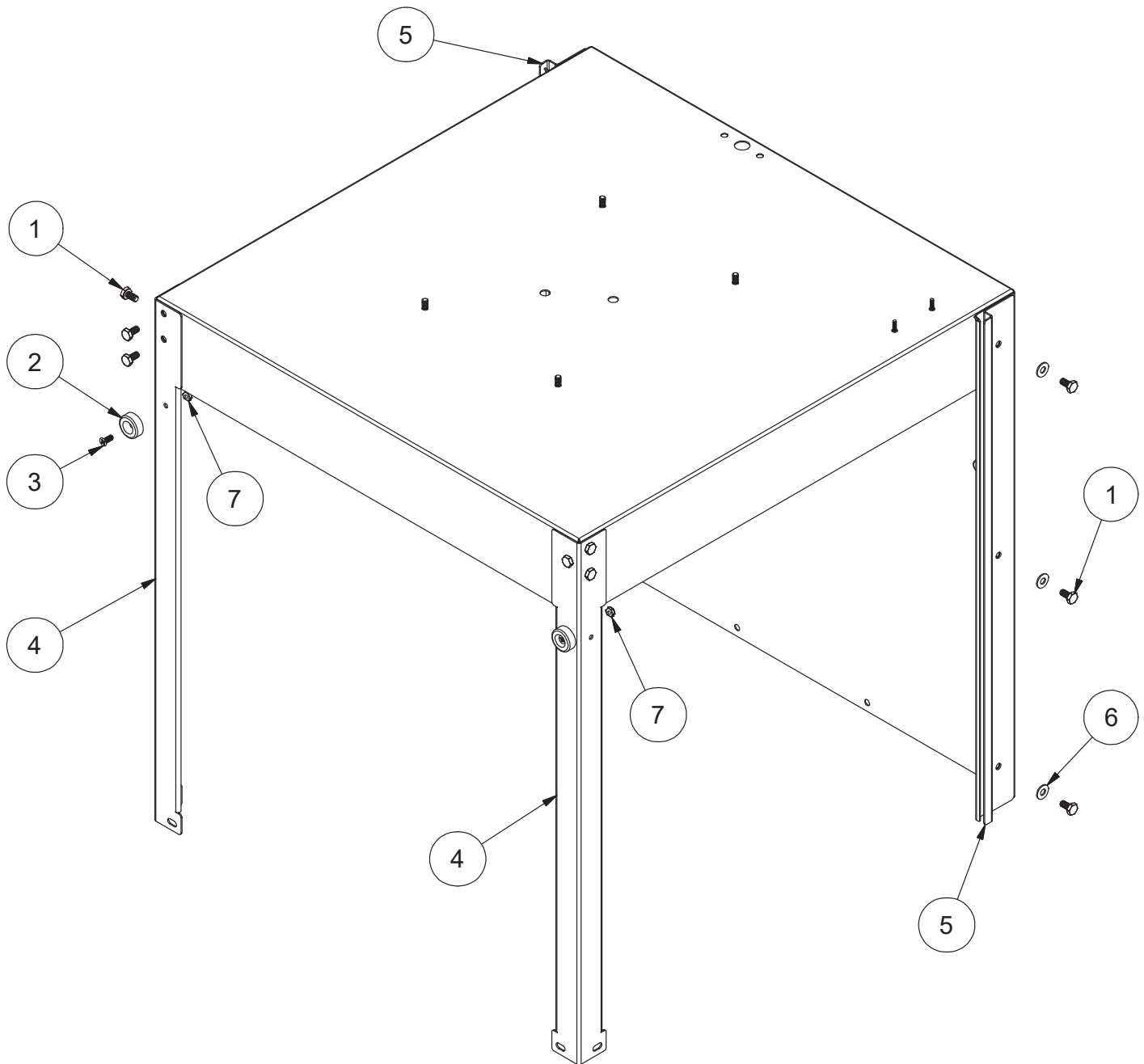
Fuse, 3 A, Slow-blow
05920-004-90-74
250 V, 5TT-3-R
Qty - 5



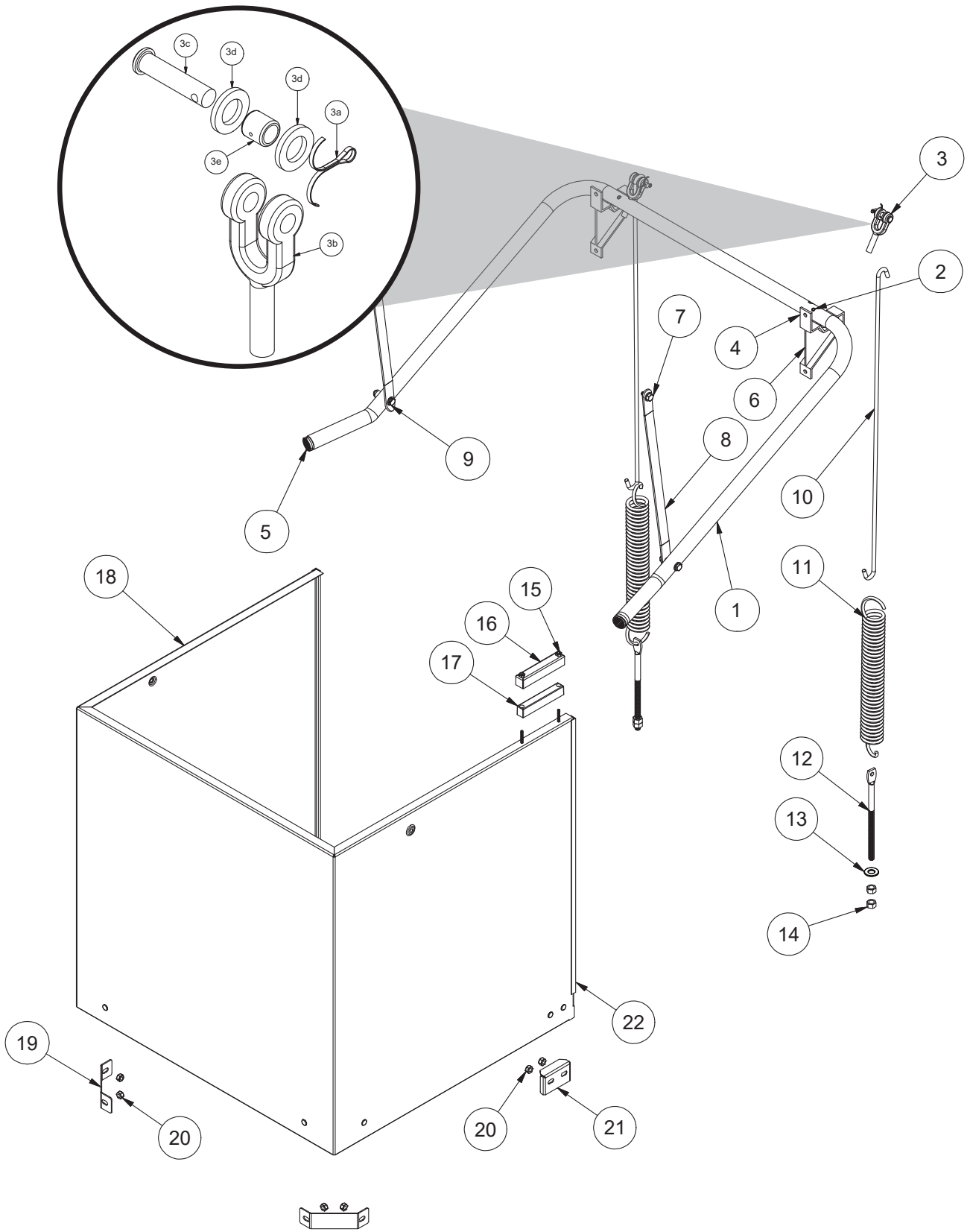
| ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|---------------------------------------|-----------------|
| 1 | 1 | Decal, Control Box | 09905-004-89-47 |
| 2 | 1 | I/O Module | 05945-004-47-81 |
| 3 | 1 | Cover, Control Box | 05700-004-85-14 |
| 4 | 4 | Screw, 10-32 x 1" | 05305-002-19-42 |
| 5 | 2 | Screw, 6-32 x 3/8" | 05305-002-25-91 |
| 6 | 4 | Locknut, 1/4-20 Hex with Nylon Insert | 05310-374-01-00 |
| 7 | 1 | Plug | 05975-011-47-81 |
| 8 | 1 | Door, Cycle Switch | 05930-002-36-80 |
| 9 | 1 | Fitting, 1/2" Straight | 05975-003-33-27 |
| 10 | 1 | Conduit, 1/2" PVC Flex | 05975-003-33-36 |
| 11 | 1 | Clamp, Tubing with Rubber Cushion | 04730-002-83-21 |
| 12 | 1 | Switch, Red/Green Momentary | 05930-004-85-60 |
| 13 | 1 | Display, LED Temp | 05945-004-85-61 |
| 14 | 1 | Relay, 10 A, 220 V, AC Coil | 05945-004-84-93 |
| 15 | 4 | Screw, 10-32 x 1/2" | 05306-004-42-04 |
| 16 | 2 | Grommet, 7/8" Split | 05975-200-40-00 |
| 17 | 1 | Din-rail, 7" | 05700-003-71-06 |
| 18 | 1 | Terminal Block, Ground | 05999-004-90-65 |
| 19 | 2 | End Bracket, Terminal | 05999-004-90-66 |
| 20 | 4 | Separator, Terminal Block | 05999-004-90-67 |
| 21 | 19 | Terminal Block, Single Level | 05999-004-90-68 |
| 22 | 6 | Holder, Terminal Block Fuse | 05999-004-90-69 |
| 23 | 2 | End Bracket, Fuse Block | 05999-004-90-70 |
| 24 | 4 | Jumper Bars, 3-pole | 05999-004-90-71 |
| 25 | 19 | Tag, Marking 5 mm x 5 mm | 05999-004-90-72 |
| 26 | 1 | Female Plug Pin | 05935-004-91-16 |
| 27 | 1 | Bushing, 1/2" Snap | 05975-210-05-00 |



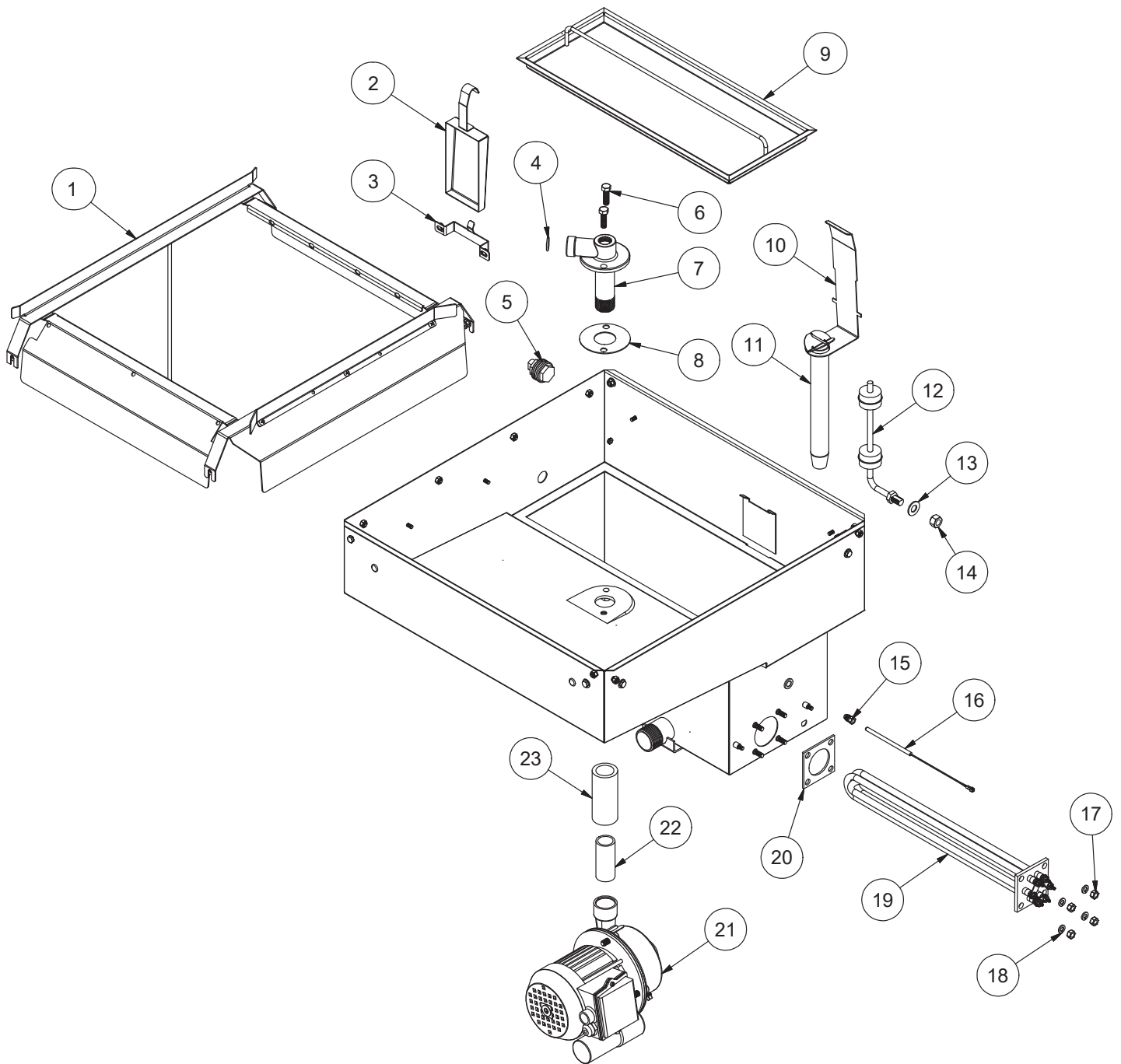
| ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|--|-----------------|
| 1 | 1 | Cover, Electrical Box | 05700-004-85-07 |
| 2 | 11 | Nut, 10-32 Hex | 05310-004-40-48 |
| 3 | 1 | Decal, Warning-Disconnect Power | 09905-100-75-93 |
| 4 | 2 | Washer, Flat | 05311-173-01-00 |
| 5 | 2 | Screw, 10-32 x 3/4" | 05305-011-62-17 |
| 6 | 1 | Ground Lug | 05940-200-76-00 |
| 7 | 9 | Screw, 10-32 x 1/2" | 05306-004-42-04 |
| 8 | 1 | Fitting, 1/2" Straight | 05975-003-33-27 |
| 9 | 1 | Thermostat, High-limit | 05930-004-33-12 |
| 10 | 1 | Bracket, High-limit | 05700-004-36-37 |
| 11 | 1 | Decal, Ground | 09905-011-86-86 |
| 12 | 1 | Decal, L1 L2 L3 | 09905-004-37-05 |
| 13 | 2 | Fitting, 90-degree, 3/4" | 05975-004-19-42 |
| 14 | 1 | Conduit, 1/2" PVC Flex | 05975-003-77-47 |
| 15 | 2 | Nut, Conduit Black Nylon, 3/4" | 05975-003-81-29 |
| 16 | 1 | Fitting | 05975-011-65-51 |
| 17 | 2 | Screw, 6-32 x 3/8" | 05305-002-25-91 |
| 18 | 1 | Terminal Block, 3-pole | 05940-011-48-27 |
| 19 | 1 | Contactor, 30 A, 240 VAC | 05945-002-74-20 |
| 20 | 2 | Contactor, Heater, 4-pole, 35 A, 208-240 VAC | 05945-109-01-69 |



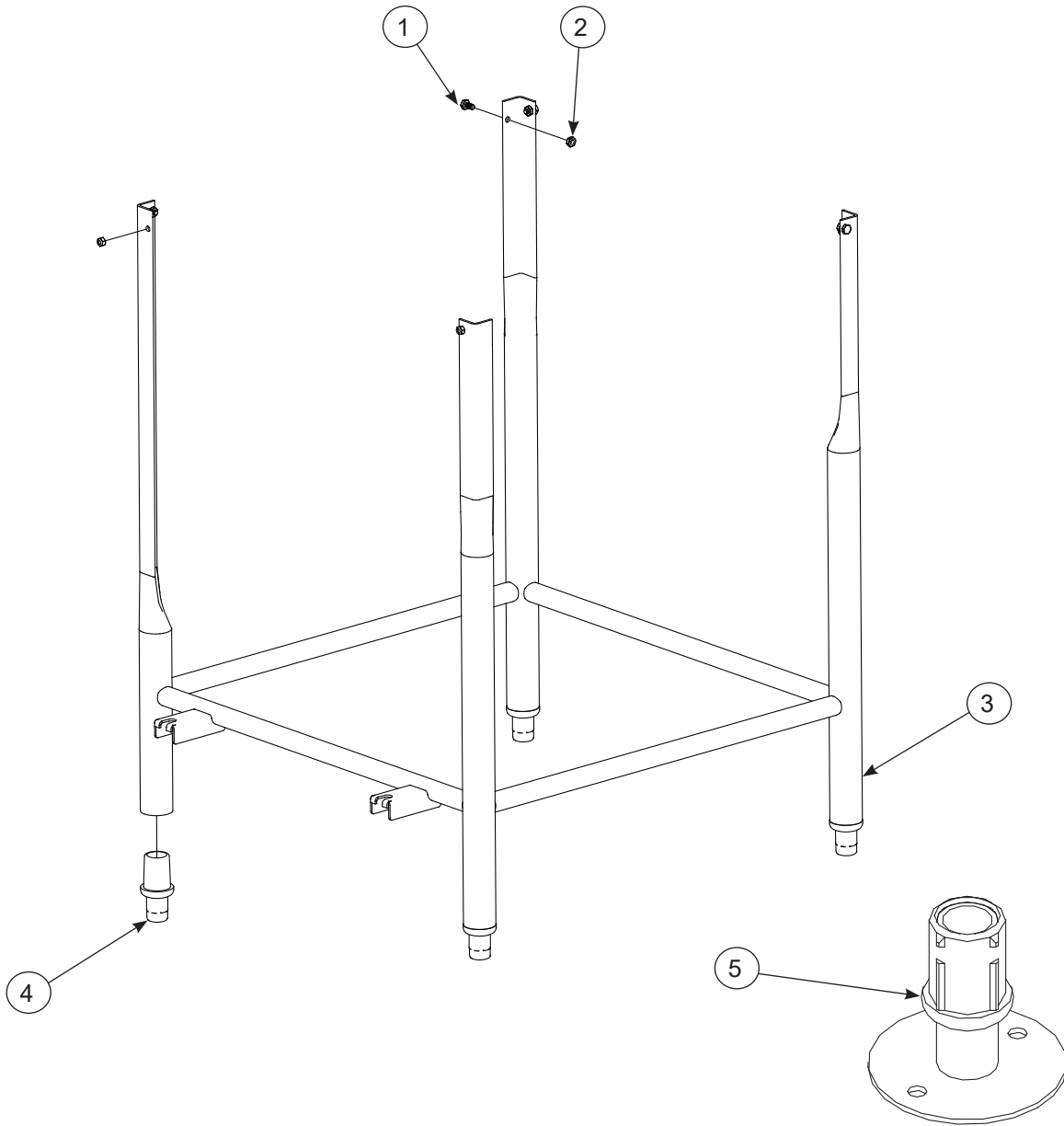
| ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|-----------------------------|-----------------|
| 1 | 12 | Bolt, 1/4-20 x 1/2" | 05305-274-02-00 |
| 2 | 2 | Guide, Hood | 05700-004-90-99 |
| 3 | 2 | Screw, 10-32 x 1/2" | 05305-011-44-51 |
| 4 | 2 | Support, Hood | 05700-004-84-99 |
| 5 | 2 | Guide, Hood, Rear | 05700-004-87-24 |
| 6 | 6 | Washer, 1/4-20 | 05311-174-01-00 |
| 7 | 2 | Locknut, Low-profile, 10-32 | 05310-004-28-70 |



| ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|---|------------------------------------|
| 1 | 1 | Complete Cantilever Arm Assembly (items 1-5) Cantilever Arm Only | 05700-004-85-10 05700-001-21-00 |
| 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 |
| 4 | 2 | Nut, Center Locknut 3/8-16 | 05310-256-04-00 |
| 5 | 2 | Plug, Cantilever Arm | 05340-011-35-00 |
| 6 | 2 | Bracket, Cantilever Arm | 05700-003-88-91 |
| 7 | 2 | Screw, 1/4-20 x 5/8" Hex | 05305-274-24-00 |
| 8 | 2 | Connector, Door | 05700-004-85-11 |
| 9 | 2 | Screw, 1/4-20 x 1 1/2" | 05305-274-23-00 |
| 10 | 2 | Rod, Spring | 05700-003-67-39 |
| 11 | 2 | Spring | 05340-109-02-00 |
| 12 | 2 | Bolt, Cantilever Hanger Eye 3/8-16 | 05306-956-05-00 |
| 13 | 2 | Washer, 3/8" ID x 7/8" OD | 05311-176-02-00 |
| 14 | 4 | Nut, 3/8-16 Hex | 05310-276-01-00 |
| 15 | 2 | Locknut, 8-32 Hex with Nylon Insert | 05310-272-02-00 |
| 16 | 1 | Cover, Door Magnet | 05700-004-07-39 |
| 17 | 1 | Magnet, Reed Switch | 05930-111-51-68 |
| 18 | 1 | Door | 05700-004-84-98 |
| 19 | 2 | Door Stop, Front | 05700-004-85-74 |
| 20 | 4 | Locknut, 1/4-20 Hex with Nylon Insert | 05310-374-01-00 |
| 21 | 2 | Door Stop, Rear | 05700-004-86-86 |
| 22 | 2 | Door Guide | 05330-600-01-00 |



| ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|--|------------------------------------|
| 1 | 1 | Track Assembly | 05700-002-01-00 |
| 2 | 1 | Sump Strainer | 05700-001-22-23 |
| 3 | 1 | Bracket, Sump Strainer | 05700-001-22-24 |
| 4 | 1 | O-ring | 05330-002-60-69 |
| 5 | 1 | Bulk Head Plug | 04730-609-05-00 |
| 6 | 2 | Bolt, Hex 3/8-16 x 1 1/4" Long | 05305-276-10-00 |
| 7 | 1 | Lower Wash Manifold | 05700-031-46-00 |
| 8 | 1 | Gasket | 05700-111-35-03 |
| 9 | 1 | Scrap Screen | 05700-003-07-76 |
| 10 | 1 | Standpipe Lift Standpipe Lift Support (Not Shown) | 05700-002-91-54 05700-002-91-55 |
| 11 | 1 | Standpipe | 05700-001-25-69 |
| 12 | 1 | Switch, Dual Float | 06680-121-70-71 |
| 13 | 1 | Washer, Flat, 1/2" | 05311-011-71-93 |
| 14 | 1 | Nut, 1/2-13 | 05310-011-72-58 |
| 15 | 1 | Fitting, 1/4" | 05310-924-02-05 |
| 16 | 1 | Probe, Thermistor 4" | 06685-004-17-26 |
| 17 | 1 | Nut, Hex, 5/16-18 | 05310-275-01-00 |
| 18 | 1 | Lockwasher, 5/16", Split | 05311-275-01-00 |
| 19 | 1 | Heater | See Heaters page. |
| 20 | 1 | Wash Heater Gasket | 05330-011-47-79 |
| 21 | 1 | Wash Motor | See Motors page. |
| 22 | 1 | Nipple | 05700-021-34-84 |
| 23 | 1 | Discharge Hose | 05700-011-88-24 |

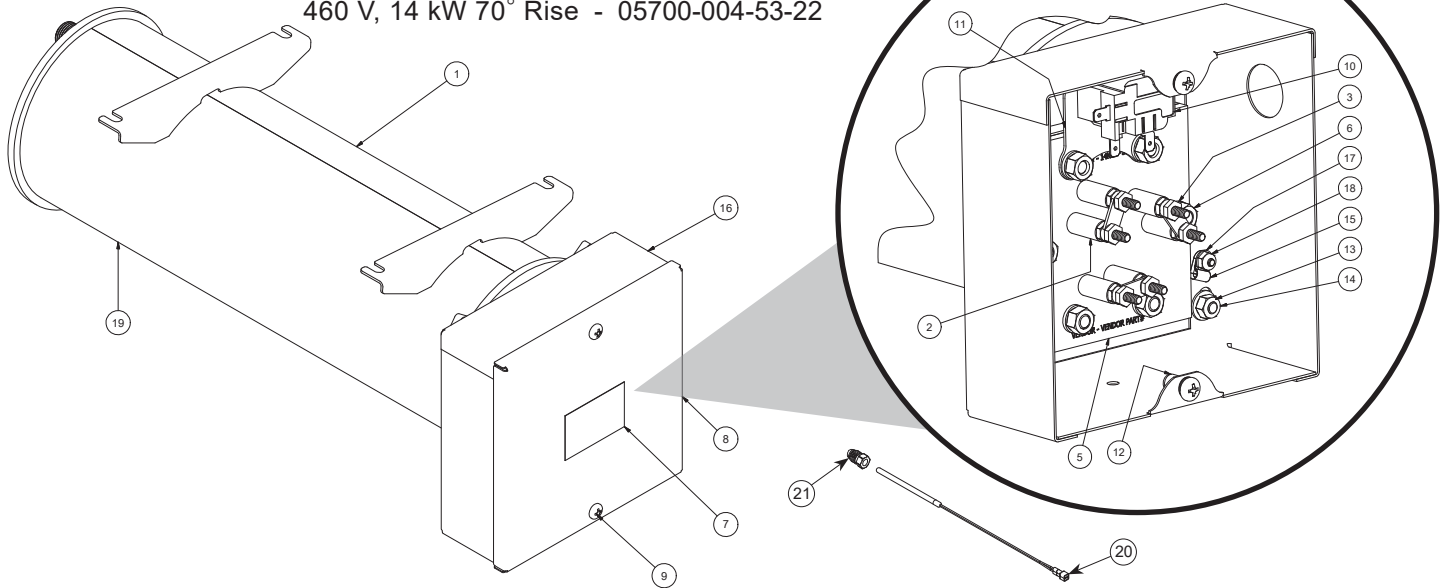


| ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|---------------------------------------|-----------------|
| 1 | 4 | Bolt, 1/4-20 x 1/2" | 05305-274-02-00 |
| 2 | 4 | Locknut, 1/4-20 Hex with Nylon Insert | 05310-374-02-00 |
| 3 | 1 | Frame | 05700-031-48-01 |
| 4 | 4 | Bullet Foot | 05340-108-01-03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

Complete Assemblies

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

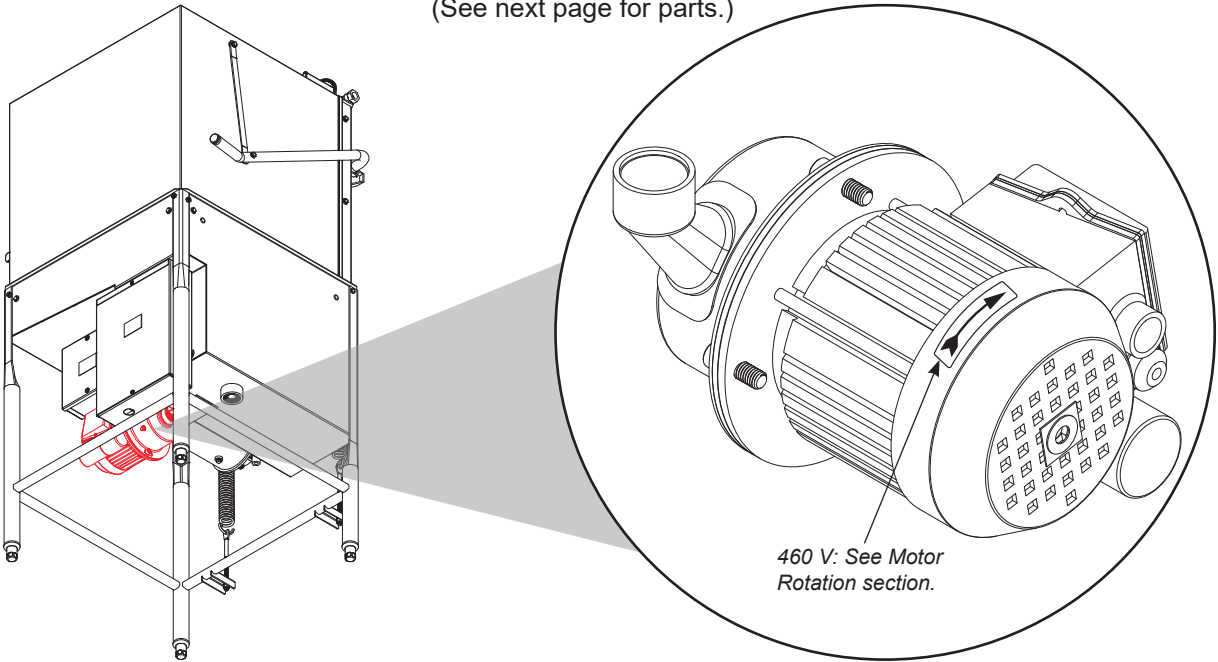
460 V, 14 kW 70° Rise - 05700-004-53-22



| 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 | Locknut, 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 Door, New Rinse Tank | 05700-004-52-21 |
| 17 | 1 | Washer, Flat | 05311-173-02-00 |
| 18 | 1 | Locknut, Hex 8-32 | 05310-272-02-00 |
| 19 | 1 | Plug, 1/4", Brass (Not Shown) | 04730-209-01-00 |
| 20 | 1 | Probe, Thermistor 4" | 06685-004-17-26 |
| 21 | 1 | Fitting, 1/4" | 05310-924-02-05 |

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.

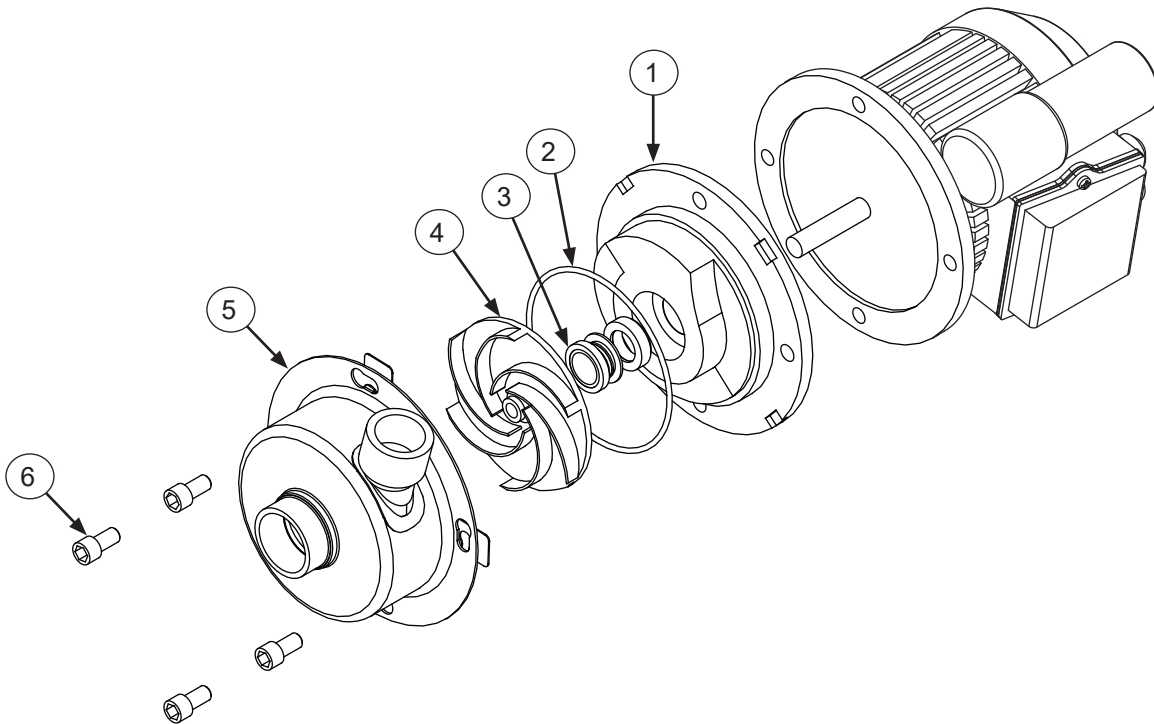
²Use P/N 06105-002-62-71 to order the motor only.

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 | Pump Casing 208/230 V | 05700-002-85-01 |
| | 1 | Pump Casing 460 V | 05700-002-06-20 |
| 6 | 1 | Case Capscrew, 208/230 V | 05305-002-81-88 |

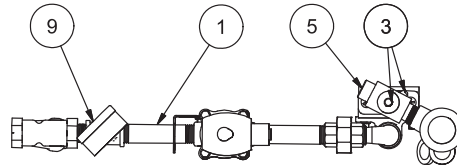
| Volts | Hz | Phase | Wash Heater | Rinse Heater (14 kW) |
|-------|----|-------|-----------------|----------------------|
| 208 | 50 | 1 | 04540-121-47-39 | 04540-121-63-38 |
| 208 | 50 | 3 | 04540-121-47-39 | 04540-121-63-38 |
| 208 | 60 | 1 | 04540-121-47-39 | 04540-121-63-38 |
| 208 | 60 | 3 | 04540-121-47-39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

Heater Phase Conversion Kit

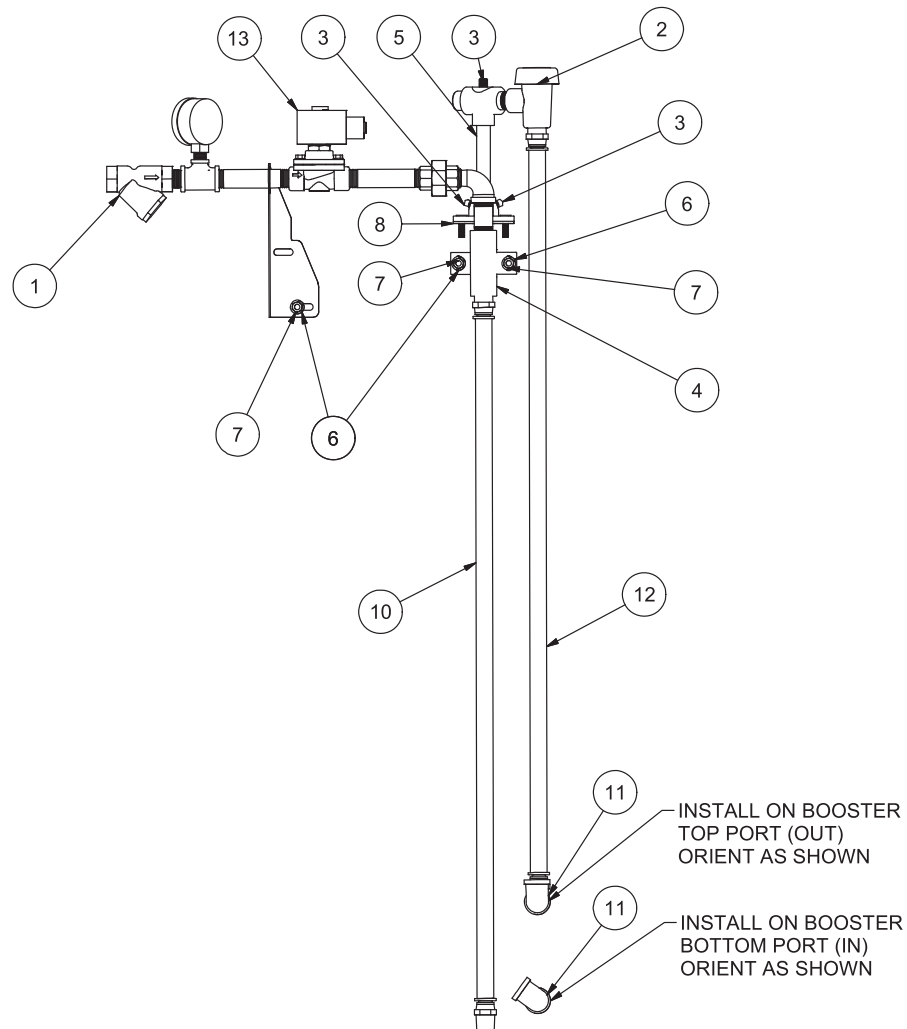
06401-004-00-22

Complete Plumbing Assembly
05700-004-54-52

Top View



Back View

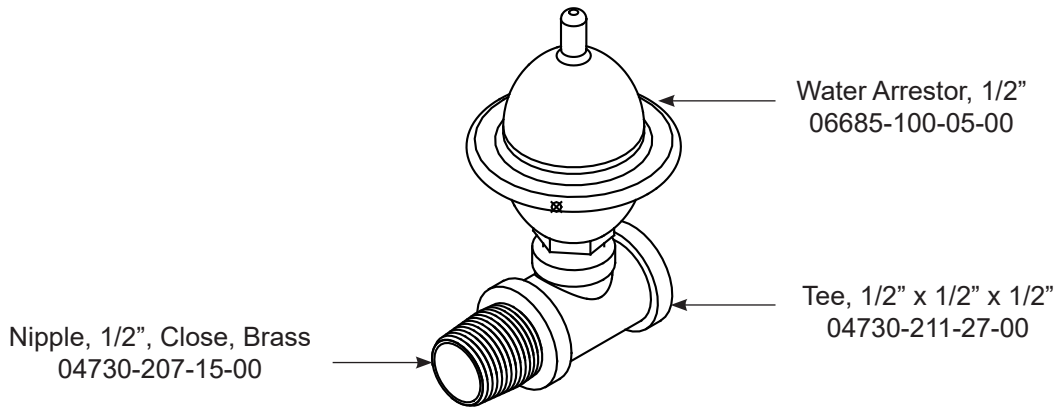


NOTICE

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 machine. 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 | Plumbing, Complete Assembly | 05700-004-54-52 |
| 1 | 1 | Plumbing, Inlet | 05700-004-47-98 |
| 2 | 1 | Vacuum Breaker, 1/2" Brass | 04820-003-06-13 |
| 3 | 3 | Plug, Rinse Injector, 1/8" Brass | 04730-209-07-37 |
| 4 | 1 | Casting, 1/2" Flanged Coupling | 05700-004-47-97 |
| 5 | 1 1 | Rinse Injector Gasket, Rinse Injector (Not Shown) | 05700-002-56-75 05330-111-42-81 |
| 6 | 3 | Washer, 1/4-20 Hex with Nylon Insert | 05311-174-01-00 |
| 7 | 3 | Locknut, 1/4-20 Hex with Nylon Insert | 05310-374-01-00 |
| 8 | 1 | Gasket, Rinse Manifold | 05330-003-75-91 |
| 9 | 1 | Decal, 10 PSI | 09905-004-50-73 |
| 10 | 1 | Hose, 1/2" x 31" Blue | 05700-004-54-56 |
| 11 | 2 | Elbow, 1/2" 90-degree Brass | 04730-011-42-96 |
| 12 | 1 | Hose, 1/2" x 33" Red | 05700-004-51-62 |
| 13 | 1 | Solenoid Valve, 1/2" | 04810-003-71-56 |

SHOCK ABSORBER (WATER ARRESTOR) OPTION

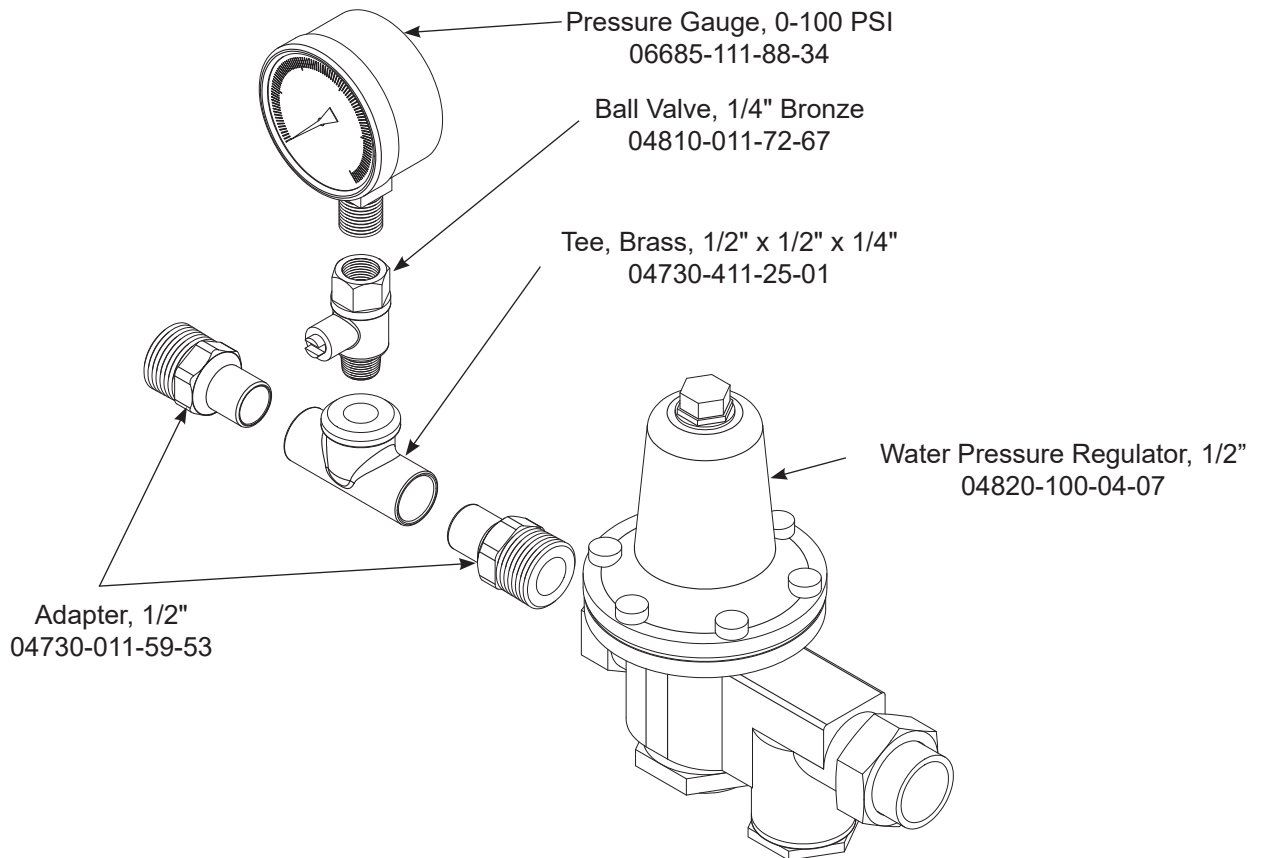


WATER TREATMENT OPTION

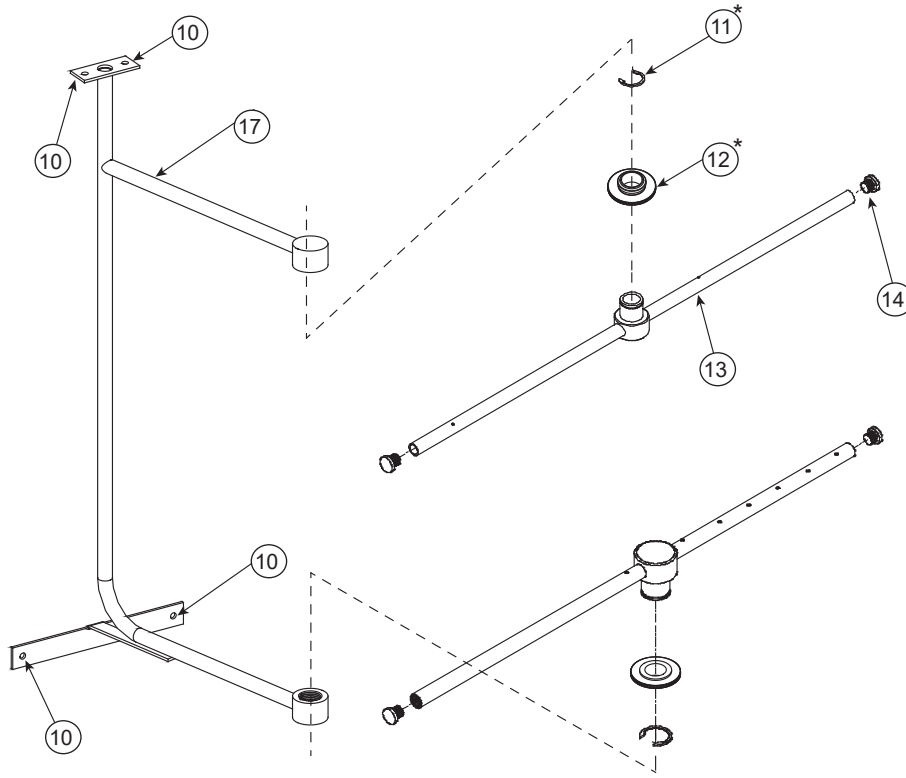
Scaltrol System
04730-003-05-76

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

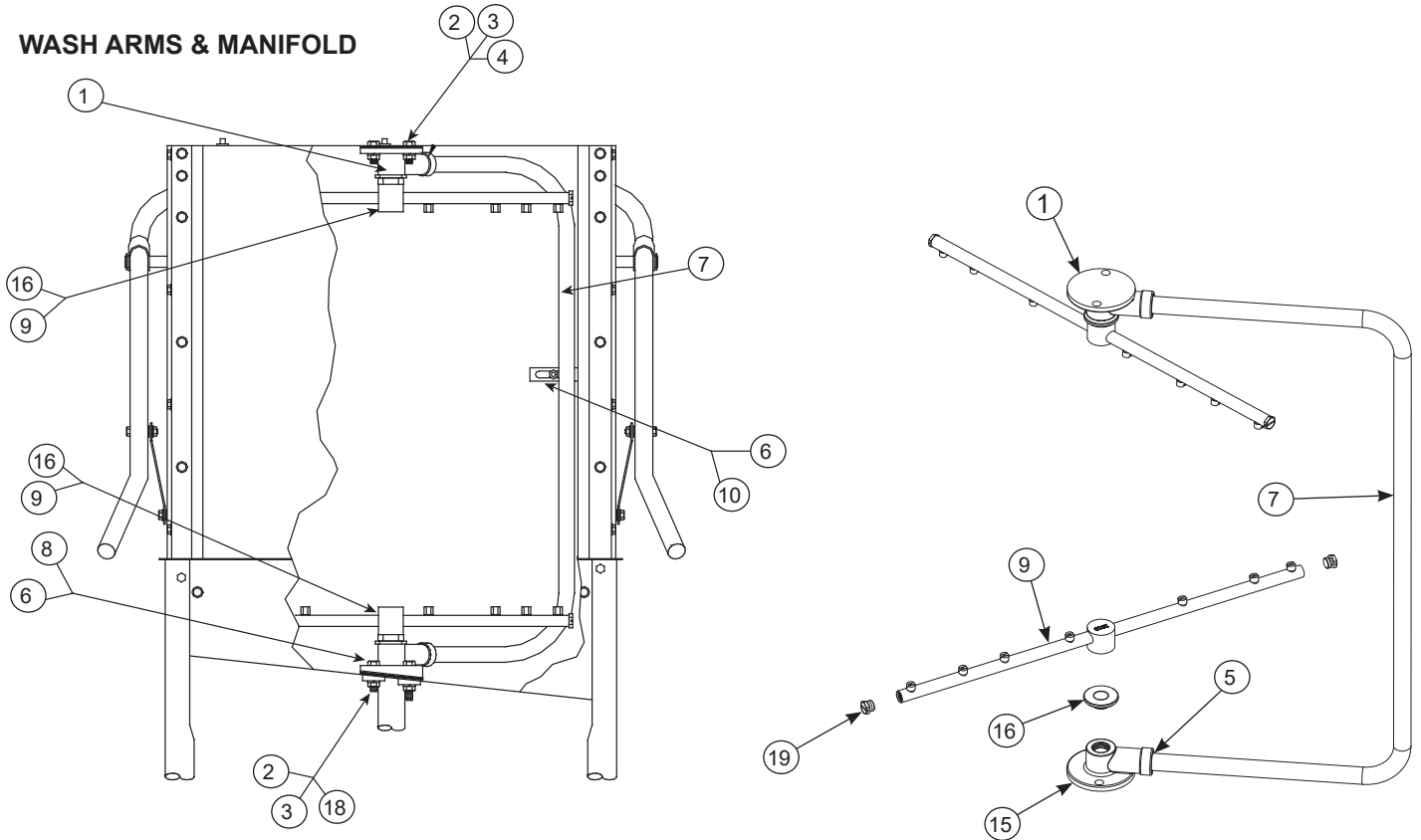
PRESSURE REGULATING VALVE OPTION



FINAL RINSE ARMS & MANIFOLD



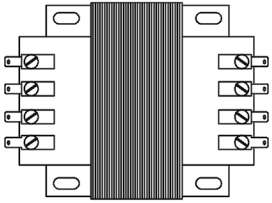
WASH ARMS & MANIFOLD



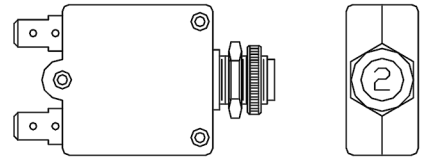
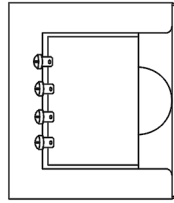
| ITEM | QTY | DESCRIPTION | PART NUMBER |
|------|-----|---------------------------------------|-----------------|
| 1 | 1 | Upper Manifold | 05700-031-34-82 |
| 2 | 4 | Nut, 3/8-16 Hex | 05310-276-01-00 |
| 3 | 4 | Lockwasher, 3/8" | 05311-276-01-00 |
| 4 | 2 | Bolt, Hex 3/8-16 x 7/8" | 05306-011-36-95 |
| 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 | 1 | 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* | 2 | Bearing Assembly, Rinse Arm | 05700-004-54-71 |
| 13 | 2 | Rinse Arm | 05700-003-58-94 |
| 14 | 4 | Rinse Arm End-cap | 04730-111-60-41 |
| 15 | 1 | Lower Wash Manifold | 05700-031-46-00 |
| 16 | 2 | Bearing Assembly | 05700-021-35-97 |
| 17 | 1 | Rinse Manifold Assembly | 05700-021-47-61 |
| 18 | 2 | Bolt, Hex 3/8-16 x 1 1/4" | 05305-276-10-00 |
| 19 | 4 | Wash Arm End-cap | 05700-003-31-59 |

*Rinse Arm Bearing Kit
(Includes items 11 and 12)
06401-004-57-50

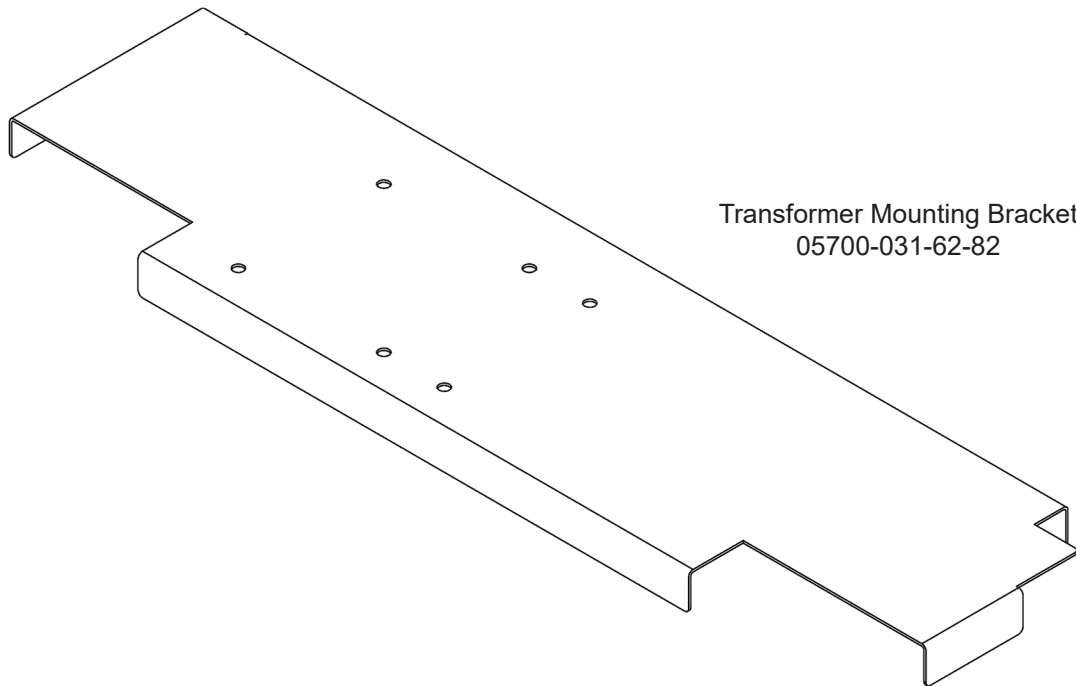
460 V MACHINE TRANSFORMER MOUNTING BOX



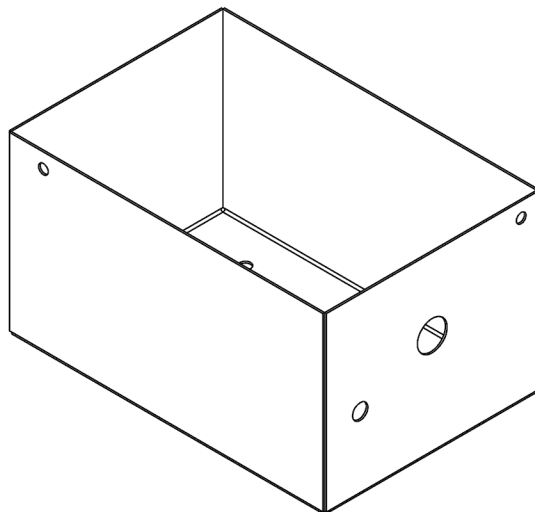
460 V Transformer
05950-111-65-93



2 A Circuit Breaker
05925-111-64-18



Transformer Mounting Bracket
05700-031-62-82



Transformer Mounting Box
05700-002-10-01

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

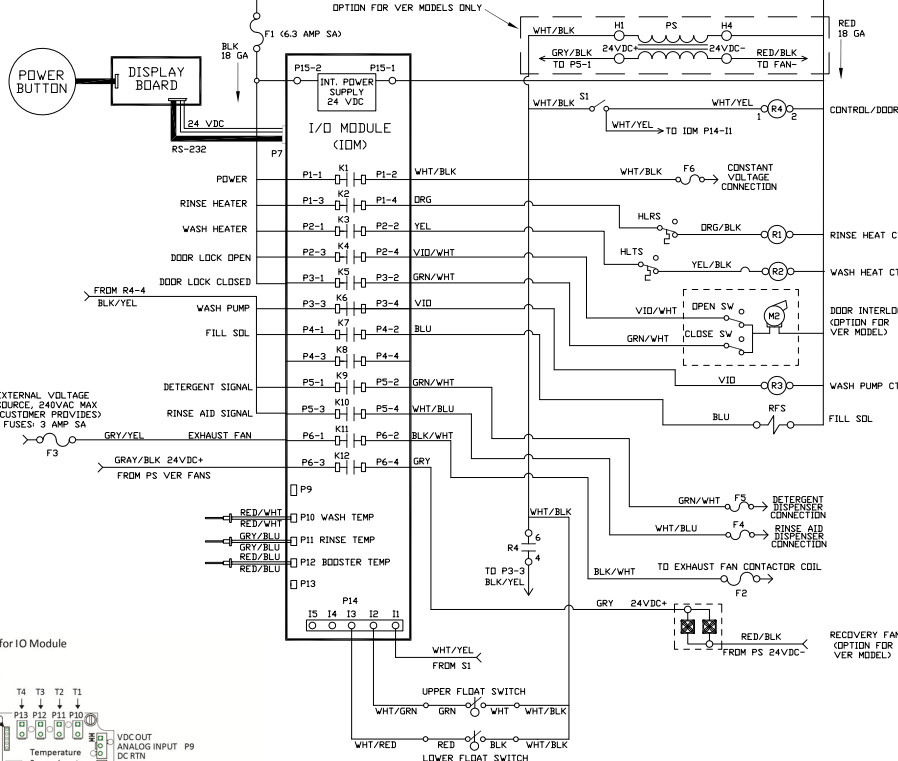
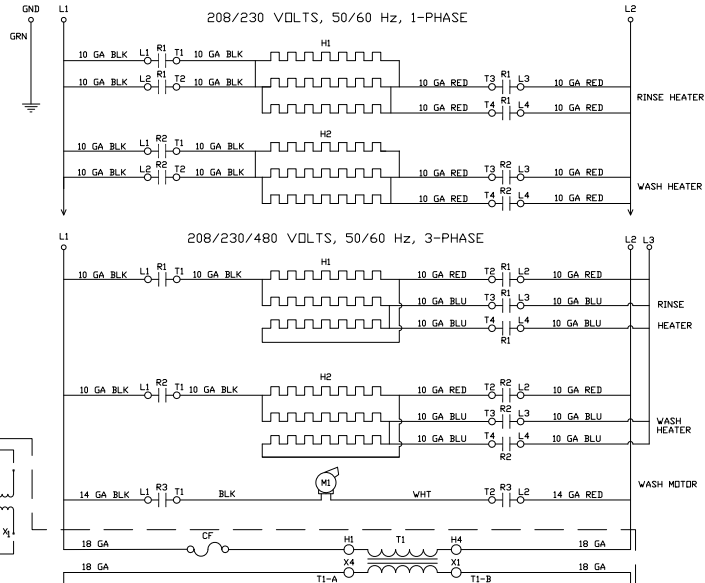
Call 1-880-800-5672 to order kits for NXP-HTD and use the part numbers below:

| DESCRIPTION | PART NUMBER |
|---------------------------|-----------------|
| Door Magnet Cover Kit | 06401-004-07-73 |
| Drain Water Tempering Kit | 06401-004-85-80 |
| Exhaust Fan Contactor Kit | 05700-004-35-35 |
| False Panel Kit | 05700-002-75-59 |
| Phase Conversion Kit | 06401-004-00-22 |

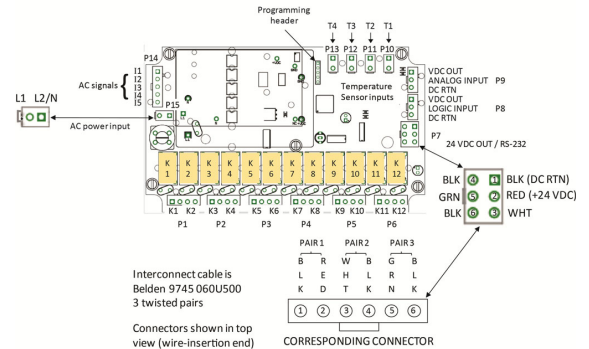
NXP HTD SCHEMATIC STD/VER

LEGEND

- L1,L2,L3 POWER DISTRIBUTION BLOCK
- GND EARTH GROUND
- H1 HEATER, RINSE
- H2 HEATER, WASH
- M1 MOTOR, WASH PUMP
- M2 MOTOR, DOOR INTERLOCK(OPTION)
- R1 CONTACTOR, RINSE HEATER
- R2 CONTACTOR, WASH HEATER
- R3 CONTACTOR, WASH PUMP
- R4 RELAY, CONTROL
- F1 FUSE-L1 CONTROL
- F2 FUSE-TO EXHAUST FAN CONTACTOR COIL
- F3 FUSE-FROM FAN EXTERNAL VOLTAGE SOURCE
- F4 FUSE- DETERGENT DISPENSER SIGNAL
- F5 FUSE- RINSE DISPENSER SIGNAL
- F6 FUSE- DISPENSER CONSTANT VOLTAGE CONN.
- S1 SWITCH, DOOR
- S2 SWITCH, DOOR LOCK OPEN (OPTION)
- S3 SWITCH, DOOR LOCK CLOSE (OPTION)
- HLTS HIGH-LIMIT T-STAT, WASH HEATER
- H1RS HIGH-LIMIT T-STAT, RINSE HEATER
- FS RINSE/FILL SOLENOID
- PS POWER SUPPLY 24VDC (OPTION)



Connection Diagram for IO Module



EXTERNAL FAN & CHEMICAL CONNECTIONS

| F2 | F3 | F4 | F5 | F6 |
|--|--|--|--|--|
| EXHAUST FAN CONTROL CONNECTION | EXHAUST FAN CONTROL CONNECTION | RINSE AID DISPENSER CONNECTION | DETERGENT DISPENSER CONNECTION | CONSTANT VOLTAGE CONNECTION |
| L1 TO EXHAUST FAN CONTACTOR COIL 3 AMP SLOW BLOW FUSE | CUSTOMER EXTERNAL VOLTAGE SOURCE FOR FAN CONTACTOR COIL. 240V MAX 3 AMP SLOW BLOW FUSE | L1 208-240V OUTPUT LIVE WHEN RINSE VALVE IS OPEN 3AMP SLOW BLOW FUSE | L1 208-240V OUTPUT LIVE WHEN WASH PUMP IS ON 3AMP SLOW BLOW FUSE | L1 208-240V OUTPUT LIVE WHEN MACHINE POWER IS ON 3AMP SLOW BLOW FUSE |



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