

INSTALLATION/OPERATION & TECHNICAL MANUAL

FOR JACKSON MODELS:

CONSERVER XL, CONSERVER XL2

CONSERVER XL2-CML, CONSERVER XL2-CMR

CONSERVER AXL, CONSERVER AXL2

CONSERVER AXL2-CML, CONSERVER AXL2-CMR



MANUFACTURERS WARRANTY

ONE YEAR LIMITED PARTS & 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 THE DATE OF PURCHASE, BUT IN NO EVENT TO EXCEED (18) EIGHTEEN MONTHS FROM THE DATE OF SHIPMENT FROM THE FACTORY.

Jackson MSC 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 furnished with the machine and the failure is reported to the 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 MSC, within the continental United States, Hawaii and Canada, during the warranty period provided a Jackson MSC authorized service agency, or those having prior authorization from the factory, performs the service. Any repair work by persons other than a Jackson MSC 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 MSC.

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

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

TRAVEL LIMITATIONS

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

WARRANTY REGISTRATION CARD

The warranty registration card supplied with the machine must be returned to Jackson MSC within 30 days to validate the warranty.

REPLACEMENT PARTS WARRANTY

Jackson replacement parts are warranted for a period of 90 days from the date of installation or 180 days from the date of shipment from the factory, which ever occurs first.

PRODUCT CHANGES AND UPDATES

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

THIS IS THE ENTIRE AND ONLY WARRANTY OF JACKSON MSC. 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 MSC BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, OR FOR THE DAMAGES IN THE NATURE OF PENALTIES, ARISING OUT OF THE USE OR INABILITY TO USE ANY OF ITS PRODUCTS.

ITEMS NOT COVERED

This warranty does not cover cleaning or deliming of the unit or any component such as, but not limited to, wash arms, rinse arms or strainers at anytime. Nor does it cover adjustments such as, but not limited to timer cams, thermostats or doors, beyond 30 days from the date of installation. In addition, the warranty will only cover the replacement of wear items such as curtains, drain balls, door guides or gaskets during the first 30 days after installation. Also, not covered are conditions caused by the use of incorrect (non-Commercial) grade detergents, incorrect water temperature or pressure, or hard water conditions.



**CALL 1-888-800-5672 TO REGISTER THIS PRODUCT!
FAILURE TO DO SO WILL VOID THE WARRANTY!**

**LLAME AL 1-888-800-5672 PARA REGISTRAR ESTE PRODUCTO!
AL NO HACERLO LA GARANTIA SERA ANULADA!**

**S.V.P. APPELER 1-888-800-5672 POUR ENREGISTRER CE PRODUIT,
LA GARANTIE SERA ANNULEE POUR TOUT PRODUIT NON- ENREGISTREE**



CONSERVER XL2-CMR

Conserver XL = Low temperature, chemical sanitizing, single rack dishmachine

Conserver XL2 = Low temperature, chemical sanitizing, dual rack dishmachine

Conserver XL2-CML = Low temperature, chemical sanitizing, dual rack dishmachine with left hand feed through

Conserver XL2-CMR = Low temperature, chemical sanitizing, dual rack dishmachine with right hand feed through

Conserver AXL = Low temperature, chemical sanitizing, universal timer, single rack dishmachine

Conserver AXL2 = Low temperature, chemical sanitizing, universal timer, dual rack dishmachine

Conserver AXL2-CML = Low temperature, chemical sanitizing, universal timer, dual rack dishmachine with left hand feed through

Conserver AXL2-CMR = Low temperature, chemical sanitizing, universal timer, dual rack dishmachine with right hand feed through

Conserver XLS = Solid Dispenser Option

Model: _____

Serial No.: _____

Installation Date: _____

Service Rep. Name: _____

Phone No.: _____

Jackson MSC LLC. provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is available from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Technical support is not available on holidays. Contact technical support toll free at 1-888-800-5672. Please remember that technical support is available for service personnel only.

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SECTION 1: SPECIFICATION INFORMATION

SECTION 1: SPECIFICATION INFORMATION

CONSERVER XL SPECIFICATIONS

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)

RACKS PER HOUR	37
DISHES PER HOUR	925
GLASSES PER HOUR	925

OPERATING CYCLE (SECONDS)

WASH TIME	42
RINSE TIME	25
DWELL TIME	23
TOTAL CYCLE TIME	90

TANK CAPACITY (MINIMUM)

WASH TANK (GALLONS)	1.49
WASH TANK (LITERS)	5.6

WASH PUMP CAPACITY

GALLONS PER MINUTE	61
LITERS PER MINUTE	231

TEMPERATURES

WASH---°F (MINIMUM)	120
WASH---°C (MINIMUM)	48.9
WASH---°F (RECOMMENDED)	140
WASH---°C (RECOMMENDED)	60
RINSE---°F(MINIMUM)	120
RINSE---°C(MINIMUM)	48.9
RINSE---°F (RECOMMENDED)	140
RINSE---°C (RECOMMENDED)	60

ELECTRICAL REQUIREMENTS

WASH PUMP MOTOR HORSEPOWER	3/4
----------------------------	-----

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

<u>VOLTS</u>	<u>PH</u>	<u>HZ</u>	<u>RINSE HEATER RATINGS</u>	<u>TOTAL AMPS</u>	<u>TYPICAL ELECTRICAL CIRCUIT</u>
115	1	60	N/A	12	15 AMP
220	1	50	N/A	8	15 AMP

WATER REQUIREMENTS

INLET TEMPERATURE (MINIMUM)	120°F
INLET TEMPERATURE (MINIMUM)	48.9°C
INLET TEMPERATURE (RECOMMENDED)	140°F
INLET TEMPERATURE (RECOMMENDED)	60°C
GALLONS PER HOUR	55.5
LITERS PER HOUR	210
WATER LINE SIZE NPT (Minimum)	3/4"
DRAIN LINE SIZE NPT (Minimum)	2"
FLOW PRESSURE PSI	20 ± 5
MINIMUM CHLORINE REQUIRED (PPM)	50

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

SECTION 1: SPECIFICATION INFORMATION

CONSERVER XL2 SERIES SPECIFICATIONS

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)

RACKS PER HOUR	74
RACKS PER HOUR (OPTION)	96
DISHES PER HOUR	1850
GLASSES PER HOUR	1850

OPERATING CYCLE (SECONDS)

WASH TIME	42
RINSE TIME	25
DWELL TIME	25
TOTAL CYCLE TIME	90
TOTAL CYCLE TIME (OPTION)	72

TANK CAPACITY (MINIMUM)

WASH TANK (GALLONS)	3.1
WASH TANK (LITERS)	11.7

WASH PUMP CAPACITY

GALLONS PER MINUTE	61
LITERS PER MINUTE	231

TEMPERATURES

WASH---°F (MINIMUM)	120
WASH---°C (MINIMUM)	48.9
WASH---°F (RECOMMENDED)	140
WASH---°C (RECOMMENDED)	60
RINSE---°F (MINIMUM)	120
RINSE---°C (MINIMUM)	48.9
RINSE---°F (RECOMMENDED)	140
RINSE---°C (RECOMMENDED)	60

ELECTRICAL REQUIREMENTS

WASH PUMP MOTOR HORSEPOWER	3/4
----------------------------	-----

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

<u>VOLTS</u>	<u>PH</u>	<u>HZ</u>	<u>RINSE HEATER RATINGS</u>	<u>TOTAL AMPS</u>	<u>TYPICAL ELECTRICAL CIRCUIT</u>
115	1	60	N/A	23	30 AMP

WATER REQUIREMENTS

INLET TEMPERATURE (MINIMUM)	120°F
INLET TEMPERATURE (MINIMUM)	48.9°C
INLET TEMPERATURE (RECOMMENDED)	140°F
INLET TEMPERATURE (RECOMMENDED)	60°C
GALLONS PER HOUR	111
GALLONS PER HOUR (OPTION)	192
WATER LINE SIZE NPT (MINIMUM)	3/4"
DRAIN LINE SIZE NPT (MINIMUM)	2"
FLOW PRESSURE PSI	20 ± 5
MINIMUM CHLORINE REQUIRED (PPM)	50

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

SECTION 1: SPECIFICATION INFORMATION

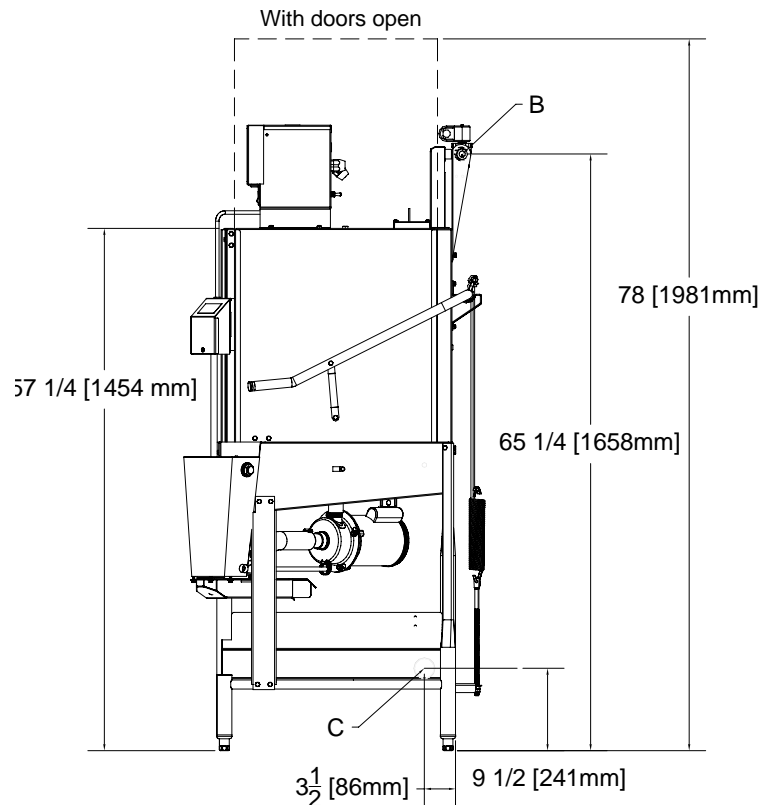
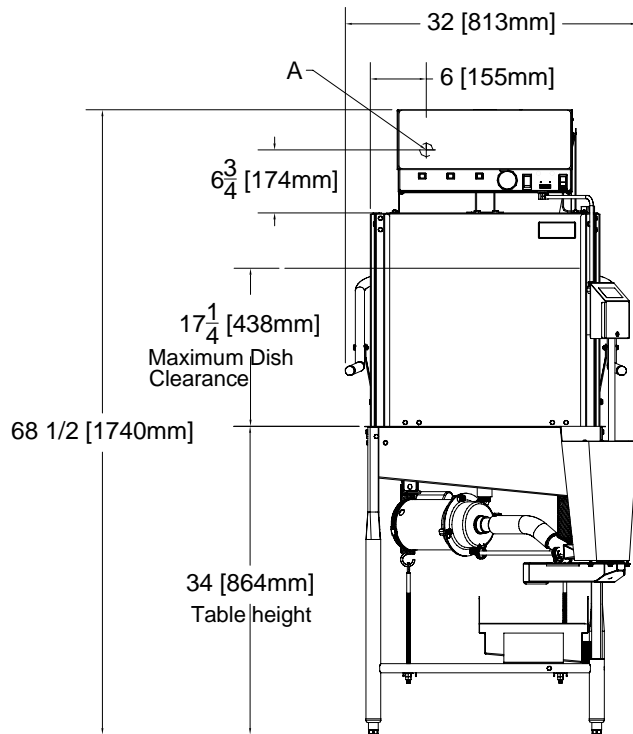
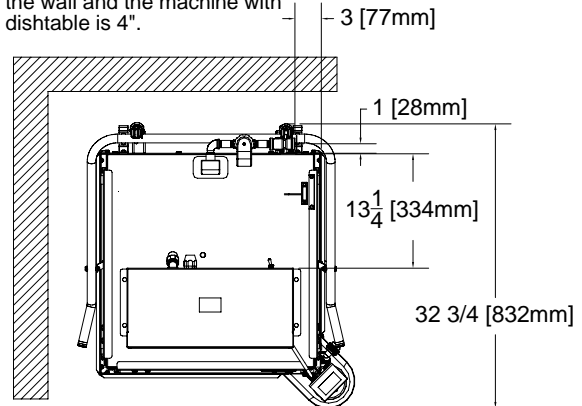
DIMENSIONS CONSERVER AXL

LEGEND:

- A - Electrical connection
- B - Water inlet 1/2" I.P.S
- C - Drain connection 2" I.P.S

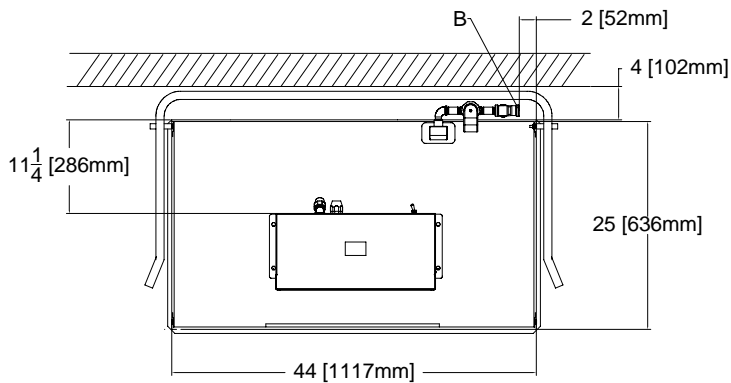
All vertical dimensions are +/- 1/2" from floor due to adjustable bullet feet.

Standard clearance between the wall and the machine with dishtable is 4".



SECTION 1: SPECIFICATION INFORMATION

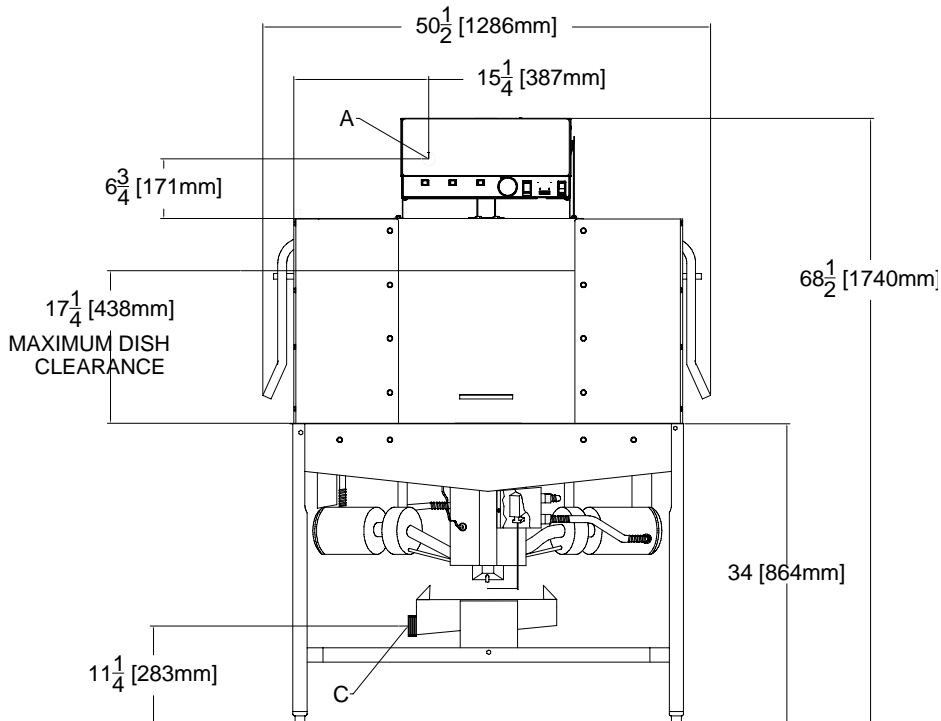
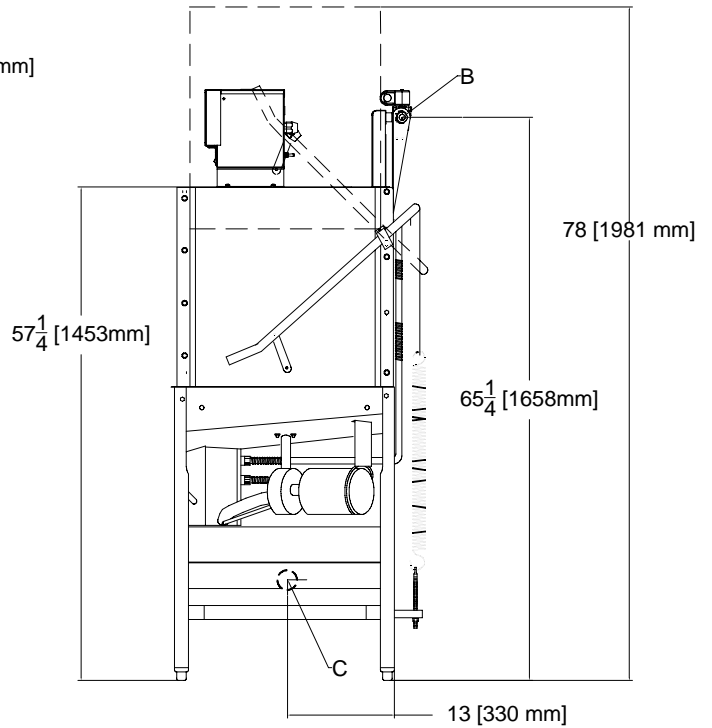
DIMENSIONS CONSERVER AXL2



LEGEND:

- A - Electrical connection
- B - Water inlet 1/2" I.P.S
- C - Drain connection 2" I.P.S

All vertical dimensions are +/- 1/2" from floor due to adjustable bullet feet.



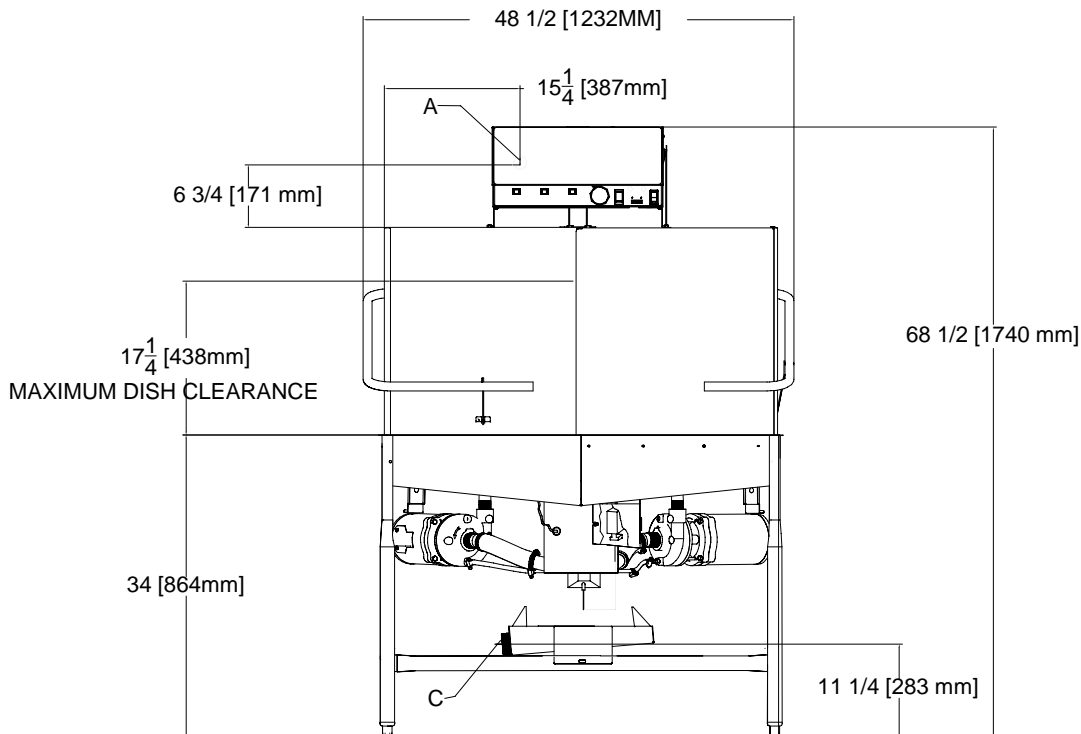
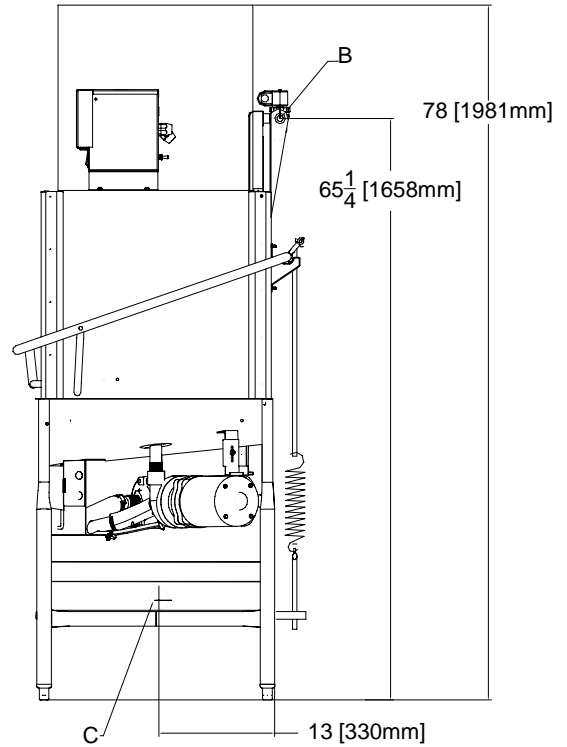
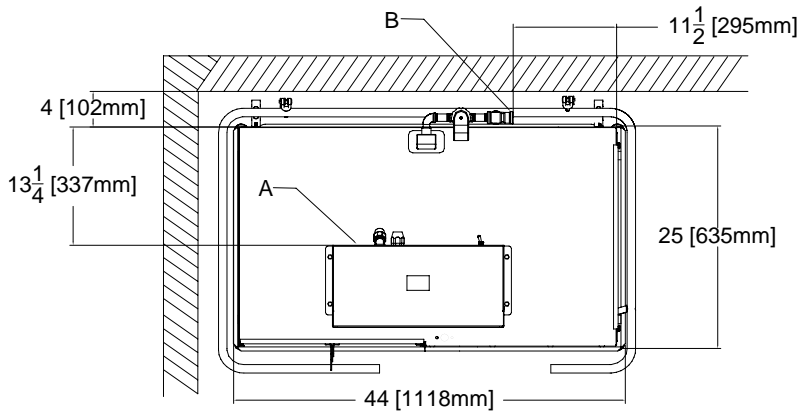
SECTION 1: SPECIFICATION INFORMATION

DIMENSIONS CONSERVER AXL2-CML

LEGEND:

- A - Electrical connection
- B - Water inlet 1/2" I.P.S
- C - Drain connection 2" I.P.S

All vertical dimensions are +/- 1/2" from floor due to adjustable bullet feet.



SECTION 1: SPECIFICATION INFORMATION

RDIMENSIONS CONSERVER AXL2-CMR

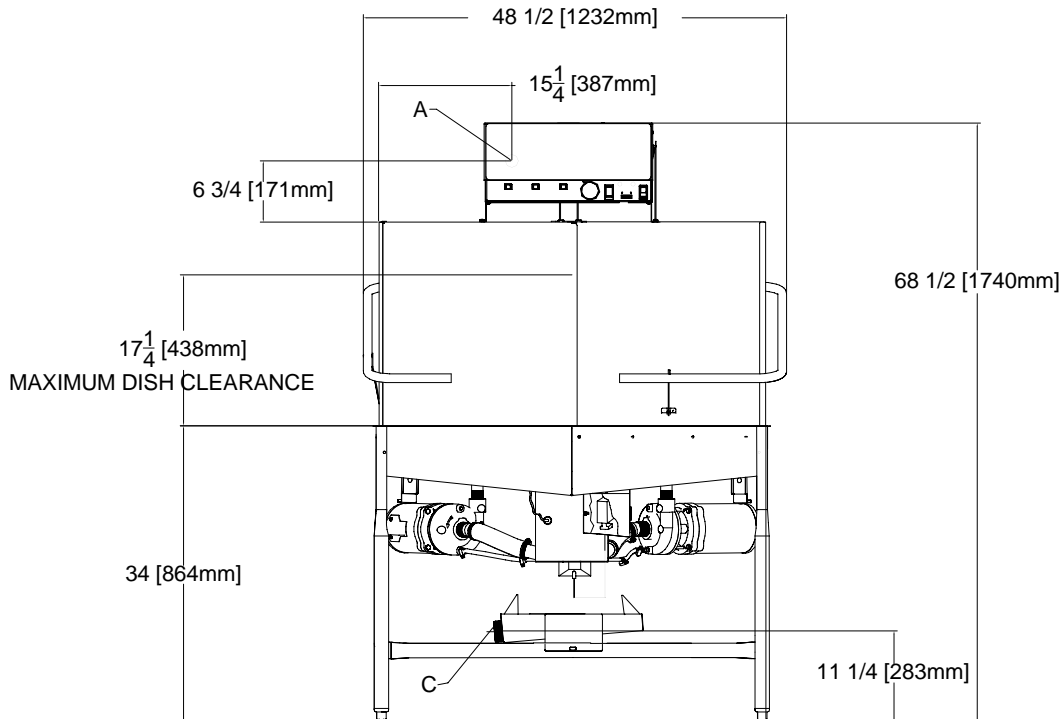
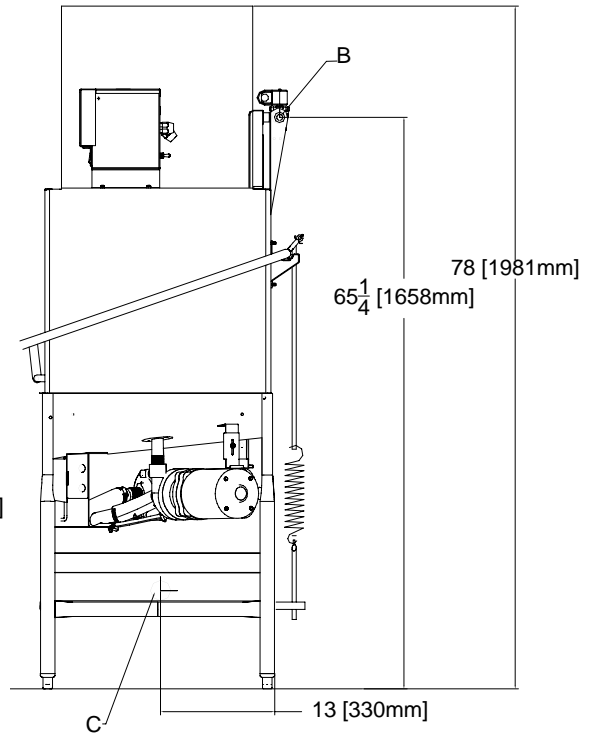
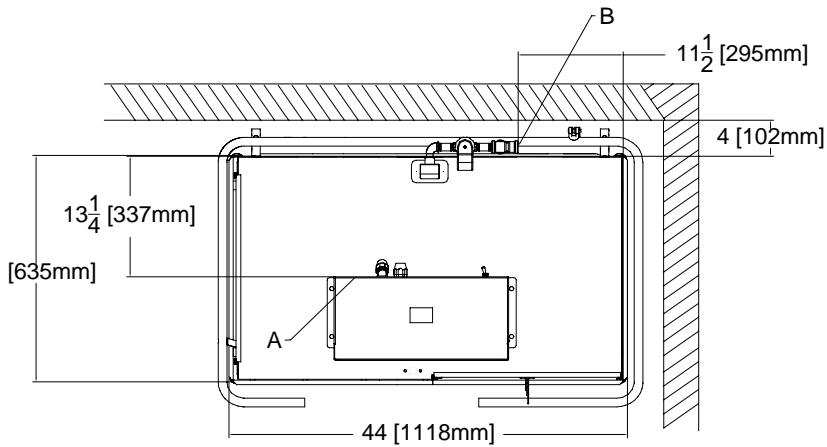
LEGEND:

A - Electrical connection

B - Water inlet 1/2" I.P.S

C - Drain connection 2" I.P.S

All vertical dimensions are +/- 1/2" from floor due to adjustable bullet feet.



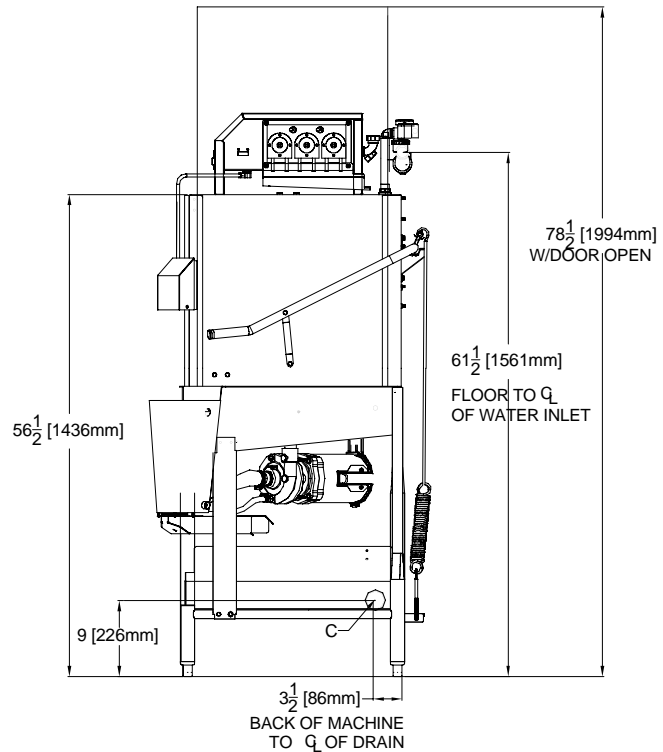
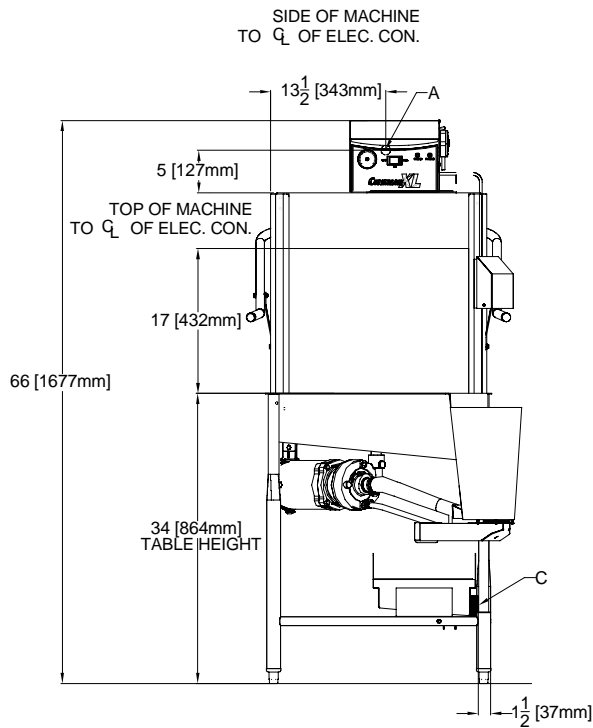
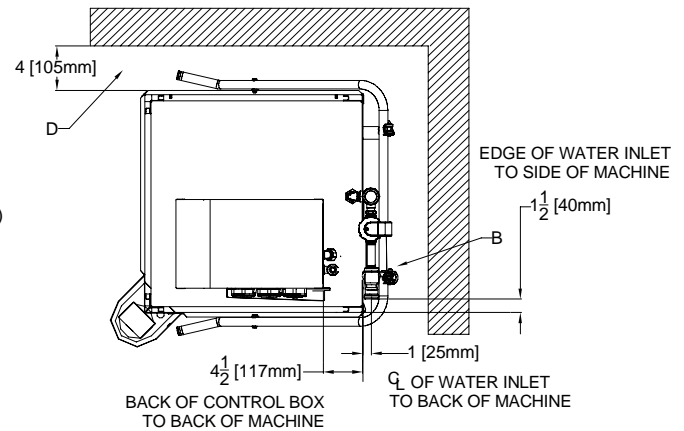
SECTION 1: SPECIFICATION INFORMATION

DIMENSIONS CONSERVER XL (Starting with S/N 04D10286)

LEGEND

A - ELECTRICAL CONNECTION
 B - WATER INLET, 3/4" IPS
 C - DRAIN CONNECTION, 2" IPS
 D - STANDARD CLEARANCE BETWEEN MACHINE AND WALL (WITH DISHTABLE)
 IS 4" [105mm]

ALL DIMENSIONS ARE +/- 1/2"
 FROM FLOOR DUE TO
 ADJUSTABLE BULLET FEET.

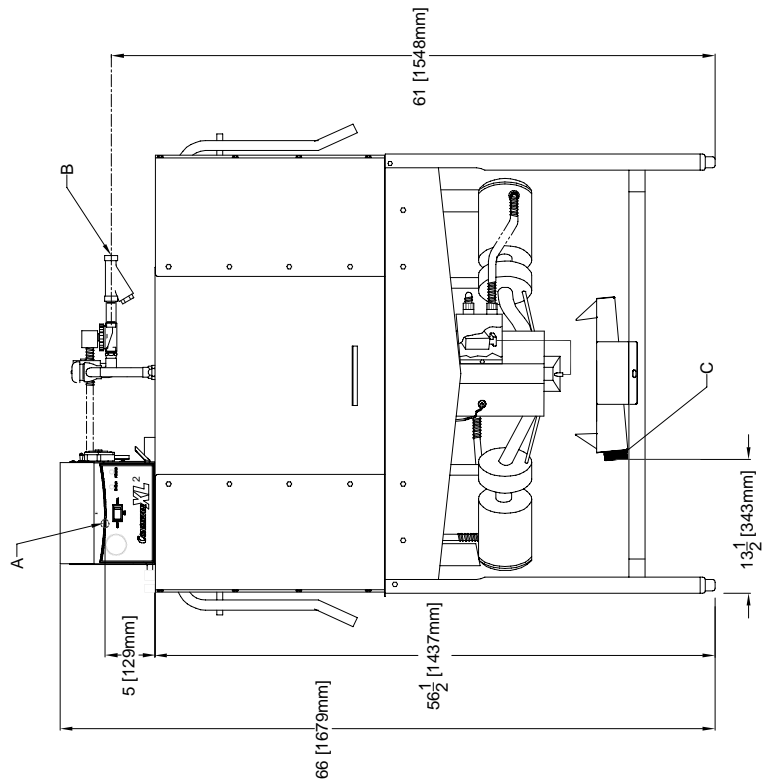
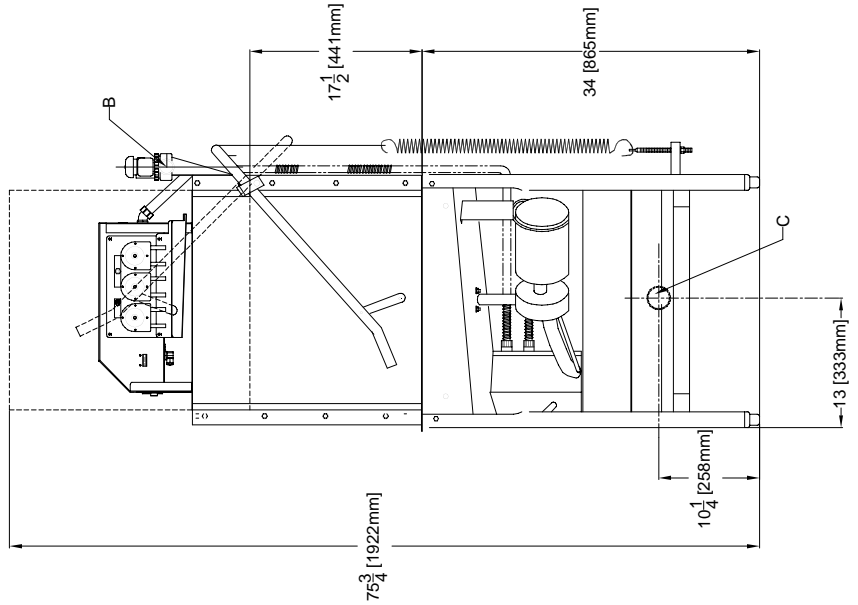
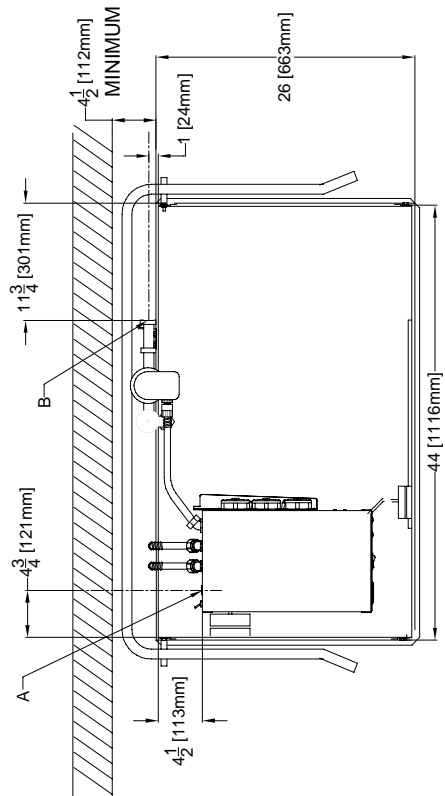


SECTION 1: SPECIFICATION INFORMATION

DIMENSIONS CONSERVER XL2

LEGEND

- A - ELECTRICAL CONNECTION
 - B - WATER INLET, 3/4" IPS
 - C - DRAIN CONNECTION, 2" IPS
- ALL DIMENSIONS ARE +/- 1/2"
FROM FLOOR DUE TO
ADJUSTABLE BULLET FEET.



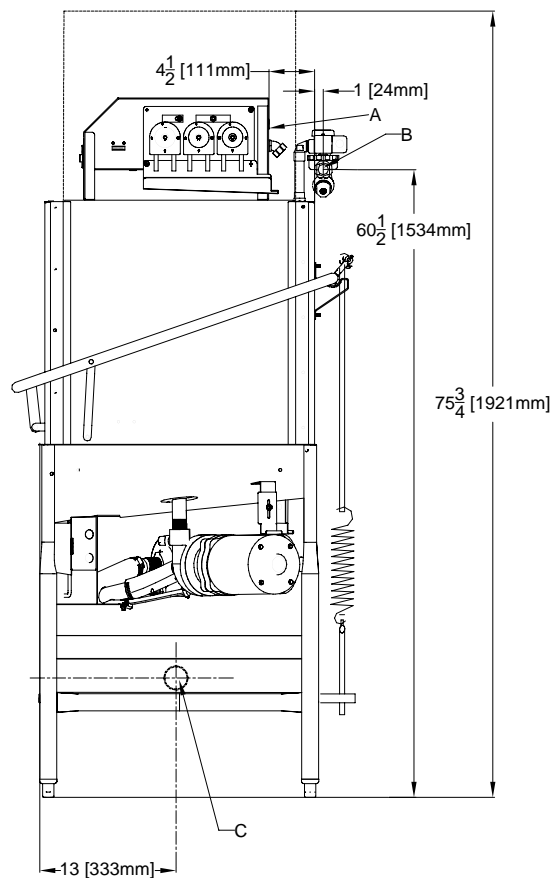
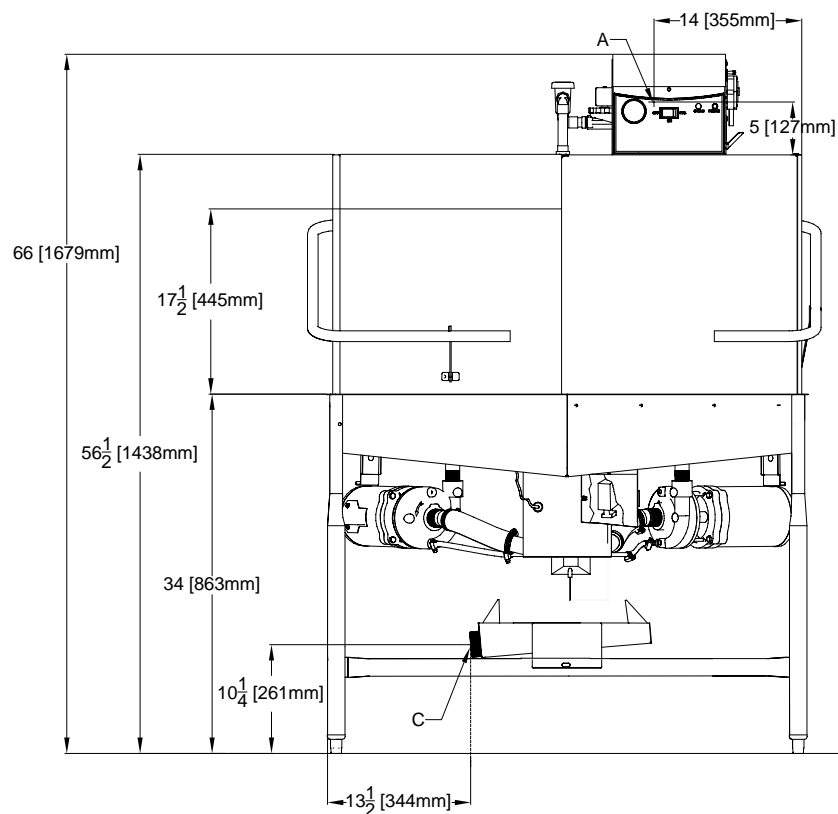
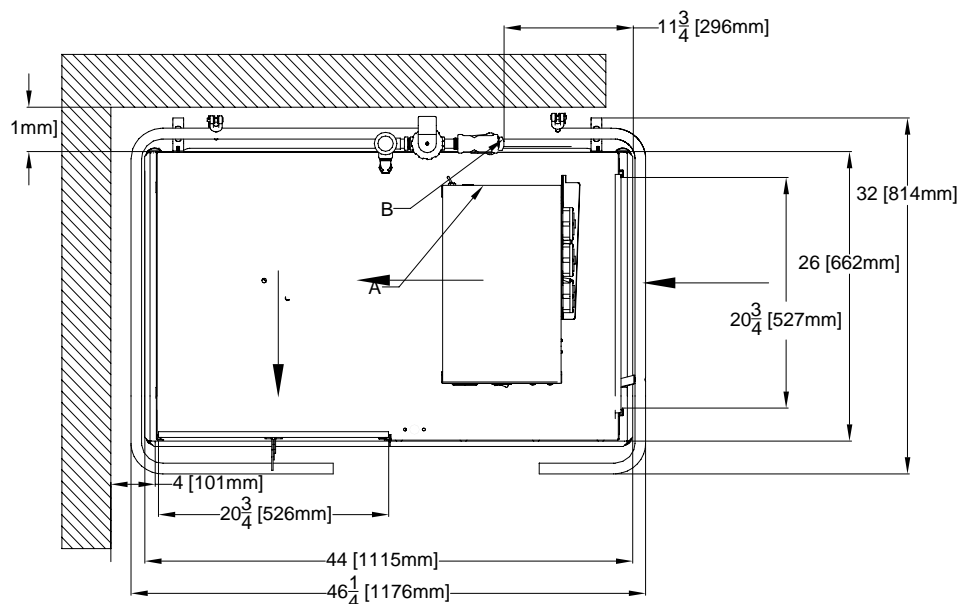
SECTION 1: SPECIFICATION INFORMATION

DIMENSIONS CONSERVER XL2-CML

LEGEND

- A - ELECTRICAL CONNECTION
- B - WATER INLET, 3/4" IPS
- C - DRAIN CONNECTION, 2" IPS

ALL DIMENSIONS ARE +/- 1/2"
FROM FLOOR DUE TO
ADJUSTABLE BULLET FEET.



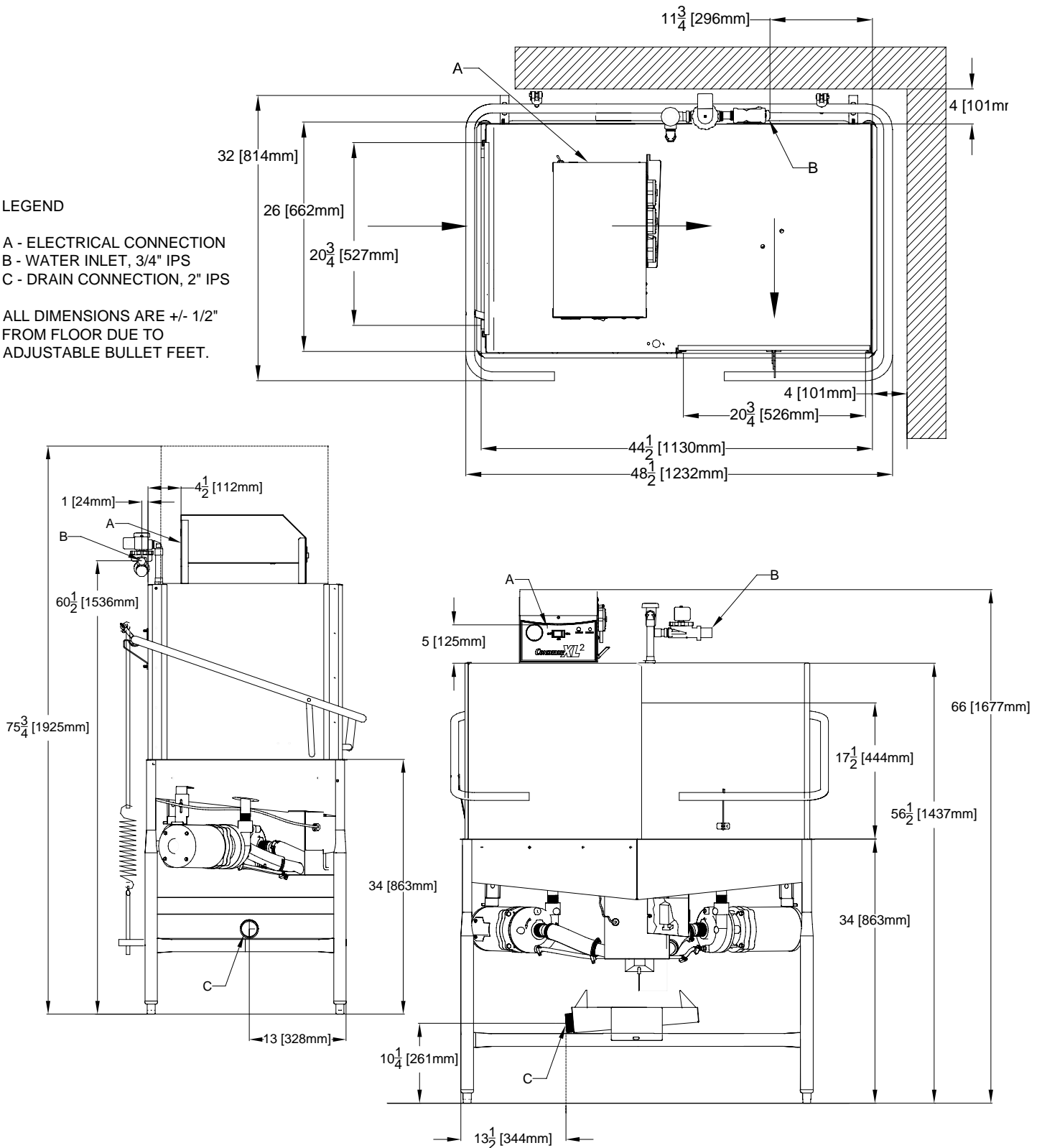
SECTION 1: SPECIFICATION INFORMATION

DIMENSIONS CONSERVER XL2-CMR

LEGEND

- A - ELECTRICAL CONNECTION
- B - WATER INLET, 3/4" IPS
- C - DRAIN CONNECTION, 2" IPS

ALL DIMENSIONS ARE +/- 1/2"
FROM FLOOR DUE TO
ADJUSTABLE BULLET FEET.

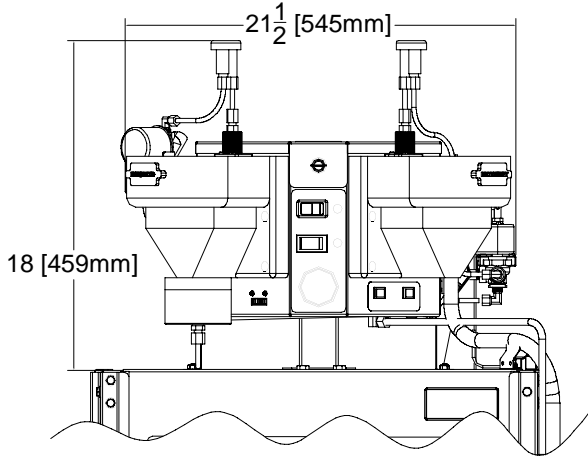


SECTION 1: SPECIFICATION INFORMATION
XLS BOWL OPTION

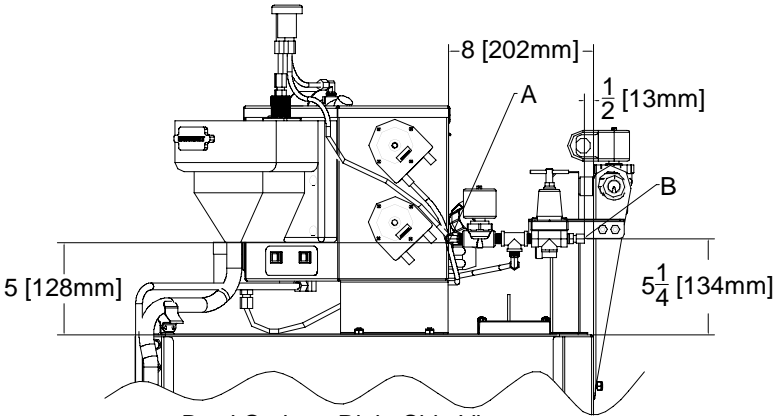
Legend

A - Electrical Connection

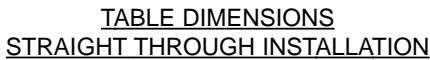
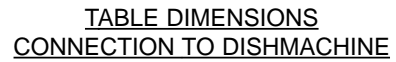
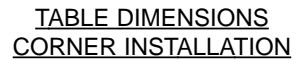
B - Water Connection, 1/4"



Bowl Option - Front Side View



Bowl Option - Right Side View



SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

VISUAL INSPECTION: Before installing the unit, check the container and machine for damage. A damaged container is an indicator that there may be some damage to the machine. If there is damage to both the container and machine, do not throw away the container. The dishmachine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others may result in there being damage to the unit while in transit. If such a situation occurs, do not return the unit to Jackson; instead, contact the carrier and ask them to send a representative to the site to inspect the damage to the unit and to complete an inspection report. You must contact the carrier within 48 hours of receiving the machine. Also, contact the dealer through which you purchased the unit.

UNPACKING THE DISHMACHINE: Once the machine has been removed from the container, ensure that there are no missing parts from the machine. This may not be obvious at first. If it is discovered that an item is missing, contact Jackson immediately to have the missing item shipped to you.

LEVEL THE DISHMACHINE: The dishmachine is designed to operate while being level. This is important to prevent any damage to the machine during operation and to ensure the best results when washing ware. The unit comes with adjustable bullet feet, which can be turned using a pair of channel locks or by hand if the unit can be raised safely. Ensure that the unit is level from side to side and from front to back before making any connections.

PLUMBING THE DISHMACHINE: All 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 prior to connecting it to any component of the dishmachine. It is necessary to remove all foreign debris from the water line that may potentially get trapped in the valves or cause an obstruction. Any valves that are fouled as a result of foreign matter left in the water line, and any expenses resulting from this fouling, are not the responsibility of the manufacturer.

CONNECTING THE DRAIN LINE: The drain for the Conserver XL/XL2 series is a gravity discharge drain. All piping from the 2" MNPT connection on the waste accumulator 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 2" NPT and shall 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 gallons per minute.

WATER SUPPLY CONNECTION: Ensure that you have read the section entitled "PLUMBING THE DISHMACHINE" above before proceeding. Install the water supply line (3/4" pipe size minimum) to the dishmachine line strainer using copper pipe. It is recommended that a water shut-off valve be installed in the water line between the main supply and the machine to allow access for service. The water supply line is to be capable of 20 ± 5 PSI "flow" pressure at the recommended temperature indicated on the data plate.

In areas where the water pressure fluctuates or is greater than the recommended pressure, it is suggested that a water pressure regulator be installed.

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.

It is also recommended that a shock absorber (not supplied with the Conserver XL/XL2 series models) be installed in the incoming water line. This prevents line hammer (hydraulic shock), induced by the solenoid valve as it operates, from causing damage to the equipment.

PLUMBING CHECK: Slowly turn on the water supply to the machine after the incoming fill line and the drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired prior to placing the machine in operation.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

ELECTRICAL INSTRUCTIONS

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

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

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

To install the incoming power lines, open the control box. This will require taking a phillips head screwdriver and removing the one (1) screw on the front cover of the control box. Install 3/4" conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1 & N) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided.

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

VOLTAGE CHECK: Ensure that the power switch is in the OFF position and apply power to the dishmachine. 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. Do not run the dishmachine if the voltage is too high or too low. Shut off the service breaker and mark it as being for the dishmachine. Advise all proper personnel of any problems and of the location of the service breaker. Replace the control box cover and tighten down the screws.



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

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

CHEMICAL DISPENSING EQUIPMENT

TO PREPARE PUMPS FOR OPERATION

The Conservor XL dishmachine is supplied with detergent, rinse additive and sanitizer dispensing chemical feeder pumps. Locate the open ends of the chemical tubes with the tube stiffeners and place each one in the appropriate container.

- A. **Red** Tubing = **Detergent**
- B. **Blue** Tubing = **Rinse Aid**
- C. **White** Tubing = **Sanitizer**

PRIMING CHEMICAL FEEDER PUMPS

Chemical feeder pumps need priming when the machine is first installed or if for some reason the chemical lines have been removed and air is allowed to enter.



CAUTION: Water must be in the sump and wash tank prior to the dispensing of chemicals. Sanitizer in concentration is caustic and may cause damage without dilution.

1. Verify that the proper chemical tube stiffener inlet is in the proper container.
2. Use the toggle switches on the right side of control box to prime each pump. There are two (2) switches mounted by the peristaltic-pumps. One will prime the sanitizer pump only, and the second will prime either the detergent or rinse aid pump, depending upon which way it is depressed.
3. To prime the pumps, hold the switch in the momentary position until chemical can be observed entering the sump.
4. Detergent is dispensed as required during the wash cycle by the cam timer. The amount of detergent may need to be increased or decreased depending on water quality and type of detergent. It is adjusted by changing Cam 6 on the cam timer.
5. Rinse additive is dispensed as required into the final rinse. The amount of rinse aid may need to be adjusted depending on water hardness and results. It can be changed by changing Cam 7 on the cam timer.
6. Chlorine based sanitizer is dispensed into the final rinse. The amount of sanitizer may need to be adjusted depending on the concentration and type of sanitizer used. It is adjusted by changing Cam 5 on the cam timer.



WARNING: Some of the chemicals used in dishwashing may cause chemical burns if they come in contact with your skin. Wear protective gear when handling these chemicals. If you do come in contact with these chemicals, immediately flush the affected area with fresh water. Always refer to the chemical agent packaging for safe handling and first-aid instructions.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

OPERATION INSTRUCTIONS

PREPARATION: Before proceeding with the start-up of the unit, verify the following:

1. The sump strainer is in place and is clean.
2. The drain stopper is installed.
3. That the wash and rinse arms are screwed securely into place and that their endcaps are tight. The wash and rinse arms should rotate freely.

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

FILLING THE WASH TUB: For the initial fill, close doors and depress and hold the OFF/ON/FILL rocker switch in the FILL position for approximately 8 - 10 seconds. Open the doors and verify that the water level is correct. Hereafter, the water level is controlled by the timer that has been preset at the factory. Verify that the drain stopper is preventing the wash tub water from pouring out excessively. There may be some slight leakage from the drain hole. Verify that there are no other leaks on the unit before proceeding any further. The wash tub must be completely filled before operating the wash pump to prevent damage to the component. Once the wash tub is filled, the unit is ready for operation.

The water level was set at the factory. If the water level is not at the level noted above, it will require adjustment. Check to ensure that the recommended water pressure is being supplied to the machine (20 ± 5 PSI). If the water pressure is correct then the fill valve will need adjustment. Use the following steps to adjust the cam. Turn power off at the machine circuit breaker. Open the control box cover. Locate the timer fill valve cam (Cam 4 from the timer motor). Locate the spanner wrench taped to the electrical panel. The spanner wrench is used to adjust the cam.

To increase the water level, open the notch of the adjustable cam. To decrease the water level, close the notch. Care must be taken that the set point does not extend into the home position of the timer. Do not move the side of the cam that starts the fill; this will change the sequence of cycle operation. With the door closed turn the power circuit breaker on. Open and close the door to run a cycle, then check the water level. Adjust as necessary then close the control box cover.

The machine runs a complete cycle to drain and fill. If the machine is not allowed to drain, the water will build up inside the tub. After the initial fill, the rinse water for the current cycle will become the wash water for the next cycle.

WARE PREPARATION: Proper preparation of ware will help ensure good results and less re-washes. If not done properly, ware may not come out clean and the efficiency of the dishmachine will be reduced. It is important to remember that a dishmachine is not a garbage disposal and that simply throwing unscrapped dishes into the machine simply defeats the purpose altogether of washing the ware. Scraps should be removed from ware prior to 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 that they do not hold water during the cycle. The dishmachine is meant not only to clean, but to sanitize as well, to destroy all of the bacteria that could be harmful to human beings. In order to do this, ware must be properly prepared prior to being placed in the machine.

DAILY MACHINE PREPARATION: Refer to the section entitled "PREPARATION" at the top of this page and follow the instructions there. Afterwards, check that all of the chemical levels are correct and/or that there is plenty of detergent available for the expected workload.

WARM-UP CYCLES: For a typical daily start-up, it is recommended to run the machine through 3 cycles to ensure that all of the cold water is out of the system and to verify that the unit is operating correctly. To cycle the machine, ensure that the power is on and that the tub has filled to the correct level. Lift the doors and the cycle light will illuminate. When the light goes out, close the doors, the unit will start, run through the cycle, and shut off automatically. Repeat this two more times. The unit should now be ready to proceed with the washing of ware.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

OPERATION INSTRUCTIONS (CONTINUED)

WASHING A RACK OF WARE: To wash a rack, open the doors completely (being careful for hot water that may drip from the doors) and slide the rack into the unit. Close the doors and the unit will start automatically. Once the cycle is completed, open the door (again watching for the dripping hot water) and remove the rack of clean ware. Replace with a rack of soiled ware and close the doors. The process will then repeat itself.

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

SHUTDOWN AND CLEANING: At the end of the workday, close the doors. When the unit completes the cycle, turn the power switch to the OFF position and open the doors. Manually remove the drain stopper from the tub and allow the tub to drain (NOTE: the wash tank water will be hot so caution is advised). Once the wash tub is drained, remove the pan strainer and the pump suction strainer. Remove soil and debris from the strainer and set to the side. Unscrew the wash and rinse arms from their manifolds. Remove the endcaps and flush the arms with water. Use a brush to clean out the inside of the arms. If the nozzles appear to be clogged, use a toothpick to remove the obstruction. Wipe the inside of the unit out, removing all soil and scraps. Reassemble the wash and rinse arms and replace them in the unit. The arms only need to be hand tight, do not use tools to tighten them down. Reinstall the strainers and close the doors.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

CAM TIMER OPERATION

The Conserver XL Series cam timer is a 1 minute, 30 second, 8-cam timer (cam 8 is a spare) that controls the operation of the dishmachine. The following is a description of the set points for each cam and the function of each switch.

CAM 1: Cam 1 is a cut cam with a single notch and serves as the cycle/reset control.

FUNCTION: When the machine is in the operation mode the notch is the home position. The machine will remain idle until the door is opened, then cam 1 moves to the start position and holds until the door is closed. The closing of the door will start the next cycle. The cam will rotate a complete cycle, and return to the home position and hold.

CAM 2: Cam 2 is a cut cam and provides the wash cycle timing.

FUNCTION: The wash cam works off the normally open contacts of Cam 2. This requires the microswitch be held closed by the cam. It will close and energize the wash pump 2 seconds after the cycle switch is activated. The pump will operate through the wash cycle (40 seconds) then shut down for the dwell period (20 seconds). As the cam rotates it energizes the pump for the rinse cycle (25 seconds). When cam 1 reaches it's home position it will de-energize cam 2, shutting down the wash pump.

NOTE: The last 6 cams are adjustable. The following instructions will require that the timer position have the cams to the front and the motor to the left.

CAM 3: Cam 3 is an adjustable cam and controls the drain valve.

FUNCTION: The drain solenoid works off the normally closed contacts of cam 3. When the cycle is initiated, the microswitch will be held open until it is allowed to drop into the notch of the cam. This energizes the drain solenoid which drains the machine. After a 12 second delay the cam reverses the microswitch, de-energizing the drain solenoid. This cam may require adjusting due to varying water pressure. The drain solenoid must remain open long enough to remove whatever water the fill valve solenoid allows in the machine. This could vary due to the water supply line pressure.

SETTINGS: The right side of cam 3 must be set to pick up the switch arm just before the wash/rinse cycle cam switch drops. It will hold the drain solenoid open to drain all the water in the tank from the unit during the dwell period. Any adjustment made to the drain should be made to the left side of cam 3. The cam must be moved back into the wash time until all of the water is drained from the machine.

CAM 4: Cam 4 is an adjustable cam and controls the fill valve and therefore the amount of water used.

FUNCTION: The fill valve cam works off the normally closed contacts of cam 4. This requires the switch to be held open by the cam and allowed to drop into the notch to operate the fill valve. This energizes the fill solenoid which opens to start filling the machine with fresh water. After a 10 second delay, the cam reverses the microswitch, de-energizing the fill solenoid. The fill cam may require adjustment due to varying water pressure. The fill solenoid must remain open a sufficient length of time to fill the machine to the correct level.

SETTINGS: The right side of cam 4 must be set to allow the switch arm to drop 2 seconds before the drain solenoid is de-energized which flushes the detergent residue from the unit. It will hold the fill solenoid open until the cam switch arm is raised. At that time the fill solenoid is de-energized, shutting off the incoming water. The tub will be filled to the correct level. Any adjustment made to the timing of the fill solenoid should be made with the left side of cam 4. To increase the water level, open the notch of the cam and for decreasing the level of the notch should be closed.

CAM 5: Cam 5 is an adjustable cam and controls the sanitizer pump.

FUNCTION: The sanitizer pump cam works off the normally closed contacts of cam 5. This requires the switch arm to be held open by the cam and allowed to drop into the notch to operate the pump. The time that the sanitizer pump will remain energized must be determined in the field to suit the chemical used and water conditions.

SETTINGS: The left side of cam 5 must be set to allow the switch arm to drop in past the starting point of the fill cam and after the drain solenoid has closed. The adjustment for sanitizer volume must be made with the right side of the cam. To increase the volume the notch should be increased or to decrease the amount of sanitizer the notch should be closed slightly in increments until the correct level is reached.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

CAM TIMER OPERATION (CONTINUED)

CAM 6: Cam 6 is an adjustable cam and controls the detergent pump.

FUNCTION: The detergent pump cam works off the normally closed contacts of cam 6. This requires the switch arm to be held open by the cam and allowed to drop into the notch to operate the pump. The time that the detergent pump will remain energized must be determined in the field to suit the chemical used and water conditions.

SETTINGS: The left side of cam 6 must be set to drop in past the starting point of the wash pump cam. The adjustment for detergent volume must be made with the right side of the cam. To increase the volume, the notch should be increased or to decrease the amount of detergent the notch should be closed slightly in increments until the correct level is reached.

CAM 7: Cam 7 is an adjustable cam and controls the rinse aid pump.

FUNCTION: The rinse aid pump cam works off the normally closed contacts of cam 7. This requires the switch arm to be held open by the cam and allowed to drop into the notch to operate the pump. The time that the rinse aid pump will remain energized must be determined in the field to suit the chemical used and water conditions.

SETTINGS: The left side of cam 7 must be set to drop in past the starting point of the fill cam and after the drain solenoid has closed. The adjustment for rinse aid volume must be made with the right side of the cam. To increase the volume the notch should be increased or to decrease the amount of detergent the notch should be closed slightly in increments until the correct level is reached.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

MECHANICAL TIMER TIMING SEQUENCE

2 SECONDS INTO CYCLE

*Wash pump starts, runs for 40 seconds, then shuts down. Controlled by C2 cam.

4 SECONDS INTO CYCLE

*Detergent feed pump is energized. The length of time will be field determined. Time will depend on the detergent used and water conditions. Controlled by C6 cam.

10 SECONDS INTO CYCLE

* Detergent feed pump shuts down. Controlled by C6 cam.

42 SECONDS INTO CYCLE

* Wash pump shuts down. Controlled by C2 cam.

* Drain solenoid is energized (opens). Wash water drains from the unit. Controlled by C3 cam.

51 SECONDS INTO CYCLE

* Fill solenoid valve is energized (opened) starting to fill unit. Controlled by C4 cam.

53 SECONDS INTO CYCLE

* Drain solenoid valve is de-energized (closed). Controlled by C3 cam.

54 SECONDS INTO CYCLE

* Sanitizer pump is energized, injecting sanitizer into wash tank. Controlled by C5 cam.

* Rinse aid pump is energized, injecting rinse aid into wash tank. Controlled by C7 cam.

58 SECONDS INTO CYCLE

* Sanitizer pump is de-energized. The length of time that the sanitizer pump is activated will be determined in the field. Timing will depend on the chemical used and water conditions. Controlled by C5 cam.

60 SECONDS INTO CYCLE

* Rinse aid pump is de-energized. The length of time that the rinse aid pump is activated will be determined in the field. Timing will depend on the chemical used and water conditions. Controlled by C7 cam.

62 SECONDS INTO CYCLE

* Wash pump is energized for the rinse cycle.

* Fill solenoid valve is de-energized.

87 SECONDS INTO CYCLE

* Wash pump is de-energized.

* End of cycle.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

UNIVERSAL TIMER PROGRAMMING INSTRUCTIONS

INSTRUCTIONS FOR CHEMICAL FEEDER PUMPS (FOR INSTALLATION TECHNICIAN ONLY)

To access the programming mode, the machine must be ON, and idle (between cycles).

On the timer board, press both the MOVE and ENTER buttons on the timer board simultaneously.

The PROGRAM light will illuminate and the A light will blink.

Once in the programming mode, the MOVE button is used to scroll between the programming categories and the ENTER button is used to select the category.

Press the MOVE button to move the blinking light between FILL, RINSE AID, DETERGENT or SANITIZER.

Press the ENTER button for the chosen category.

The PROGRAM light will illuminate along with the lights corresponding to the time values for the chosen category. The ACCEPT light will blink.

To change the value of a parameter, use the MOVE button to move the blinking light to the time option (time is in seconds). In the time categories, each second in use will light up. To deselect the option, press ENTER and the light will go off, press ENTER again and it will illuminate. Once you have set your time category, press the MOVE button until the ACCEPT light is blinking and press ENTER. This will save the changed parameters.

Once you press the ENTER button when the ACCEPT light is blinking, you will exit the programming mode. To change any other values, you will have to return to the programming mode. To revert back to a previous setting, you must return to that option and change the parameter back to the previous setting.

Once in the programming mode, if there have been no keypad inputs for approximately 2 minutes, the system will automatically exit out of the programming mode. Any changes to parameters will be saved when the programming mode is automatically exited.

All time adjustments are in seconds. Refer to the chart below for the adjustable outputs.

Please note that options A, B, and D are not adjustable outputs.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

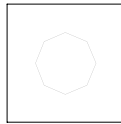
UNIVERSAL TIMER PROGRAMMING INSTRUCTIONS (CONTINUED)

Please note that options A, B and D are not adjustable outputs.

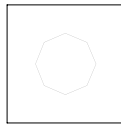
Timer Programming Board

	PGM		Time in seconds.
	A	<input type="text"/>	8.0
	B	<input type="text"/>	4.0
DRAIN	C	<input type="text"/>	2.0
	D	<input type="text"/>	1.0
FILL	E	<input type="text"/>	0.8
SANITIZER	F	<input type="text"/>	0.4
DETERGENT	G	<input type="text"/>	0.2
RINSE AID	H	<input type="text"/>	0.1
ACCEPT		<input type="text"/>	

MOVE



ENTER



SECTION 3: PREVENTATIVE MAINTENANCE

SECTION 3: PREVENTATIVE MAINTENANCE

PREVENTATIVE MAINTENANCE

The dishmachines covered in this manual are designed to operate with a minimum of interaction with the operator. However, this does not mean that some items will not wear out in time. Jackson highly recommends that any maintenance and repairs not specifically discussed in this manual should be performed by **QUALIFIED SERVICE PERSONNEL ONLY**. Performing maintenance on your dishmachine may void your warranty if it is still in effect, so if you have a question or concern, do not hesitate to contact one of the **QUALIFIED SERVICE AGENCIES** listed in the back of this manual.

There are many things that operators can do to prevent catastrophic damage to the dishmachine. One of the major causes of component failure has to do with prescrapping procedures. A dishmachine is not a garbage disposal; any large pieces of material that are put into the machine shall remain in the machine until they are either broken up (after spreading out on your ware!) or physically removed. Strainers are installed to help catch debris, but they do no good if they are clogged. Have operators regularly inspect the pan strainers to ensure (1) that they are free of soil and debris and (2) they are laying flat in the tub.

When cleaning out strainers, do **NOT** beat them on waste cans. The strainers are made of metal and can be forgiving; but once severe damage is done, it is next to impossible for the strainer to work in the way it was designed to. Wipe out strainers with a rag and rinse under a faucet if necessary. For stubborn debris, a toothpick should be able to dislodge any obstructions from the perforations. Always ensure that strainers are placed back in the machine before operation and that they lay flat in the tub.

You may wish to learn more about how your water hardness will effect the performance of your machine. Hard water makes dishmachines work harder and decreases efficiency.

Again, it is important to remind operators that trying to perform corrective maintenance on the dishmachine could lead to larger problems or even cause harm to the operator. If a problem is discovered; secure the dishmachine using proper shut down procedures as listed in this manual and contact a **QUALIFIED SERVICE AGENCY**.

Some problems, however, may have nothing to do with the machine itself and no amount of preventative maintenance is going to help. A common problem has to do with temperatures being too low. Verify that the water temperatures coming to your dishmachine match the requirements listed on the machine data plate. There can be a variety of reasons why your water temperature could be too low and you should discuss it with a **QUALIFIED SERVICE AGENCY** to determine what can be done.

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

1. Ensure that the water temperatures match those listed on the machine data plate.
2. Ensure that all strainers are in place before operating the machine.
3. Ensure that all wash and/or rinse arms are secure in the machine before operating.
4. Ensure that drains are closed/sealed before operating.
5. Remove as much soil from dishes by hand as possible before loading into racks.
6. Do not overfill racks.
7. Ensure that glasses are placed upside down in the rack.
8. Ensure that all chemicals being injected to machine have been verified as being at the correct concentrations.
9. Clean out the machine at the end of every workday as per the instructions in the manual.
10. Always contact a **QUALIFIED SERVICE AGENCY** whenever a serious problem arises.
11. Follow all safety procedures, whether listed in this manual or put forth by local, state or national codes/regulations.

SECTION 4: TROUBLESHOOTING SECTION

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (DOMESTIC UNITS)



WARNING: Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel. Certain procedures in this section require electrical tests or measurements while power is applied to the machine. **Exercise extreme caution at all times.** If test points are not easily accessible, disconnect power, attach test equipment and reapply power to test. When replacing electrical parts, disconnect power at source circuit breaker.

Problem: Dishmachine will not run, no voltage at wash relay terminals L1 and T1.

1. Service disconnect switch off or faulty. Turn disconnect on.
2. Branch circuit breaker tripped/fuse blown. Reset or replace.
3. Loose or broken connection to dishmachine. Tighten or replace connections.

Problem: Machine will not run in "ON" position unless cam timer is moved off the "home" position.

1. Door switch shorted out. With the door open, check for voltage between ORANGE/WHITE door switch and neutral. If 120V, replace the door switch.
2. Faulty control relay. With the door open, check for voltage between connections #9 & #3 on control relay. If 120V, replace control relay.
3. Faulty "cycle reset" microswitch in cam timer. Replace microswitch.

Problem: Machine will not cycle in "ON" position, works in Delime mode.

1. Faulty cycle reset cam microswitch. With the switch in the Normal position, rotate the cams manually off the home position. Check the voltage between the ORANGE and BLACK/WHITE wires on the cycle reset switch. If it is 120V, then the switch is open and should be replaced.
2. Faulty cam timer motor. If cam timer is not rotating, check the voltage to the motor. If voltage is present when the door is closed, replace the motor.
3. Faulty control relay. Check the voltage across contacts #9 and #6. If 120V when the door is closed, replace the relay.
4. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 120V, replace the switch.

Problem: Machine will not run. Wash pump motor will run if wash relay is depressed manually (nothing else works).

1. Open door switch. With door closed, measure voltage between BLUE and WHITE/BLACK wires on terminals #6 & #9 of the relay. If 120V, replace the relay.
2. Faulty control relay. Measure between the BLACK wires on terminals #6 & #9 of the relay. If 120V, replace the relay. Measure between the WHITE/BLACK wire on terminal 4 and the ORANGE/WHITE wire on terminal 7 of the relay. If 120V, replace relay.

Problem: Machine will not run in "ON" position or in Delime mode.

1. Faulty door switch. With door closed, check for voltage between WHITE/BLACK and ORANGE/WHITE wires to the door switch. If 120V, replace open switch.
2. Faulty OFF/ON/FILL switch. With switch ON, check voltage between BLACK and WHITE/BLACK wires on switch. Replace the switch if 120V.
3. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 120V, replace the switch.

Problem: Machine cycles continuously.

1. Cycle reset switch loose. Reposition switch assembly, bend metal lever if necessary.
2. Faulty cycle reset switch. Measure between BLACK/YELLOW & ORANGE wires on "cycle reset" switch while timer is rotating. As the switch lever drops into home position you should measure 120V. If not, adjust or replace the switch.

Problem: Machine fills continuously even with no power applied to machine.

1. Solenoid valve dirty or faulty. Clean valve, replace plunger and/or diaphragm.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (DOMESTIC UNITS)

Problem: Machine will not fill, other functions work.

1. Y-strainer plugged. Clean strainer.
2. Water valve(s) turned off. Turn on water valves.
3. Faulty solenoid valve diaphragm. Replace diaphragm, clean foreign material out of valve body and orifices.
4. Faulty solenoid coil. If coil has voltage but no continuity, replace coil (continuity is measured across coil connectors with wires removed).
5. Faulty fill microswitch. Will not fill during cycle only. During fill, measure between the ORANGE and WHITE/GREEN wires. If 120V, adjust or replace switch).
6. Faulty OFF/ON/FILL switch. Depress switch, measure between BLACK and WHITE/GREEN wire. If 120V, replace switch.

Problem: Machine fills continuously, only when the power is on.

1. Faulty fill microswitch. Repair/replace switch.
2. Cam timer stalled in fill position. If cam timer is not rotating, check the voltage to the timer motor. If 120V when door is closed, replace the timer motor.
3. Shorted OFF/ON/FILL switch. Check voltage between BLACK and WHITE/GREEN connections of the switch in the "ON" position. If you do not read 120V, replace switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.

1. Loose wire connection to microswitch, relay, or contactor. Tighten wires.
2. Faulty wash cam microswitch. During wash cycle, check voltage between ORANGE and BLACK/ ORANGE wires on the microswitch. If 120V, replace the switch.
3. Faulty delime switch. During wash cycle, check the voltage between the two BLACK/ORANGE wires (not jumpers). If 120V, replace the delime switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.

1. Faulty control relay. Check the voltage across relay contacts #7 & #4. If 120V during the wash cycle, replace the relay.
2. Faulty wash relay. Check voltage at relay coil between ORANGE/BLACK and WHITE wires. If you read 120V, coil is faulty. Replace the relay.

Problem: Wash motor does not run even when the wash relay is manually depressed; other functions work.

1. Loose wire connections to motor, delime switch, or from contactors. Tighten wires.
2. Mechanical binding in pump. If motor has correct incoming voltage, and its overload is tripping, repair or replace the pump.
3. Mechanical binding in pump. On end of motor, opposite pump, remove endcap. With large slot type screwdriver, fit into slot in end of shaft. Turn to dislodge. Run motor as normal. If it still does not run, replace motor.
4. Faulty wash motor. If the motor has the correct incoming voltage and the pump is okay, replace the motor.
5. Faulty wash relay. With the wash relay pushed in, check the voltage between T1 and L1 of the relay. If 120V, replace the relays.
6. High or low voltage problem. Check voltage at motor and at power terminal block. Compare to electrical specifications.

Problem: Wash motor runs continuously.

1. The NORMAL/DELIME switch is in the Delime position. Place the switch in the Normal position.
2. Wash relay contacts are welded closed. Turn machine off. If wash relay doesn't release, replace contactor.
3. Cam timer stalled in wash or rinse cycle. If cam timer is not rotating, check the voltage to the timer motor. If no voltage when the door is closed, check wires and/or replace motor.
4. Wash motor microswitch faulty. Tighten connections, make sure switch makes contact, replace if necessary.

Problem: Machine will not hold water.

1. Faulty drain ball. Replace drain ball.
2. Obstructed drain hole. Clear obstruction.
3. Drain linkage is binding. Repair drain mechanism parts.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (DOMESTIC UNITS)

Problem: Machine runs with door open.

1. Door switch shorted. With machine off, open doors, and with both wires to door switch unplugged, measure continuity between wires on switch. If there is continuity, replace the switch.
2. Faulty wash relay (wash relay contacts welded closed). Turn machine off, if wash relay doesn't release, replace contactor.
3. Faulty control relay. With power off, remove WHITE/RED & BLACK/YELLOW wires from control relay terminals #9 & #6. If there is continuity, replace relay.

Problem: Low pumped water pressure.

1. Water level is too low. Increase fill time on cam timer, or decrease drain timer, or increase incoming water pressure.
2. Sump strainer clogged. Clean strainer.
3. Wash arms clogged. Clean arms and jets.
4. Obstruction in pump housing or wash manifold. Disassemble and clear.
5. Pump impeller worn or broken. Replace the pump impeller.

Problem: Sanitizer pump doesn't run during the cycle or through the use of the prime switch.

1. Loose motor terminal wire. Tighten connections.
2. Faulty sanitizer pump motor. If you read 120V at the sanitizer motor terminals during the sanitizer feed cycle, replace the motor.

Problem: Machine keeps tripping the service breaker.

1. Power supply shorted to ground. Check for loose wires or burned connections.
2. Faulty door switch or detergent safety switch. Check for loose or wet connections at switch and at wire connectors. Bypass switch to verify that switch is problem; replace if required.
3. Pump impeller jammed. Clear impeller.
4. Wash pump motor faulty. Check motor voltage and amp load. If amp load is over 12 amps, replace the motor.
5. Circuit breaker is too small. Replace with properly sized breaker. Refer to the data plate.

Problem: Machine will not drain.

1. Loose wire connection. Tighten wires to timer drain microswitch.
2. Drain hole/strainer obstructed. Clear obstructions.
3. Not enough time to drain. Adjust fill cam on timer and/or the drain cam.
4. Drain linkage binding. Repair drain parts.
5. Faulty drain microswitch on timer. With power off and the drain cam on the timer in the home position, remove the WHITE/YELLOW wire from the microswitch.
6. Faulty drain microswitch on timer. Measure the continuity between the ORANGE wire on the microswitch and the tab that the WHITE/ YELLOW wire is attached onto. If there is no continuity, replace the microswitch.
7. Drain solenoid defective. Check for voltage at solenoid valve during the drain cycle. Replace if voltage is present.

Problem: Sanitizer pump runs continuously.

1. Shorted sanitizer microswitch on cam timer. If there is not 120V between the ORANGE and GREY wires on the sanitization pump motor microswitch when switch is out of the home position, replace the switch.
2. Shorted prime switch. If there is not 120 volts between GREY and WHITE/RED wires to prime switch, replace the switch. Sanitizer pump does not run during the cycle, but runs when primed.
3. Loose or broken wire. Tighten connections to microswitch.
4. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 120V, replace switch.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (DOMESTIC UNITS)

Problem: Prime switch does not activate sanitizer pump.

1. Faulty prime switch. With the prime switch in the prime position, check for voltage between the GREY and WHITE/RED wires to switch. If 120V, replace the switch.
2. Faulty delime switch. With the delime switch in the DELIME position, check for voltage between the WHITE/BLACK and WHITE/RED wires to the delime switch. If 120V, replace the delime switch.

Problem: Detergent not feeding; rinse aid feeds okay.

1. Misadjusted cam. Adjust detergent cam on cam timer.
2. Faulty detergent microswitch on cam timer. When the detergent cam is in the home position, measure voltage between ORANGE and GREY/ WHITE wires. If 120V, replace the microswitch.

Problem: Rinse aid not feeding, detergent feeds okay.

1. Misadjusted cam. Adjust rinse aid cam on cam timer.
2. Faulty rinse aid microswitch on cam timer. When the rinse aid cam is in the home position, measure the voltage between the ORANGE and ORANGE/YELLOW wires. If 120V, replace the microswitch.

Problem: Sanitizer pump does not run during the cycle, but runs when primed.

1. Loose or broken wire. Tighten connections to microswitch.
2. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 120V, replace switch.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (EXPORT UNITS)



WARNING: Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel. Certain procedures in this section require electrical tests or measurements while power is applied to the machine. **Exercise extreme caution at all times.** If test points are not easily accessible, disconnect power, attach test equipment and reapply power to test. When replacing electrical parts, disconnect power at source circuit breaker.

Problem: Dishmachine will not run, no voltage at wash relay terminals L1 and T1.

1. Service disconnect switch off or faulty. Turn disconnect on.
2. Branch circuit breaker tripped/fuse blown. Reset or replace.
3. Loose or broken connection to dishmachine. Tighten or replace connections.

Problem: Machine will not run in "ON" position unless cam timer is moved off the "home" position.

1. Door switch shorted out. With the door open, check for voltage between ORANGE/WHITE door switch and neutral. If 220V, replace the door switch.
2. Faulty control relay. With the door open, check for voltage between connections #9 & #3 on control relay. If 220V, replace control relay.
3. Faulty "cycle reset" microswitch in cam timer. Replace microswitch.

Problem: Machine will not cycle in "ON" position, works in Delime mode.

1. Faulty cycle reset cam microswitch. With the switch in the Normal position, rotate the cams manually off the home position. Check the voltage between the ORANGE and BLACK/WHITE wires on the cycle reset switch. If it is 220V, then the switch is open and should be replaced.
2. Faulty cam timer motor. If cam timer is not rotating, check the voltage to the motor. If voltage is present when the door is closed, replace the motor.
3. Faulty control relay. Check the voltage across contacts #9 and #6. If 220V when the door is closed, replace the relay.
4. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 220V, replace the switch.

Problem: Machine will not run. Wash pump motor will run if wash relay is depressed manually (nothing else works).

1. Open door switch. With door closed, measure voltage between BLUE and WHITE/BLACK wires on terminals #6 & #9 of the relay. If 120V, replace the relay.
2. Faulty control relay. Measure between the BLACK wires on terminals #6 & #9 of the relay. If 220V, replace the relay. Measure between the WHITE/BLACK wire on terminal 4 and the ORANGE/WHITE wire on terminal 7 of the relay. If 220V, replace relay.

Problem: Machine will not run in "ON" position or in Delime mode.

1. Faulty door switch. With door closed, check for voltage between WHITE/BLACK and ORANGE/WHITE wires to the door switch. If 220V, replace open switch.
2. Faulty OFF/ON/FILL switch. With switch ON, check voltage between BLACK and WHITE/BLACK wires on switch. Replace the switch if 220V.
3. Faulty NORMAL/DELIME switch. In the NORMAL position, check the voltage between WHITE/BLACK & WHITE/RED wires to switch. If 220V, replace the switch.

Problem: Machine cycles continuously.

1. Cycle reset switch loose. Reposition switch assembly, bend metal lever if necessary.
2. Faulty cycle reset switch. Measure between BLACK/YELLOW & ORANGE wires on "cycle reset" switch while timer is rotating. As the switch lever drops into home position you should measure 220V. If not, adjust or replace the switch.

Problem: Machine fills continuously even with no power applied to machine.

1. Solenoid valve dirty or faulty. Clean valve, replace plunger and/or diaphragm.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (EXPORT UNITS)

Problem: Machine will not fill, other functions work.

1. Y-strainer plugged. Clean strainer.
2. Water valve(s) turned off. Turn on water valves.
3. Faulty solenoid valve diaphragm. Replace diaphragm, clean foreign material out of valve body and orifices.
4. Faulty solenoid coil. If coil has voltage but no continuity, replace coil (continuity is measured across coil connectors with wires removed).
5. Faulty fill microswitch. Will not fill during cycle only. During fill, measure between the ORANGE and WHITE/GREEN wires. If 220V, adjust or replace switch).
6. Faulty OFF/ON/FILL switch. Depress switch, measure between BLACK and WHITE/GREEN wire. If 220V, replace switch.

Problem: Machine fills continuously, only when the power is on.

1. Faulty fill microswitch. Repair/replace switch.
2. Cam timer stalled in fill position. If cam timer is not rotating, check the voltage to the timer motor. If 220V when door is closed, replace the timer motor.
3. Shorted OFF/ON/FILL switch. Check voltage between BLACK and WHITE/GREEN connections of the switch in the "ON" position. If you do not read 220V, replace switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.

1. Loose wire connection to microswitch, relay, or contactor. Tighten wires.
2. Faulty wash cam microswitch. During wash cycle, check voltage between ORANGE and BLACK/ORANGE wires on the microswitch. If 220V, replace the switch.
3. Faulty delime switch. During wash cycle, check the voltage between the two BLACK/ ORANGE wires (not jumpers). If 220V, replace the delime switch.

Problem: Wash motor does not run, other functions work, motor runs only when the wash relay is manually pushed down.

1. Faulty control relay. Check the voltage across relay contacts #7 & #4. If 220V during the wash cycle, replace the relay.
2. Faulty wash relay. Check voltage at relay coil between ORANGE/BLACK and WHITE wires. If you read 220V, coil is faulty. Replace the relay.

Problem: Wash motor does not run even when the wash relay is manually depressed; other functions work.

1. Loose wire connections to motor, delime switch, or from contactors. Tighten wires.
2. Mechanical binding in pump. If motor has correct incoming voltage, and its overload is tripping, repair or replace the pump.
3. Mechanical binding in pump. On end of motor, opposite pump, remove endcap. With large slot type screwdriver, fit into slot in end of shaft. Turn to dislodge. Run motor as normal. If it still does not run, replace motor.
4. Faulty wash motor. If the motor has the correct incoming voltage and the pump is okay, replace the motor.
5. Faulty wash relay. With the wash relay pushed in, check the voltage between T1 and L1 of the relay. If 220V, replace the relays.
6. High or low voltage problem. Check voltage at motor and at power terminal block. Compare to electrical specifications.

Problem: Wash motor runs continuously.

1. The NORMAL/DELIME switch is in the Delime position. Place the switch in the Normal position.
2. Wash relay contacts are welded closed. Turn machine off. If wash relay doesn't release, replace contactor.
3. Cam timer stalled in wash or rinse cycle. If cam timer is not rotating, check the voltage to the timer motor. If no voltage when the door is closed, check wires and/or replace motor.
4. Wash motor microswitch faulty. Tighten connections, make sure switch makes contact, replace if necessary.

Problem: Sanitizer pump doesn't run during the cycle or through the use of the prime switch.

1. Loose motor terminal wire. Tighten connections.
2. Faulty sanitizer pump motor. If you read 220V at the sanitizer motor terminals during the sanitizer feed cycle, replace the motor.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (EXPORT UNITS)

Problem: Machine runs with door open.

1. Door switch shorted. With machine off, open doors, and with both wires to door switch unplugged, measure continuity between wires on switch. If there is continuity, replace the switch.
2. Faulty wash relay (wash relay contacts welded closed). Turn machine off, if wash relay doesn't release, replace contactor.
3. Faulty control relay. With power off, remove WHITE/RED & BLACK/YELLOW wires from control relay terminals #9 & #6. If there is continuity, replace relay.

Problem: Low pumped water pressure.

1. Water level is too low. Increase fill time on cam timer, or decrease drain timer, or increase incoming water pressure.
2. Sump strainer clogged. Clean strainer.
3. Wash arms clogged. Clean arms and jets.
4. Obstruction in pump housing or wash manifold. Disassemble and clear.
5. Pump impeller worn or broken. Replace the pump impeller.

Problem: Machine keeps tripping the service breaker.

1. Power supply shorted to ground. Check for loose wires or burned connections.
2. Faulty door switch or detergent safety switch. Check for loose or wet connections at switch and at wire connectors. Bypass switch to verify that switch is problem; replace if required.
3. Pump impeller jammed. Clear impeller.
4. Wash pump motor faulty. Check motor voltage and amp load. If amp load is over 12 amps, replace the motor.
5. Circuit breaker is too small. Replace with properly sized breaker. Refer to the data plate.

Problem: Machine will not drain.

1. Loose wire connection. Tighten wires to timer drain microswitch.
2. Drain hole/strainer obstructed. Clear obstructions.
3. Not enough time to drain. Adjust fill cam on timer and/or the drain cam.
4. Drain linkage binding. Repair drain parts.
5. Faulty drain microswitch on timer. With power off and the drain cam on the timer in the home position, remove the WHITE/YELLOW wire from the microswitch.
6. Faulty drain microswitch on timer. Measure the continuity between the ORANGE wire on the microswitch and the tab that the WHITE/ YELLOW wire is attached onto. If there is no continuity, replace the microswitch.
7. Drain solenoid defective. Check for voltage at solenoid valve during the drain cycle. Replace if voltage is present.

Problem: Machine will not hold water.

1. Faulty drain ball. Replace drain ball.
2. Obstructed drain hole. Clear obstruction.
3. Drain linkage is binding. Repair drain mechanism parts.

Problem: Sanitizer pump runs continuously.

1. Shorted sanitizer microswitch on cam timer. If there is not 120V between the ORANGE and GREY wires on the sanitization pump motor microswitch when switch is out of the home position, replace the switch.
2. Shorted prime switch. If there is not 220 volts between GREY and WHITE/RED wires to prime switch, replace the switch. Sanitizer pump does not run during the cycle, but runs when primed.
3. Loose or broken wire. Tighten connections to microswitch.
4. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 220V, replace switch.

SECTION 4: TROUBLESHOOTING

COMMON PROBLEMS (EXPORT UNITS)

Problem: Prime switch does not activate sanitizer pump.

1. Faulty prime switch. With the prime switch in the prime position, check for voltage between the GREY and WHITE/RED wires to switch. If 220V, replace the switch.
2. Faulty delime switch. With the delime switch in the DELIME position, check for voltage between the WHITE/BLACK and WHITE/RED wires to the delime switch. If 220V, replace the delime switch.

Problem: Detergent not feeding; rinse aid feeds okay.

1. Misadjusted cam. Adjust detergent cam on cam timer.
2. Faulty detergent microswitch on cam timer. When the detergent cam is in the home position, measure voltage between ORANGE and GREY/ WHITE wires. If 220V, replace the microswitch.

Problem: Rinse aid not feeding, detergent feeds okay.

1. Misadjusted cam. Adjust rinse aid cam on cam timer.
2. Faulty rinse aid microswitch on cam timer. When the rinse aid cam is in the home position, measure the voltage between the ORANGE and ORANGE/YELLOW wires. If 220V, replace the microswitch.

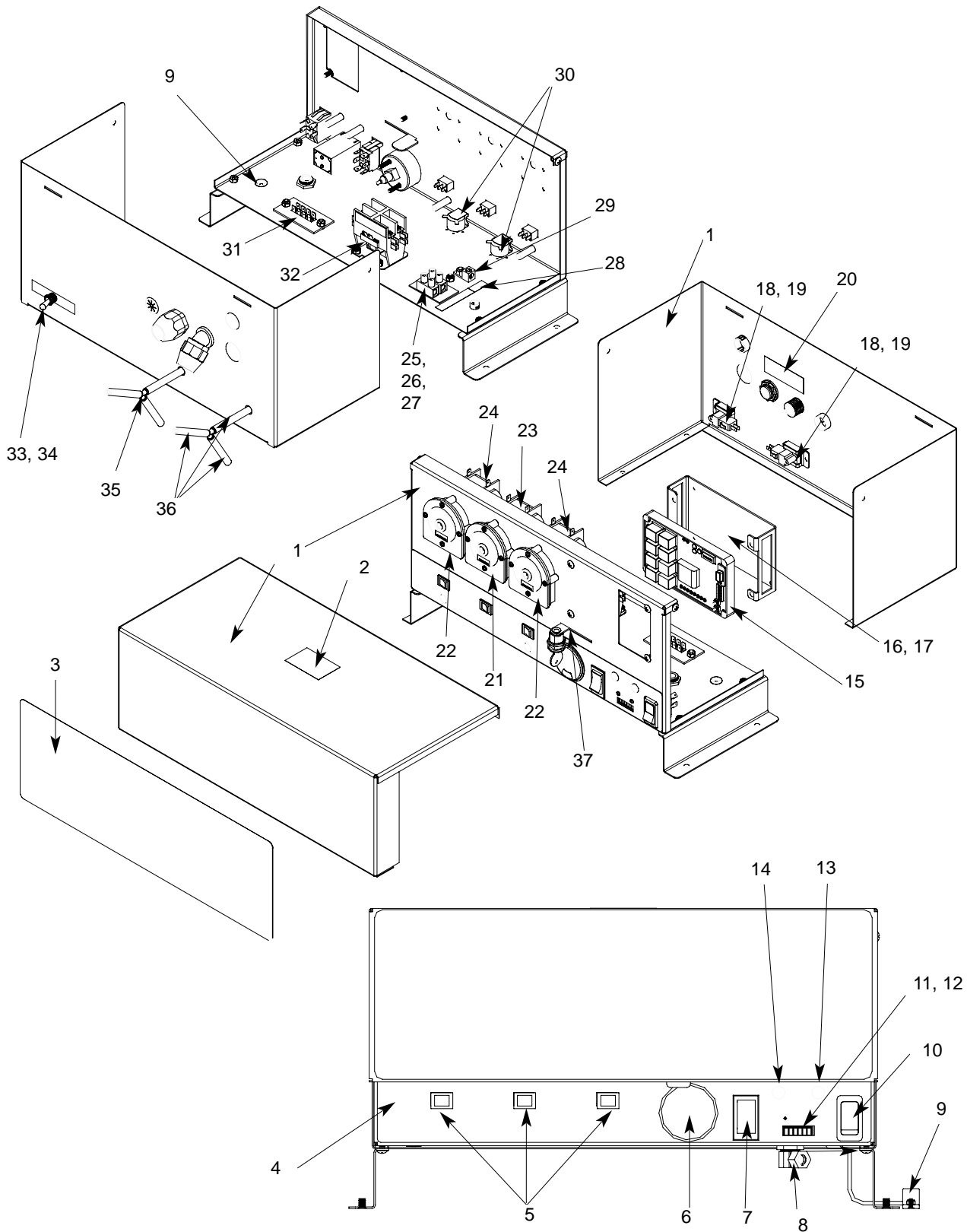
Problem: Sanitizer pump does not run during the cycle, but runs when primed.

1. Loose or broken wire. Tighten connections to microswitch.
2. Faulty sanitizer microswitch on cam timer. When sanitizer cam is in home position, measure voltage between ORANGE and GREY wires on the microswitch. If 220V, replace switch.

SECTION 5: PARTS SECTION

SECTION 5: PARTS SECTION

CONTROL BOX ASSEMBLIES - UNIVERSAL TIMER



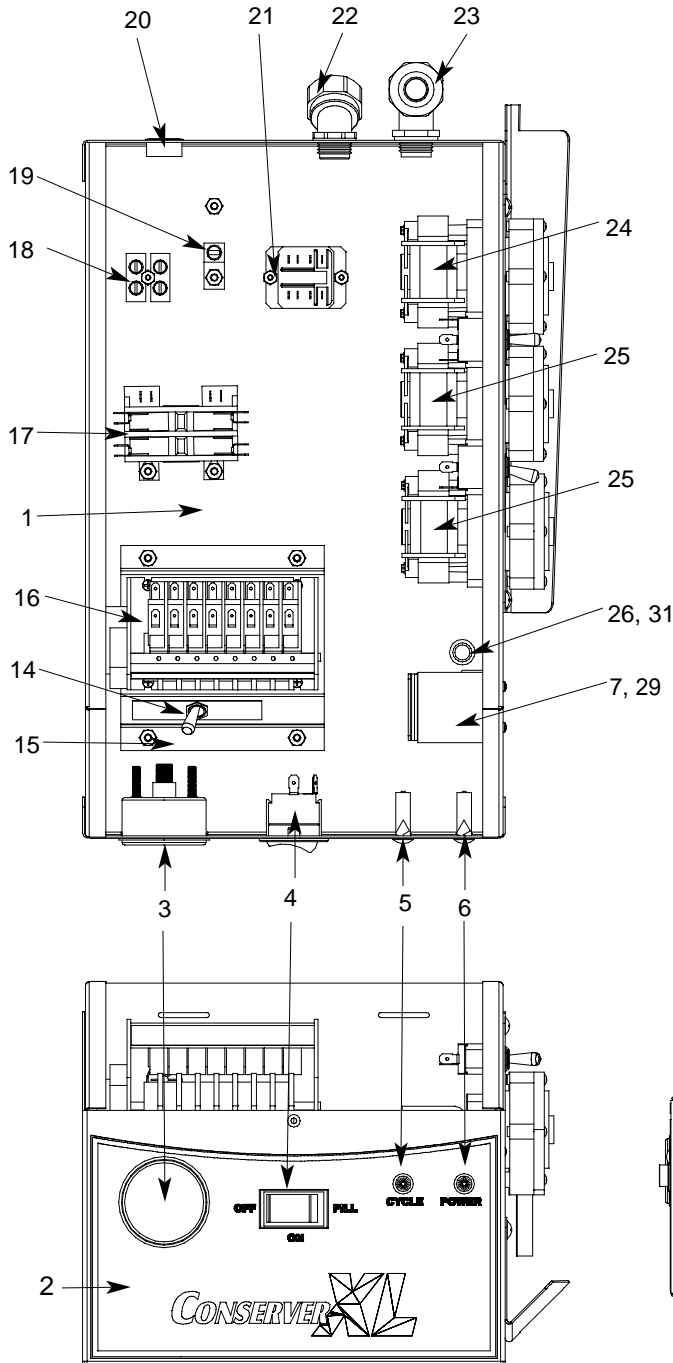
SECTION 5: PARTS SECTION**CONTROL BOX ASSEMBLIES - UNIVERSAL TIMER (CONTINUED)**

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Assembly	05700-003-16-83
2	1	Decal, Warning-Disconnect Power	09905-100-75-93
3	1	Decal, Control Box Upper	09905-003-21-89
4	1	Decal, Control Box Lower	09905-003-20-07
5	3	Switch, Prime	05930-011-49-54
6	1	Thermometer	06685-111-68-49
		Decal, Wash/Rinse 120F	09905-002-82-46
7	1	Switch, DPD	05930-301-49-00
8a	1	Fitting, Brass	04730-206-23-00
8b	2	Nut, Lock	05700-000-66-01
9a	1	Switch, Reed	05930-002-36-80
9b	1	Grommet	05325-011-46-73
10	1	Switch, On/Off, DPST	05930-111-38-79
11	1	Cycle Counter, 115 Volt	05990-111-35-38
11	1	Cycle Counter, 240 Volt	05990-111-47-42
12	4	Screw, 4-40 x 1/4" Long	05305-002-32-38
13	1	Power Light, Red	05945-504-07-18
14	1	Cycle Light, Green	05945-504-08-18
15	1	Universal Timer	05945-003-33-09
16	1	Timer Mounting Bracket	05700-003-53-04
17	4	Screw, 10-32 x 3/8" Long	05305-173-12-00
18	2	Switch, Pressure	06685-003-36-13
19	2	Bracket, Switch Pressure	05700-003-53-03
20	1	Decal, Copper Conductors	09905-011-47-35
21	1	Motor Only, 14 RPM, 115 V	04320-111-35-13
21	1	Motor Only, 14 RPM, 240 V	04320-111-47-46
22	2	Motor Only, 36 RPM, 115 V	04320-111-35-14
22	2	Motor Only, 36 RPM, 240 V	04320-111-47-47
23	1	Chemical Feeder Pump Kit Assembly, 14 RPM w/Motor	05700-003-25-03
24	2	Chemical Feeder Pump Kit Assembly, 36 RPM w/Motor	05700-003-25-02
	3	Stiffener, 17 3/8"	05700-002-66-49
	FT	Tubing, Blue	04720-601-11-00
	FT	Tubing, Red	04720-601-12-00
	FT	Tubing, White	04720-601-13-00
25	1	Terminal Block	05940-500-09-61
26	1	Terminal Block Spacer	05700-011-40-05
27	1	Locknut, 6-32 Hex with Nylon Insert	05310-373-03-00
28	1	Decal, Power Connections	09905-011-47-64
29	1	Ground Wire Lug	05940-200-76-00
30	2	Buzzer, 115V	05990-003-36-12
31	1	Terminal Board	05940-021-94-85
32	1	Contactor, 115 Volt	05945-109-05-69
32	1	Contactor, 240 Volt	05945-002-74-20
33	1	Switch, Delime	05930-301-21-18
34	1	Decal, Delime/Normal	09905-011-34-96
35	2	Wye, 1/4" Barbed PVDT	04730-003-36-14
36	6	Tubing, 5/16 ID	05700-003-53-26
37	1	Lock Kit	05340-102-01-00
		Locknut, 6-32 Hex with Nylon Insert	05310-373-03-00
		Locknut, 10-24 Hex with Nylon Insert	05310-373-01-00

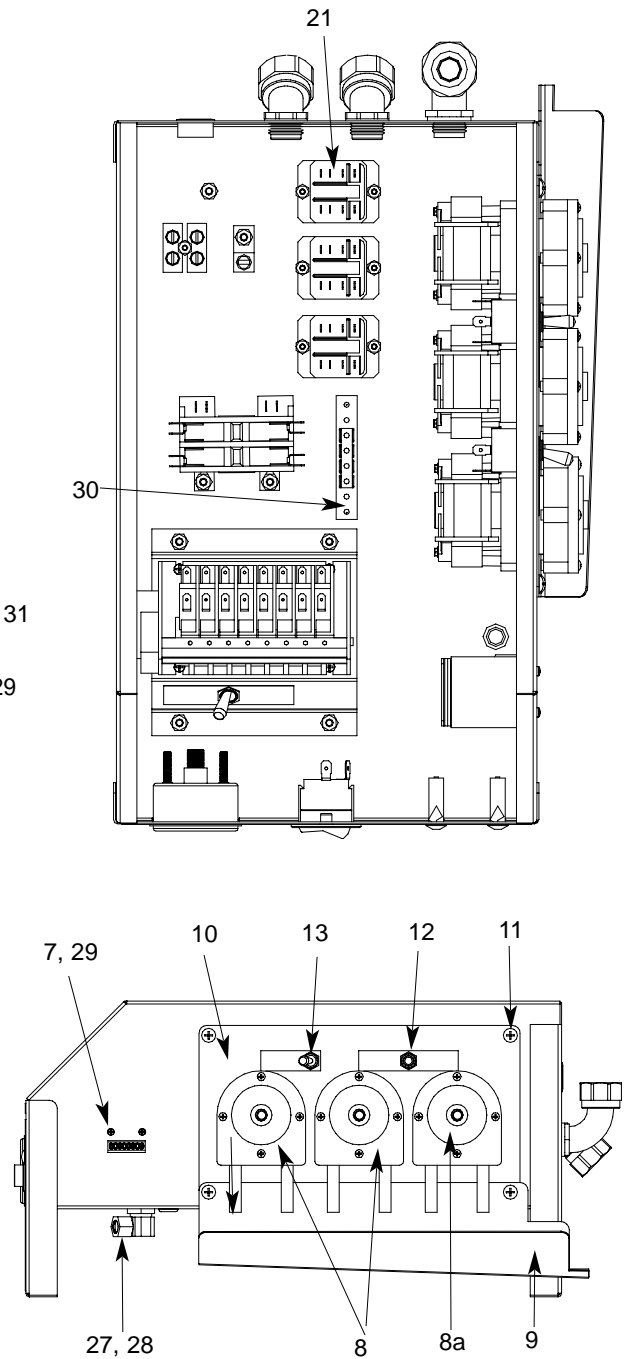
SECTION 5: PARTS SECTION

CONTROL BOX ASSEMBLIES - MECHANICAL TIMER

Conservex XL Control Box Assembly



Conservex XL2 Series Control Box Assembly



ITEM	QTY	DESCRIPTION
1	1	Control Box Weldment, Conservex XL
1	1	Control Box Weldment, Conservex XL2 Series
		Cover, Control Box
		Decal, Warning-Disconnect Power
		Cotter Pin, 3/32 x 3/4"
2	1	Decal, Control Box Front, Conservex XL
2	1	Decal, Control Box Front, Conservex XL2 Series

Mfg. No.
05700-002-04-57
05700-002-21-56
05700-002-04-62
09905-100-75-93
05315-207-01-00
09905-002-04-61
09905-002-20-46

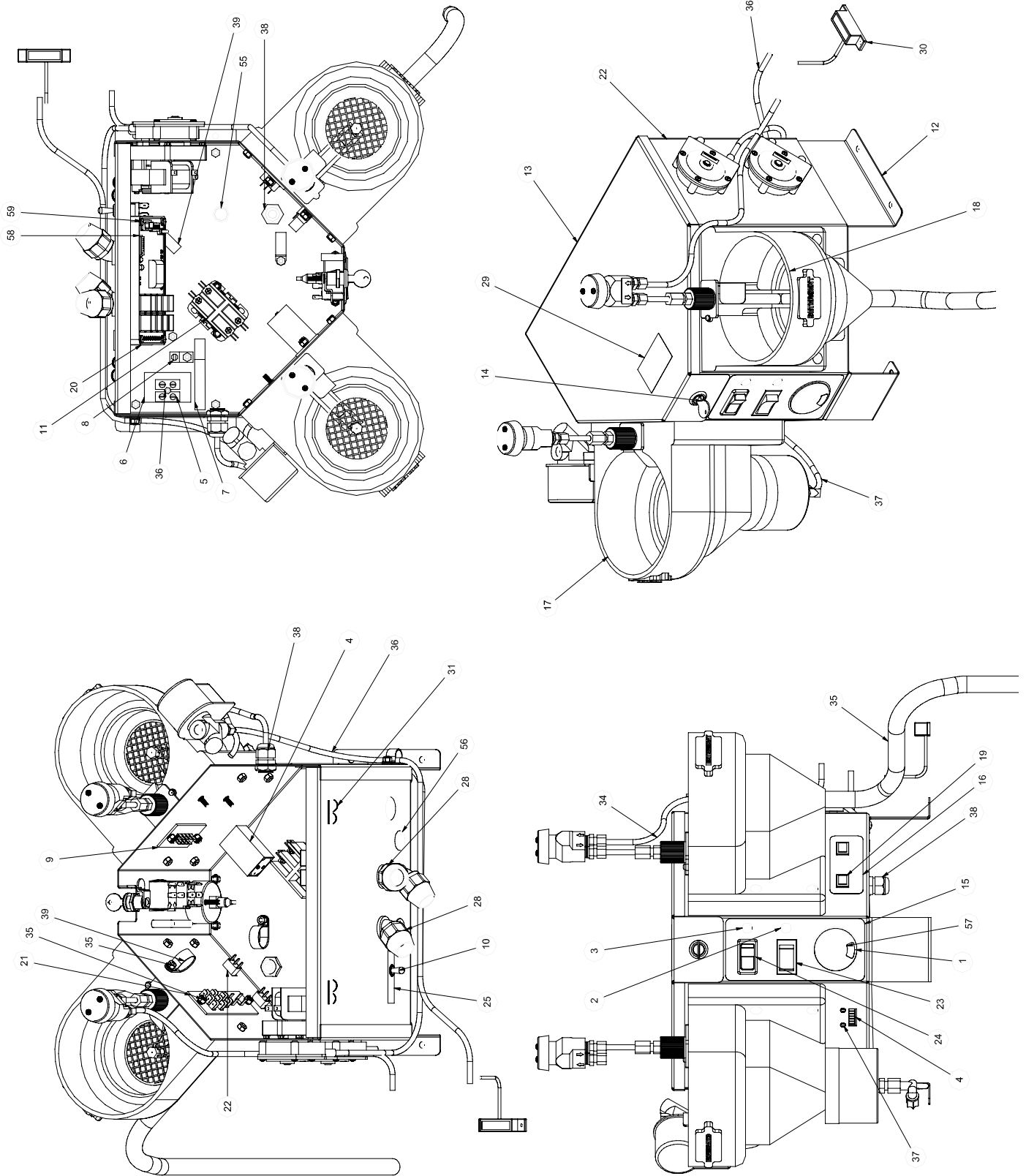
SECTION 5: PARTS SECTION

CONTROL BOX ASSEMBLY - WITH MECHANICAL TIMER (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
3	1	Thermometer	06685-111-68-49
4	1	Switch, On/Off, DPST	05930-111-38-79
5	1	Cycle Light	05945-504-08-18
6	1	Power Light	05945-504-07-18
7	1	Cycle Counter, 115 Volt	05990-111-35-38
7	1	Cycle Counter, 240 Volt	05990-111-47-42
8	2	Chemical Feeder Pump Kit Assembly	05700-001-37-10
8a	1	Chemical Feeder Pump Kit Assembly	05700-002-83-90
		Stiffener, 17 3/8"	05700-002-66-49
		Tubing, Blue	04720-601-11-00
		Tubing, Red	04720-601-12-00
		Tubing, White	04720-601-13-00
9	1	Drip Shield	05700-001-82-56
		Hose, Drip Through Drain	05700-011-35-04
10	1	Peri-Pump Mounting Plate	05700-021-82-55
11	4	Screw, 10-32 x 3/8" Long	05305-173-12-00
12	1	Switch, Detergent/Rinse Aid Toggle	05930-011-35-27
		Decal, Det/Rinse Prime	09905-011-34-95
13	1	Switch, On/Off, SPST	05930-111-38-21
		Decal, Sanitizer Prime	09905-011-34-98
14	1	Switch, Delime	05930-301-21-18
		Decal, Delime/Normal	09905-011-34-96
15	1	Timer Mounting Bracket	05700-021-82-26
16	1	8 Cam Timer, 115 Volt	05945-111-35-32
16	1	8 Cam Timer, 240 Volt	05945-111-47-48
		Decal, Timer Cam Operation	09905-011-37-21
17	1	Contactor, 115 Volt	05945-109-05-69
17	1	Contactor, 240 Volt	05945-002-74-20
18	1	Terminal Block	05940-500-09-61
	1	Terminal Block Spacer	05700-011-40-05
		Decal, Power Connections	09905-011-47-64
		Decal, Copper Conductors	09905-011-47-35
19	1	Ground Wire Lug	05940-200-76-00
20	1	Grommet, Split 7/8"	05975-200-40-00
21	1	Control Relay, 115 Volt (Qty of 3 for Conserver XL2)	05945-111-35-19
21	1	Control Relay, 240 Volt	05945-111-47-51
22	1	Conduit Fitting, 1/2" 45° Plastic	05975-011-45-23
23	1	Conduit Fitting, 1/2" 90° Plastic	05975-011-45-13
		Plug, 3/4" Metal	05975-212-02-02
24	1	Motor, Chemical Feeder Pump, 14 RPM, 115 V	04320-111-35-13
24	1	Motor, Chemical Feeder Pump, 14 RPM, 240 V	04320-111-47-46
25	2	Motor, Chemical Feeder Pump, 36 RPM, 115 V	04320-111-35-14
25	2	Motor, Chemical Feeder Pump, 36 RPM, 240 V	04320-111-47-47
26	1	Grommet	05325-011-46-73
27	1	Fitting, Brass	04730-206-23-00
28	2	Nut, Lock	05700-000-66-01
29	4	Screw, 4-40 x 1/4" Long	05305-002-32-38
30	1	Terminal Board	05940-021-94-85
31	1	Switch, Reed	05930-002-36-80
		Switch, 20 AMP	05930-011-48-21
		Plate, Switch Legend	05945-011-35-07
		Locknut, 6-32 Hex with Nylon Insert	05310-373-03-00
		Locknut, 10-24 Hex with Nylon Insert	05310-373-01-00

SECTION 5: PARTS SECTION

XLS BOWL OPTION

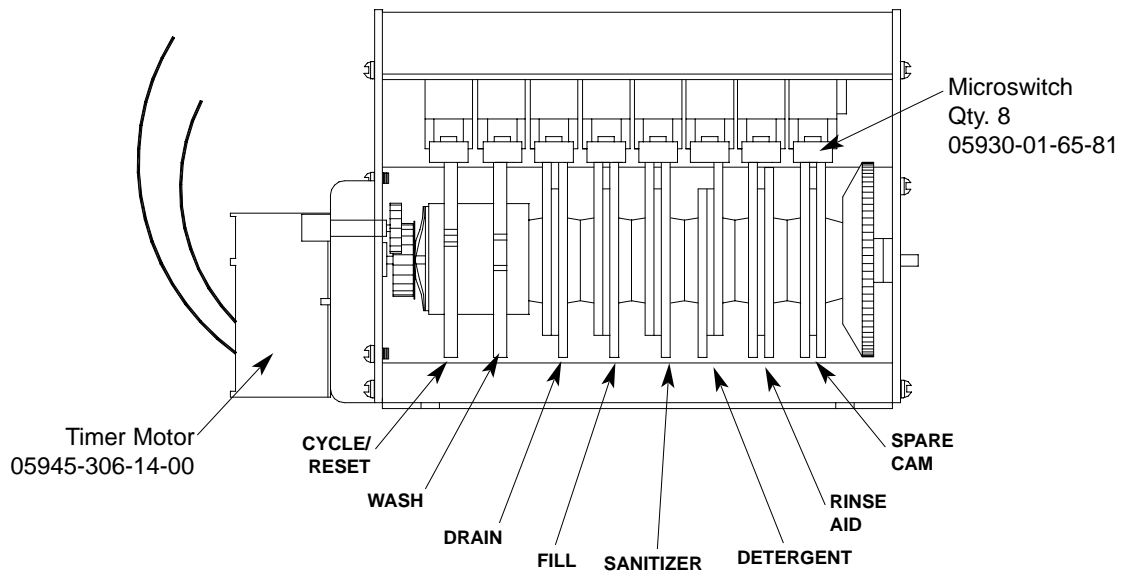
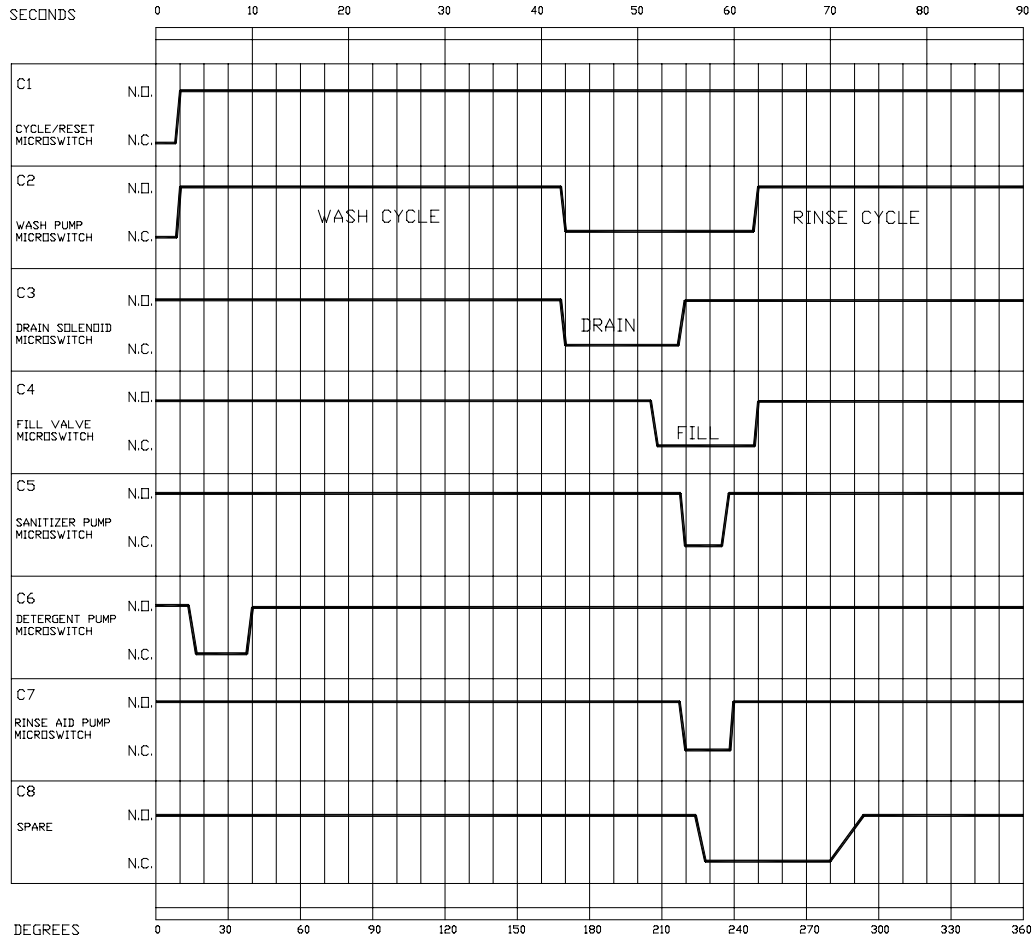


SECTION 5: PARTS SECTION**XLS BOWL OPTION**

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Thermometer	06685-111-68-49
2	1	Cycle Light, Green	05945-504-08-18
3	1	Power Light, Red	05945-504-07-18
4	1	Cycle Counter, 115 Volt	05990-111-35-38
4	1	Cycle Counter, 240 Volt	05990-111-47-42
5	1	Terminal Block	05940-500-09-61
6	1	Terminal Block Spacer	05700-011-40-05
7	1	Decal, Power Connections	09905-011-47-64
8	1	Ground Wire Lug	05940-200-76-00
9	1	Terminal Board	05940-021-94-85
10	1	Switch, Delime	05930-301-21-18
11	1	Contactor, 115 Volt	05945-109-05-69
12	2	Stand, Control Box	05700-003-30-29
13	1	Cover, Control Box	05700-003-30-88
14	1	Lock Kit	05340-102-01-00
15	1	Decal, Control Box	09905-003-30-85
16	1	Decal, Sanitizer and Rinse Aid	09905-003-30-86
17	1	Dispenser, Solid Rinse	09515-003-24-70
18	1	Dispenser, Solid Detergent	09515-003-24-71
19	2	Switch, Prime	05930-011-49-54
20	1	Bracket, Control Board	05700-003-30-91
21	1	Terminal Board	05940-002-78-97
22	1	Weldment, Control Box	05700-003-31-00
23	1	Switch, DPD	05930-301-49-00
24	1	Switch,	05930-111-38-79
25	1	Decal, Delime/Normal	09905-011-34-96
26	1	Decal, Copper Conductors	09905-011-47-35
27	1	Bushing, Split	05975-200-40-00
28	3	Fitting	05975-011-45-23
29	1	Decal, Warning-Disconnect Power	09905-100-75-93
30	1	Switch, Reed	05930-002-36-80
31	2	Cotter aPin, 3/32 x 3/4"	05315-207-01-00
32	6	Screw, 10-32 x 3/8" Long	05305-173-12-00
33	18	Locknut, 10-32 Hex with Nylon Insert	05310-373-02-00
34	8	Screw, 10-32 x 1/2" Phillips Truss Head	05305-011-39-36
35	14	Locknut, 10-24 Hex with Nylon Insert	05310-373-01-00
36	1	Locknut, 6-32 Hex with Nylon Insert	05310-373-03-00
37	4	Screw, 4-40 x 1/4" Long	05305-002-32-38
38	2	Fitting, LiquidTite .231x.394	05975-011-49-03
39	3	Clamp, 1" Nylon Loop	04730-002-41-88
40	1	Bushing, Snap 1/2"	05975-210-05-00
41	1	Stand, Control Box Front	05700-003-31-20
42	2	Bacuum Breaker, 1/4" Bottom Outlet	04810-002-74-72
43	4	Fitting, 1/4" x 1/4" Comp Straight Brass	04730-011-48-56
44	1	Clamp, 5/8" Nylon	04730-011-39-01
45-54	-	See Peri Pump Assembly Page	N/A
55	1	Plug, 3/4"	04730-011-60-21
56	1	Plug	05975-011-47-81
57	1	Decal, Wash/Rinse 120F	09905-002-82-46
58	1	Universal Timer	05945-003-33-09
59	4	Screw, 10-32 x01" Phillips Pan Head	05305-002-19-42

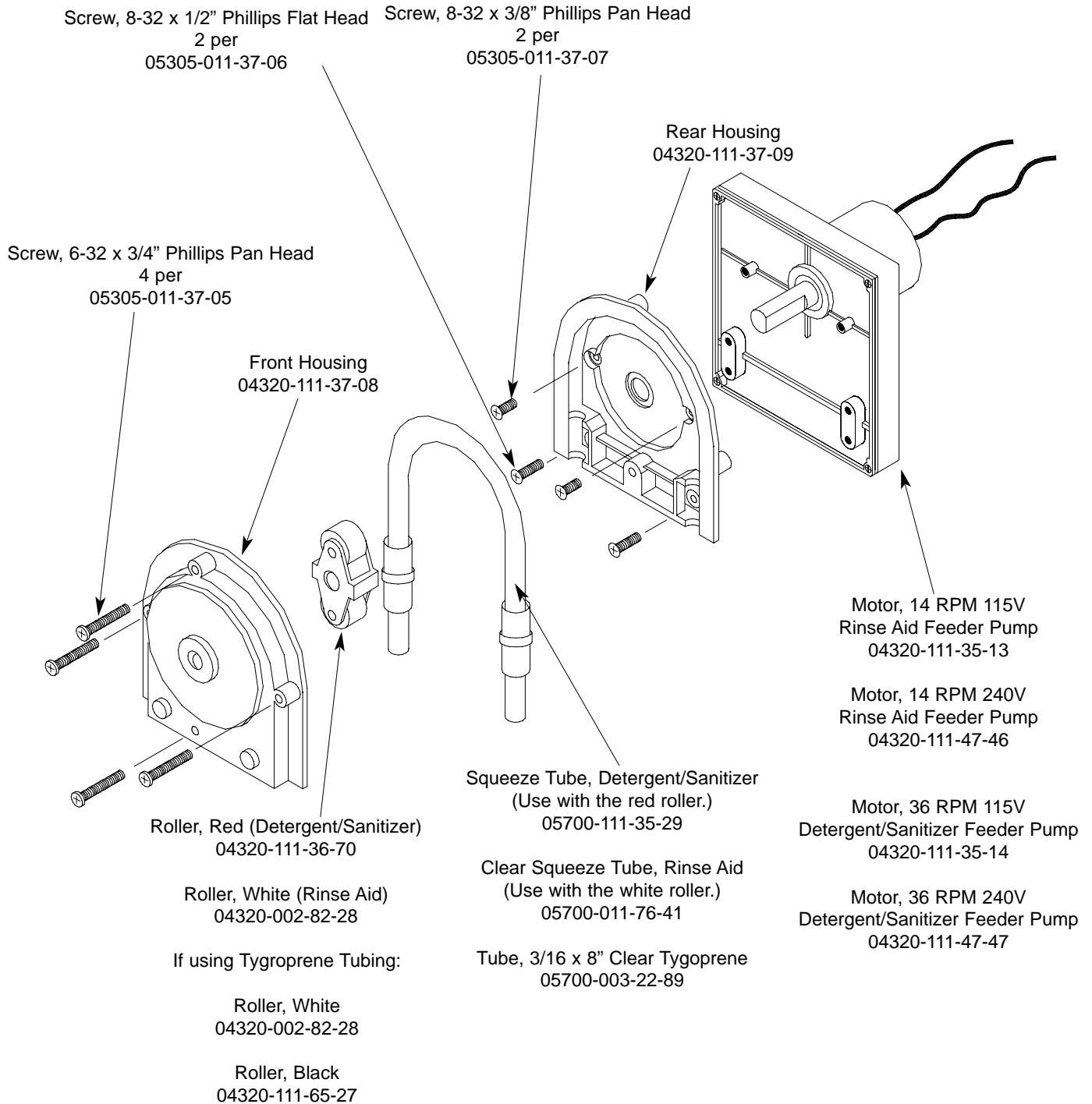
SECTION 5: PARTS SECTION

MECHANICAL 8 CAM TIMER



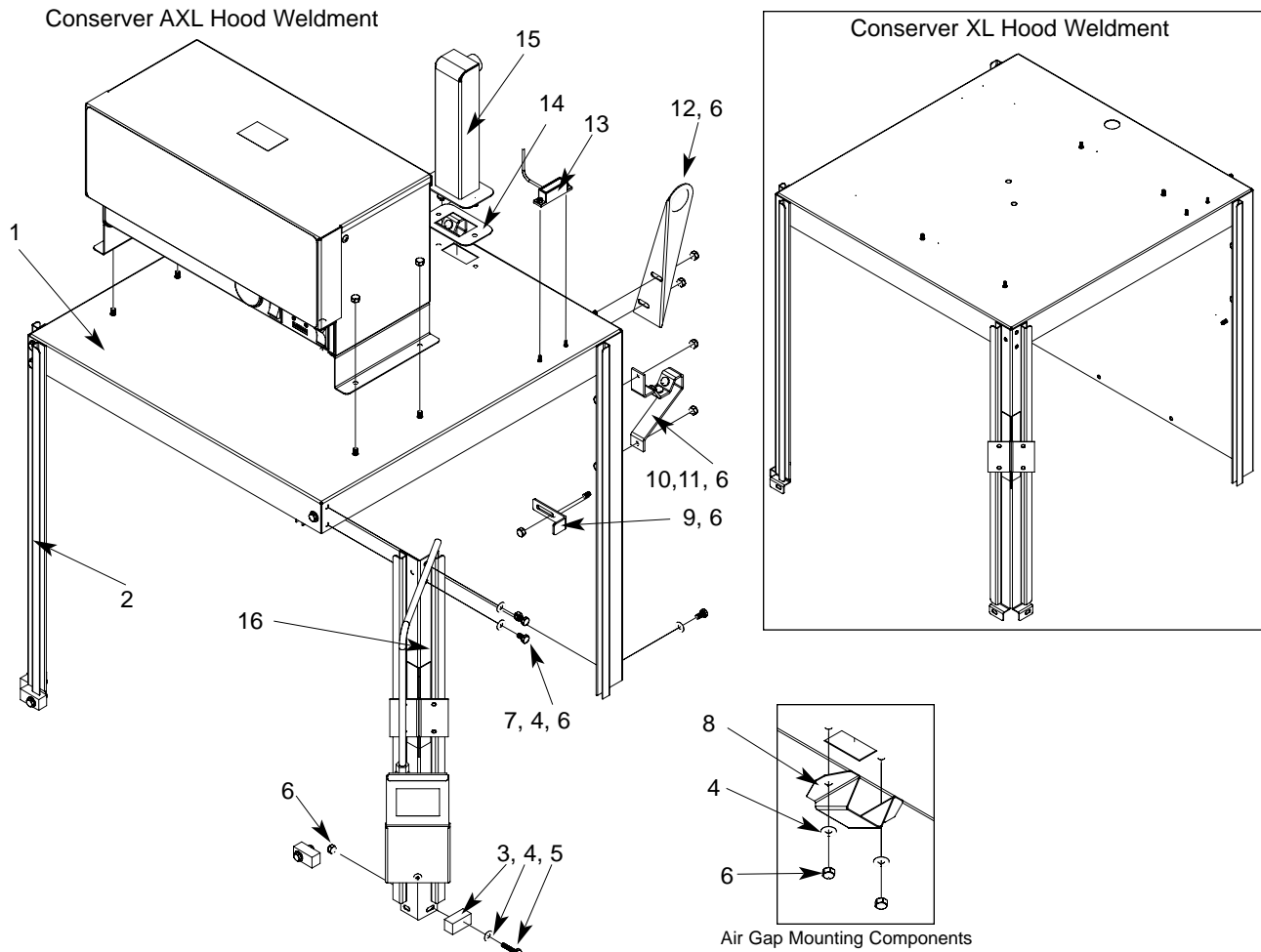
SECTION 5: PARTS SECTION

CHEMICAL FEEDER PUMP ASSEMBLY



SECTION 5: PARTS SECTION

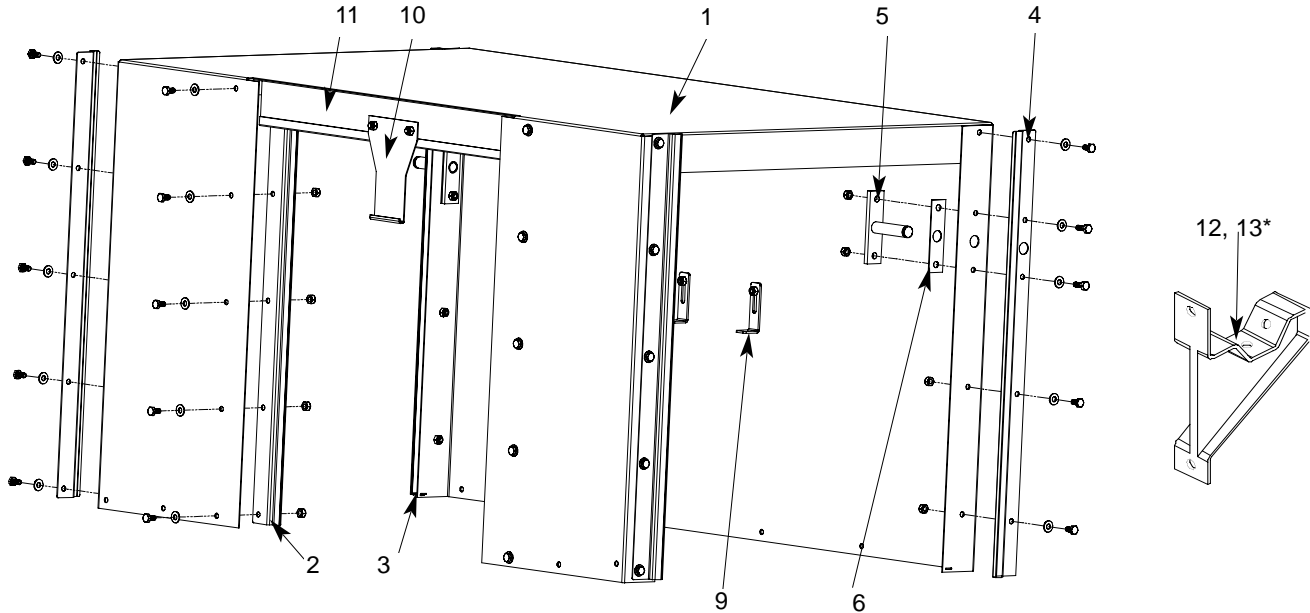
HOOD ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment, Conserver AXL	05700-003-22-05
1	1	Hood Weldment, Conserver XL (Starting with S/N 04d10286)	05700-002-91-38
2	1	Hood Support	05700-002-78-99
3	4	Block Spacer	05700-002-81-02
4	16	Washer, 1/4" ID S/S	05311-174-01-00
5	4	Screw, 1/4"-20 x 1 1/8" Long S/S	05305-274-21-00
6	27	Locknut, 1/4"-20 S/S Hex with Nylon Insert	05310-374-01-00
7	10	Screw, 1/4"-20 x 1/2" Long S/S	05305-274-02-00
8	1	Shield, Air Gap	05700-002-13-35
9	1	Bracket, Manifold Positioning Tube	05700-011-34-63
10	2	Bracket, Cantilever Support	09515-003-15-64
11	6	Wear Button	05700-011-88-01
12	1	Bracket, Plumbing Support	05700-021-34-02
13	1	Reed Switch	05930-002-36-80
14	1	Gasket, Air Gap	05330-002-14-48
15	1	Weldment, Air Gap	05700-002-81-70
16	1	Hood Support Weldment	05700-003-22-54

SECTION 5: PARTS SECTION

CONSERVER XL2 HOOD ASSEMBLY



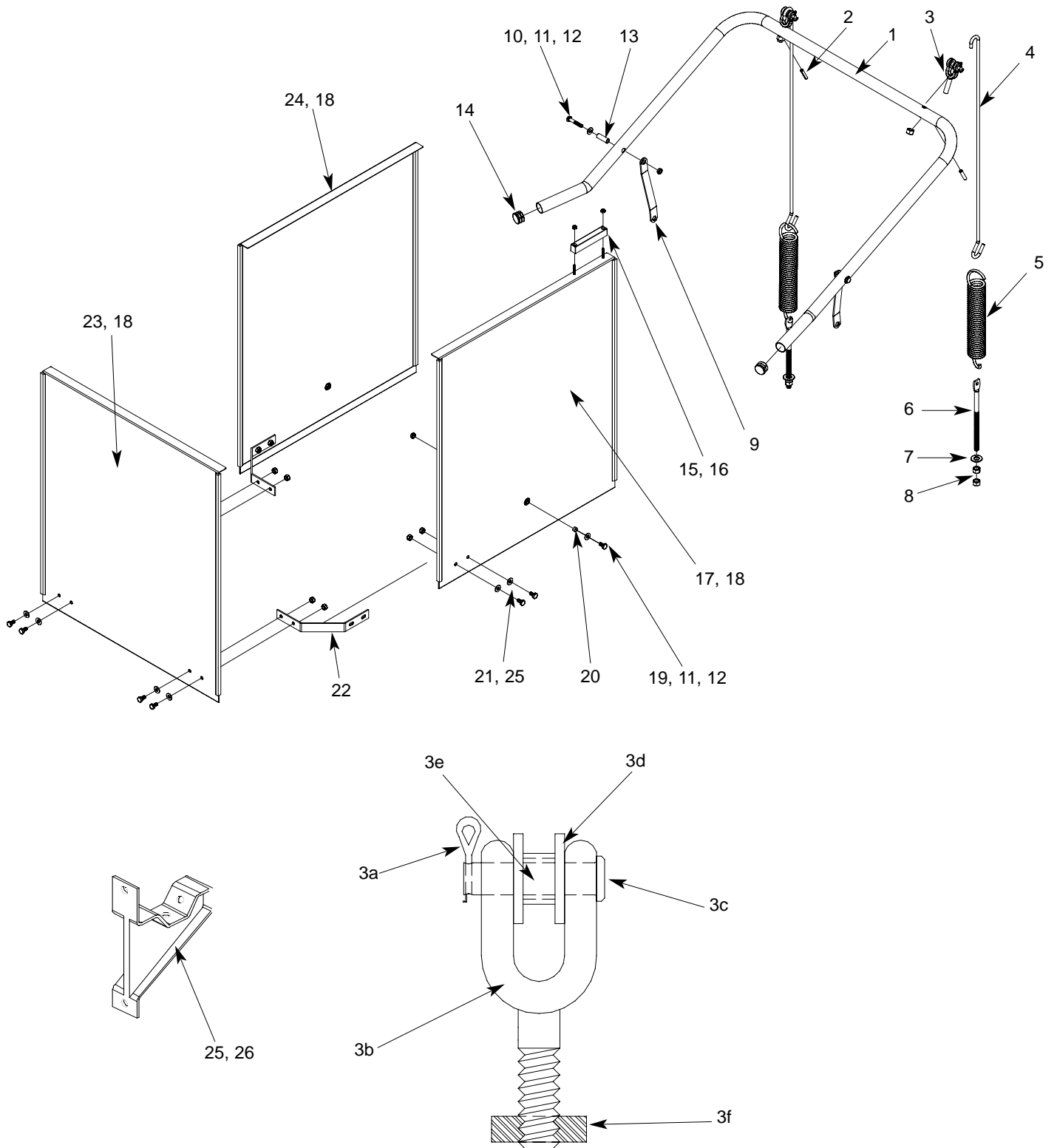
OLD STYLE: If your unit uses items 5 and 6, it is the old style hood weldment. Items 3 thru 6 are used only with the old style Hood Weldment. The hood will have the proper mounting holes in the rear door guides and in the hood itself.

NEW STYLE: If your unit does not use items 5 and 6, then it is the new style hood weldment. Items 12 thru 15 are used only with the new style Hood Weldment. The hood will have two places on the back of the hood to attach the cantilever support bracket assembly shown above to the right.

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment, Conserver XL2 - Old Style	05700-002-21-67
1	1	Hood Weldment, Conserver XL2 - New Style	05700-002-60-76
1	1	Hood Weldment, Conserver AXL2	05700-003-25-05
2	4	Door Guide	05700-021-44-94
3	1	Door Guide, Left Rear	05700-021-33-16
4	1	Door Guide, Right Rear	05700-021-33-15
5	2	Arm Support Weldment	05700-011-43-52
6	2	Arm Support Weldment Gasket	05700-111-36-01
7*	1	Front Door Stop (Not Shown)	05700-021-60-27
8*	1	Stiffener, Hood Support (Not Shown)	05700-002-47-39
9	2	Manifold L-Bracket	05700-011-34-63
10	1	Door Catch	05700-011-46-50
11	1	Hood Stiffener	05700-002-08-24
12*	2	Bracket, Cantilever Support	09515-003-15-64
13*	6	Wear Button	05700-011-88-01
14	1	Door Guide, Left Rear, New Style	05700-021-84-71
15	1	Door Guide, Right Rear, New Style	05700-021-84-70

SECTION 5: PARTS SECTION

CANTILEVER ARM (DOUBLE BRACKET MOUNT)



SECTION 5: PARTS SECTION**CANTILEVER ARM (DOUBLE BRACKET MOUNT) (CONTINUED)**

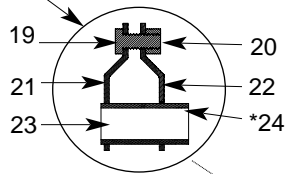
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Arm, Cantilever, Conserver XL (Prior to S/N 04D10286)	05700-002-00-20
1	1	Arm, Cantilever, Conserver XL (Starting with S/N 04D10286)	05700-031-50-67
1	1	Arm, Cantilever, Conserver AXL	05700-003-52-91
1*	1	Arm, Cantilever, Conserver XL2	05700-002-60-65
2	1	Spring Pin, 1/4" Dia. x 1 1/8" Long	05315-407-06-00
3	2	Yoke Assembly	05700-000-75-77
3a	1	Cotter Pin	05315-207-01-00
3b	1	Yoke	05700-000-75-78
3c	1	Clevis Pin, 5/16" x 1 3/8"	05315-700-01-00
3d	2	Nylon Washer	05311-369-03-00
3e	1	Bushing	03120-100-03-00
3f	2	Locknut, 3/8"-16 S/S Hex Center	05310-256-04-00
4	2	Rod, Spring, Conserver XL (Prior to S/N 04D10286)	05700-000-69-45
4	2	Rod, Spring, Conserver XL (Starting with S/N 04D10286)	05700-002-10-52
4	2	Rod, Spring, Conserver XL2	05700-002-29-38
5	2	Spring, Conserver XL	05340-109-02-00
5	2	Spring, Conserver XL2	05340-109-02-00
6	2	Bolt, Hanger Eye 3/8"-16	05306-956-05-00
7	2	Washer, Impeller 3/8" I.D. x 7/8" O.D.	05311-176-02-00
8	4	Nut, 3/8"-16 S/S Hex	05310-276-01-00
9	2	Cantilever Arm Connector	05700-011-90-99
10	2	Screw, 1/4"-20 x 1 1/2" Long S/S	05305-274-23-00
11	2	Washer, 1/4" ID S/S	05311-174-01-00
12	2	Locknut, 1/4"-20 S/S Hex with Nylon Insert, Low Profile	05310-374-02-00
13	2	Sleeve, Cantilever Arm	05700-000-85-69
14	2	Plug, Cantilever Arm	05340-011-35-00
15	1	Magnet, Reed Switch	05930-111-51-68
16	2	Locknut, 8-32 S/S Hex with Nylon Insert	05310-272-02-00
17	1	Right Door Weldment Assembly, Conserver XL (Starting with S/N 04D10286)	05700-002-30-88
	1	Right Door Weldment with Studs, Conserver XL (Starting with S/N 04D10286)	05700-002-29-85
17a*	1	Right Door Assembly, Conserver XL2	05700-003-02-97
	1	Right Door Only, Conserver XL2	05700-003-02-71
18	6	Door, Guides	05700-111-33-59
19	2	Screw, 1/4"-20 x 1/2" Long S/S	05305-274-02-00
20	2	Spacer, PB Bolt	05700-000-29-40
21	4	Locknut, 1/4"-20 S/S Hex with Nylon Insert	05310-374-01-00
22	2	Door Connector Bracket, Conserver XL Only	05700-021-33-39
22*	4	Door Stop, Conserver XL2 Only	05700-011-46-30
23	1	Front Door Assembly, Conserver XL (Starting with S/N 04D10286)	05700-002-30-89
	1	Front Door Only, Conserver XL (Starting with S/N 04D10286)	05700-002-29-83
23a*	1	Front Door Weldment Assembly, Conserver XL2	05700-003-02-96
	1	Front Door Weldment with Studs, Conserver XL2	05700-003-03-41
24	1	Left Side Door Assembly, Conserver XL (Starting with S/N 04D10286)	05700-002-30-87
	1	Left Side Door Only, Conserver XL (Starting with S/N 04D10286)	05700-002-29-86
24a*	1	Left Side Door Weldment Assembly, Conserver XL2	05700-003-02-99
	1	Left Side Door Weldment Only, Conserver XL2	05700-003-02-98
25	2	Bracket, Cantilever Arm Support	09515-003-15-64
26*	6	Wear Button, 1/2" Dia. UHMW	05700-011-88-01

* Represents an item not shown.

SECTION 5: PARTS SECTION

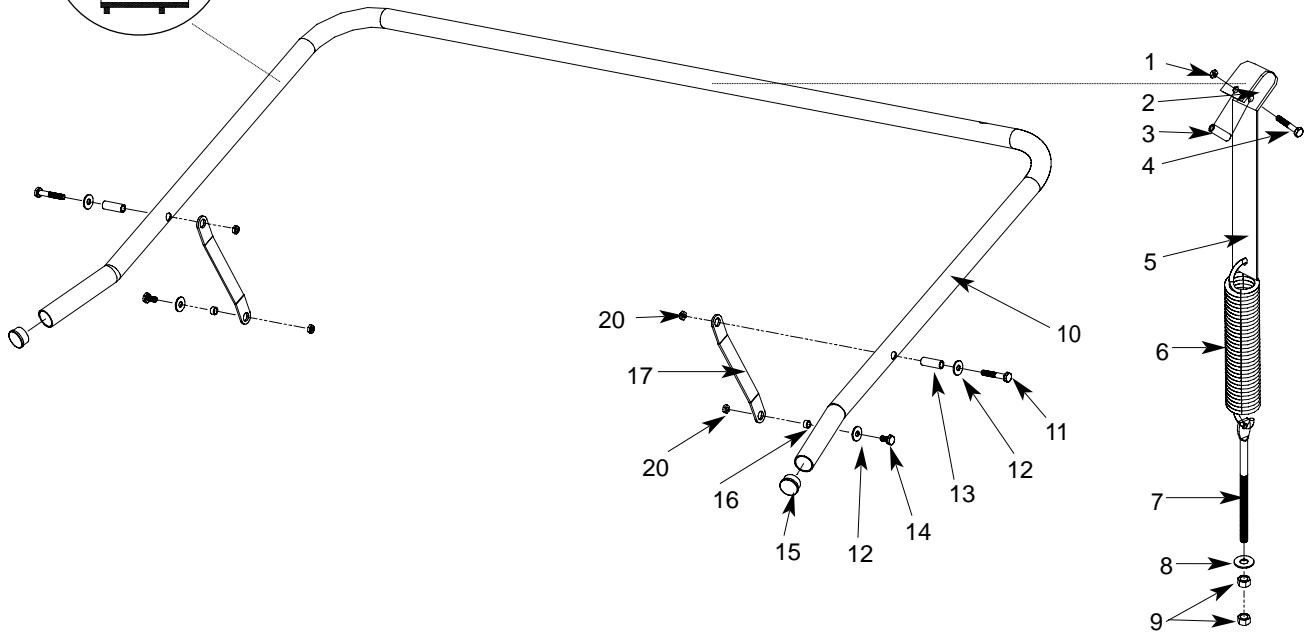
CONSERVER XL2 CANTILEVER ARM ASSEMBLY (SINGLE BRACKET MOUNT)

18 U Bracket Assembly



OLD STYLE CANTILEVER ARM ASSEMBLY

Note: Items 1 thru 5 and items 18 thru 24 are used only with the old style, single mount bracket, Cantilever Arm Assembly.

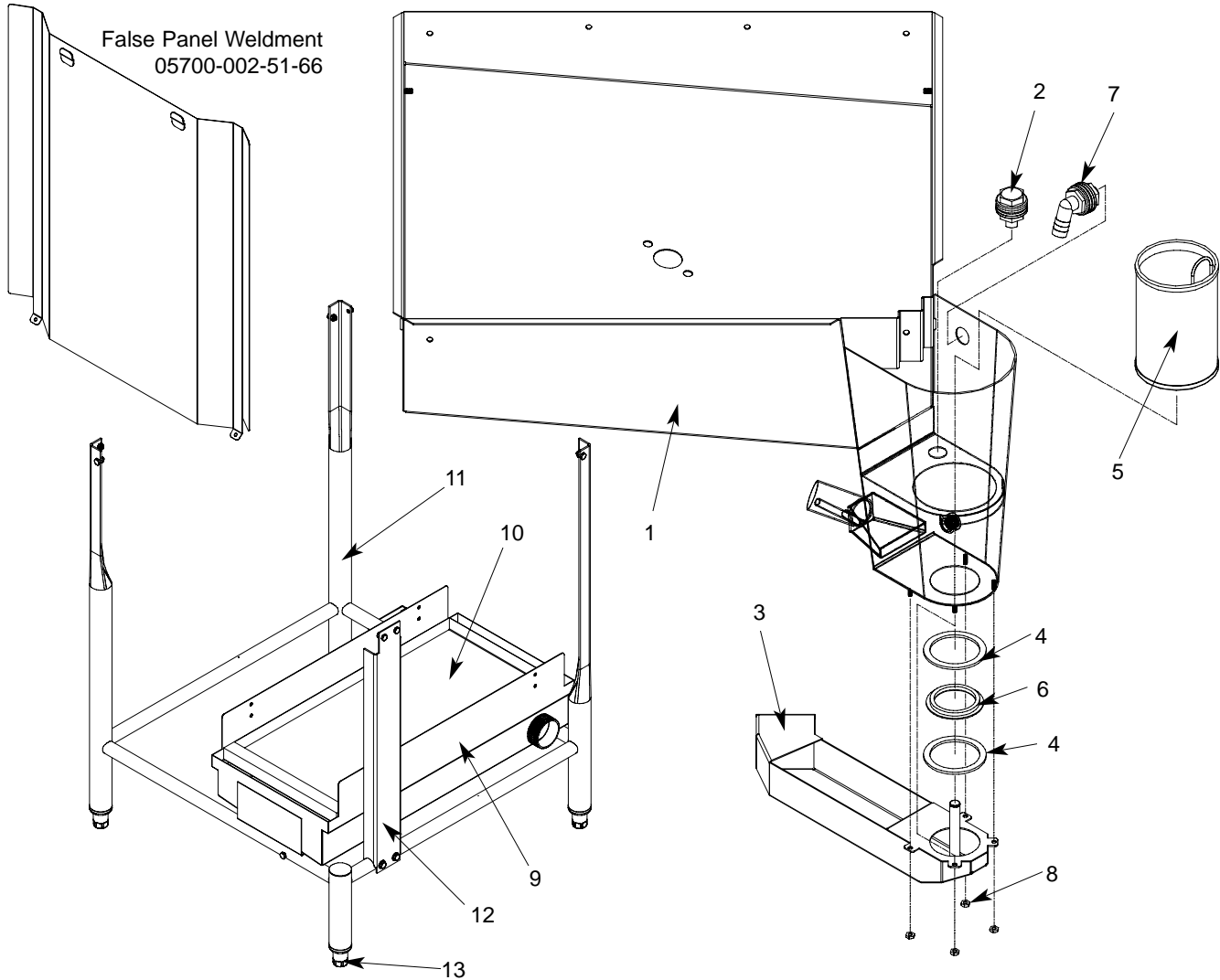


ITEM	QTY	DESCRIPTION
1	1	Hex Nut, 1/4"-20 with Nylon Insert, S/S
2	1	Wear Strip UHMW
3	1	Sleeve
4	1	Bolt, 1/4"-20 x 1 3/4", S/S
5	1	Link, Spring to Cantilever Arm
6	1	Cantilever Spring
7	1	Cantilever Eye Bolt
8	1	Washer, Impeller
9	2	Nut, 3/8"-16 Hex, S/S
10	1	Cantilever Arm
11	2	Hex Head Bolt, 1/4"-20 x 1 1/2", S/S
12	4	Washer, Flat 1/4", S/S
13	2	Cantilever Arm Sleeve
14	2	Hex Head Bolt, 1/4"-20 x 1/2", S/S
15	2	Endcap, Cantilever Arm
16	2	Bolt Spacer
17	2	Cantilever Arm Lever
18	2	U Bracket Assembly
19	2	Bolt, Hex Head, 1/4"-20 x 3/4"
20	5	Hex Nut, 1/4"-20 with Nylon Insert, Low Profile
21	1	Bracket, Inner Half, U
22	1	Bracket, Outer Half, U & Bearing Assembly
23	1	Sleeve Bearing
24*	2	Retaining Ring

Mfg. No.
05310-374-01-00
05700-011-34-50
05700-000-01-53
05305-274-10-00
05700-021-34-49
05340-111-35-22
05700-011-45-99
05311-176-02-00
05310-276-01-00
05700-031-45-38
05305-274-23-00
05311-174-01-00
05700-000-85-69
05305-274-02-00
05340-011-35-00
05700-000-29-40
05700-011-90-99
05700-011-43-72
05305-274-04-00
05310-374-02-00
05700-021-43-00
05700-011-43-54
05700-021-43-04
03120-011-43-53
05340-011-33-62

SECTION 5: PARTS SECTION

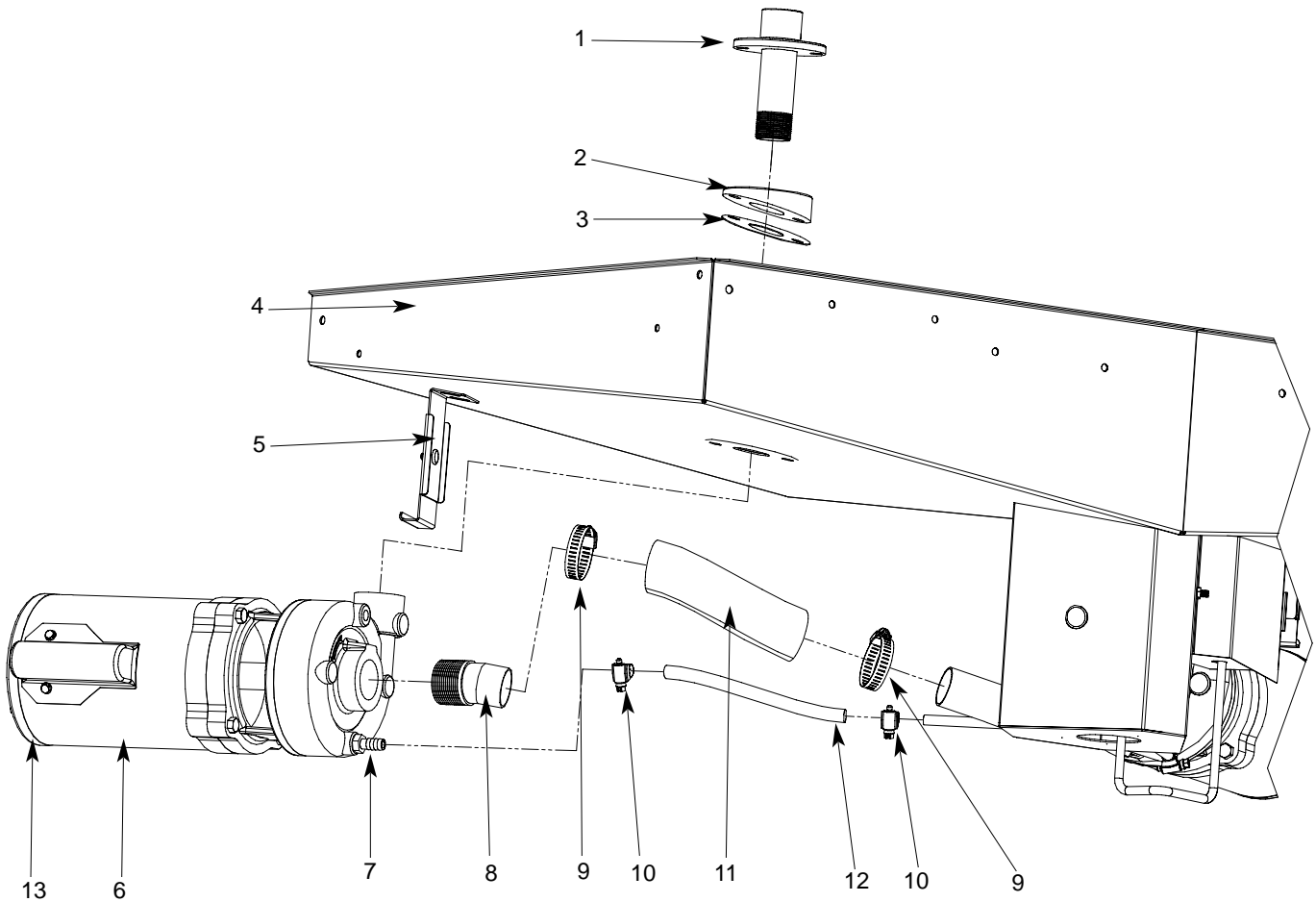
CONSERVER XL WASH TUB & FRAME ASSEMBLY (Starting with S/N 04D10286)



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Tub Weldment, Conserver XL (Prior to S/N 04D10286)	05700-002-04-38
1	1	Tub Weldment, Conserver XL (Starting with S/N 04D10286)	05700-002-78-30
2	1	Fitting, Chemical Drip	05700-002-05-62
3	1	Spillway Weldment	05700-002-04-41
3	1	Cover, Drain Chute	05700-002-35-53
4	2	Drain Seat Gasket	05700-002-04-42
5	1	Sump Strainer	05700-002-06-25
6	1	Drain Seat Insert	05700-021-34-38
7	1	Bulkhead to 1/2" Hosebarb Fitting	04730-011-45-21
8	4	Locknut, 10-24, with Nylon Insert	05310-373-01-00
9	1	Accumulator Weldment	05700-002-19-05
10	1	Strainer, Accumulator Weldment	05700-031-33-13
11	1	Frame Weldment	05700-002-29-15
12	1	Leg, Tub Support	05700-002-89-32
13	4	Bullet Feet	05340-108-01-03

SECTION 5: PARTS SECTION

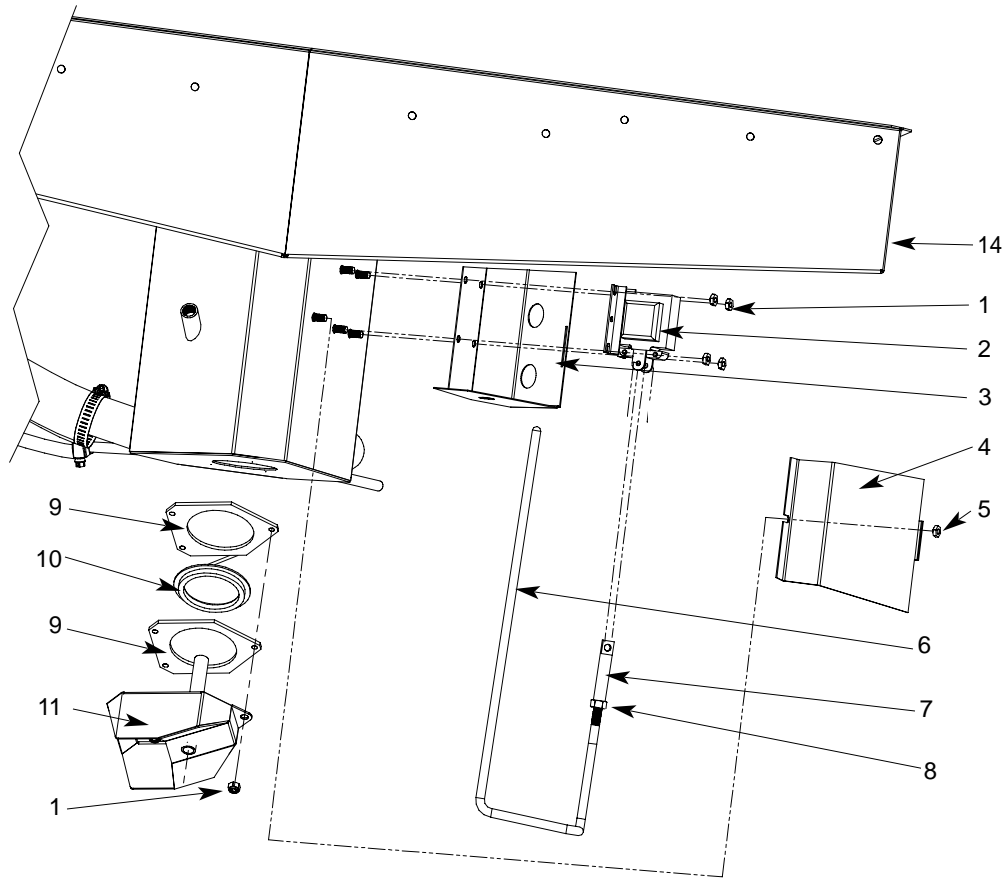
CONSERVER XL2 TUB ASSEMBLY (LEFT FRONT VIEW)



ITEM	QTY	DESCRIPTION	Mfg. No.
1	2	Lower Wash Manifold Weldment	05700-031-46-00
2	2	Casting, Manifold Wedge	09515-011-46-61
3	4	Manifold Gasket	05700-111-35-03
4	1	Wash Tub Weldment	05700-002-21-50
5	2	Wash Motor Support Assembly	05700-021-66-48
	1	Bracket, Pump Support Weldment	05700-021-66-47
	1	Bracket, Lower Pump Support	05700-021-66-46
	1	Nut, 1/4"-20 Serrated Nut	05310-011-66-49
6	2	Wash Motor 60 Cycle	06105-002-69-78
7	1	Fitting, Brass Elbow	04730-002-18-96
8	2	Pump Inlet Nipple	05700-021-46-84
9	4	Hose Clamp, Regular, 1 5/16" - 2 1/4"	04730-719-01-37
10	4	Hose Clamp, Mini, 7/16" - 25/32"	04730-011-36-05
11	2	Hose, 1 1/2" ID x 7 3/4" Long	05700-111-33-52
12	2	Hose, 3/8" ID x 12" Long	05700-002-69-73
13	2	Hose Clamp, Regular, 5 5/8" - 6"	04730-011-34-90

SECTION 5: PARTS SECTION

CONSERVER XL2 SERIES TUB ASSEMBLY (RIGHT FRONT VIEW)



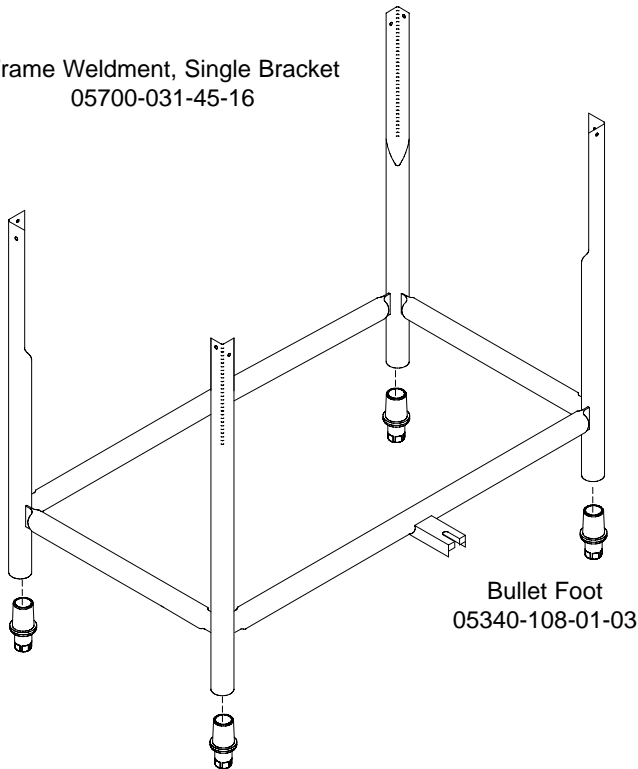
* Represents an item not shown.

ITEM	QTY	DESCRIPTION	Mfg. No.
1	7	Locknut, 10-24 S/S Hex with Nylon Insert	05310-373-01-00
2	1	Drain Solenoid, 115V	04810-200-11-00
2	1	Drain Solenoid, 240V	04810-111-87-74
3	1	Drain Solenoid Box	05700-021-37-53
4	1	Drain Solenoid Box Cover	05700-031-33-27
5	1	Locknut, 1/4"-20 S/S Hex with Nylon Insert	05310-374-01-00
6	1	Drain Link Assembly	05700-002-38-21
6	1	Drain Link	05700-031-46-52
7	1	Drain Link Connector	05700-002-38-10
8	1	Hex Nut, 5/16"-18	05310-275-01-00
9	2	Spillway Gasket	05700-111-34-52
10	1	Drain Seat Insert (Stainless Ring)	05700-021-34-38
11	1	Spillway Weldment	05700-031-37-86
12*	1	Cotter Pin, 1/8" x 1"	05315-002-15-39
13*	1	Solenoid Stop	05700-000-66-40
14	1	Hole Plug	04730-011-60-21

SECTION 5: PARTS SECTION

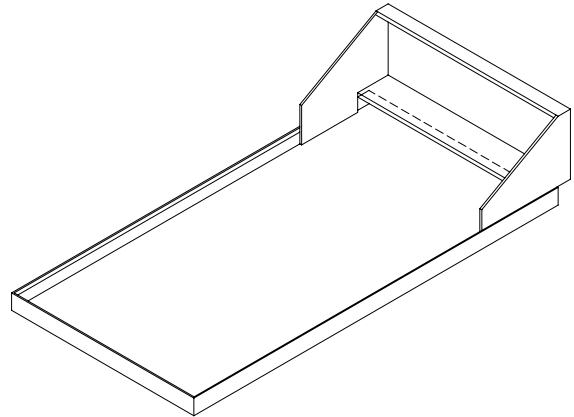
CONSERVER XL2 SERIES FRAME WELDMENT & ACCUMULATOR

Frame Weldment, Single Bracket
05700-031-45-16

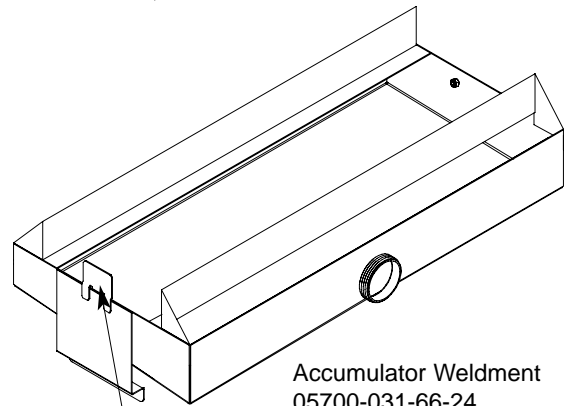
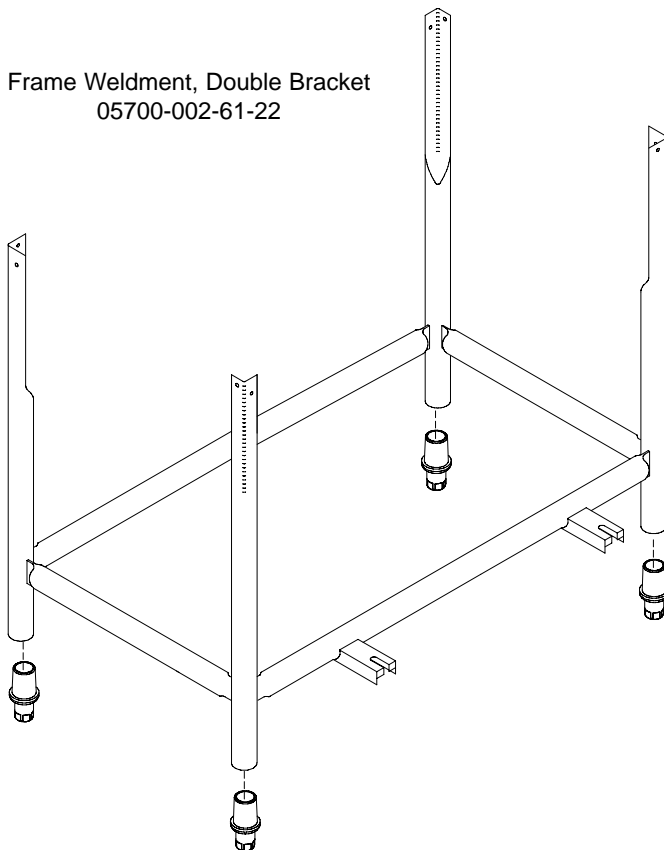


Bullet Foot
05340-108-01-03

Accumulator Strainer
05700-021-47-17



Frame Weldment, Double Bracket
05700-002-61-22



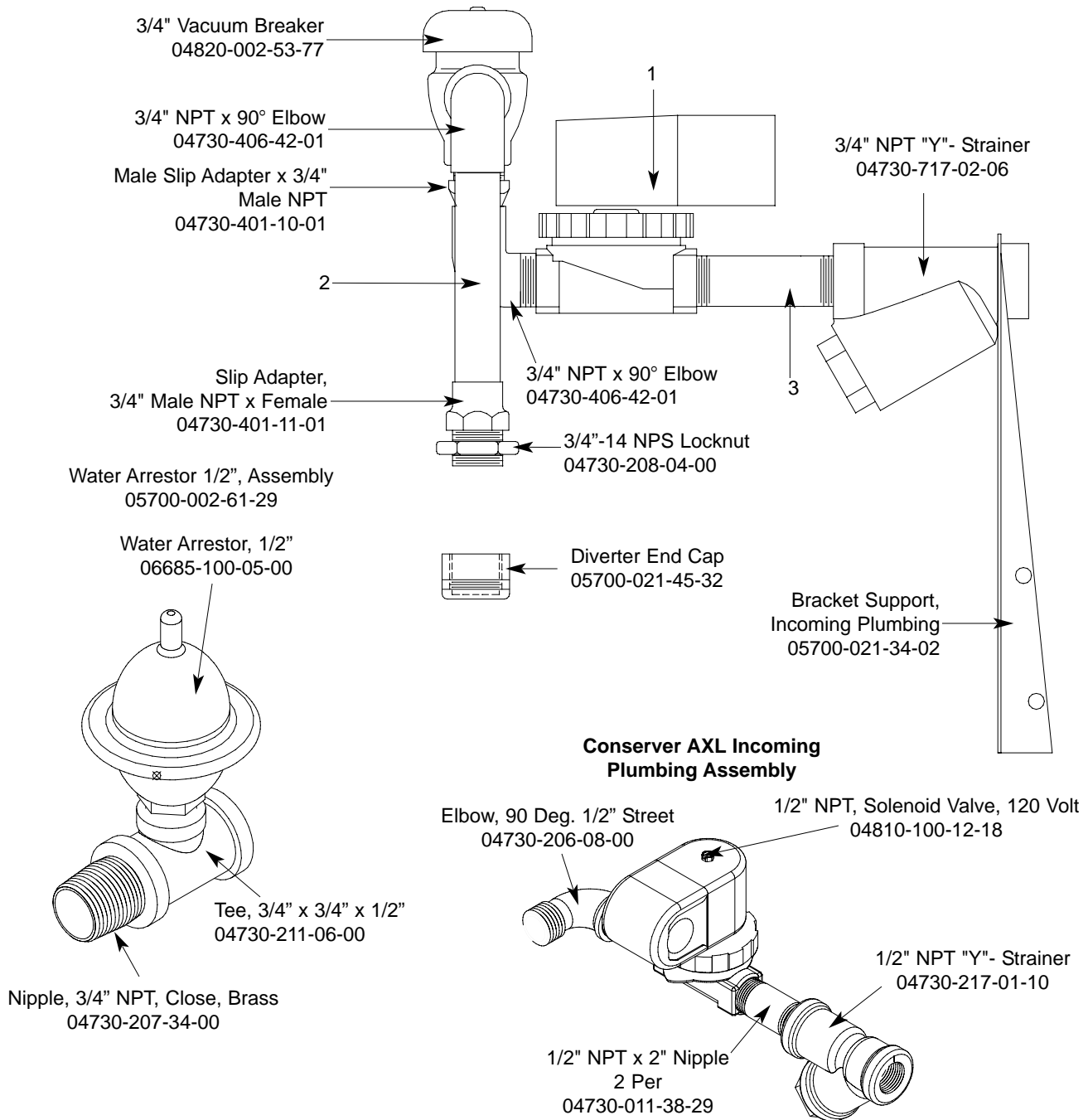
Accumulator Weldment
05700-031-66-24

Accumulator Stop Clip
05700-011-49-11

Locknut, 10-24 S/S
with Nylon Insert
05310-373-01-00

SECTION 5: PARTS SECTION

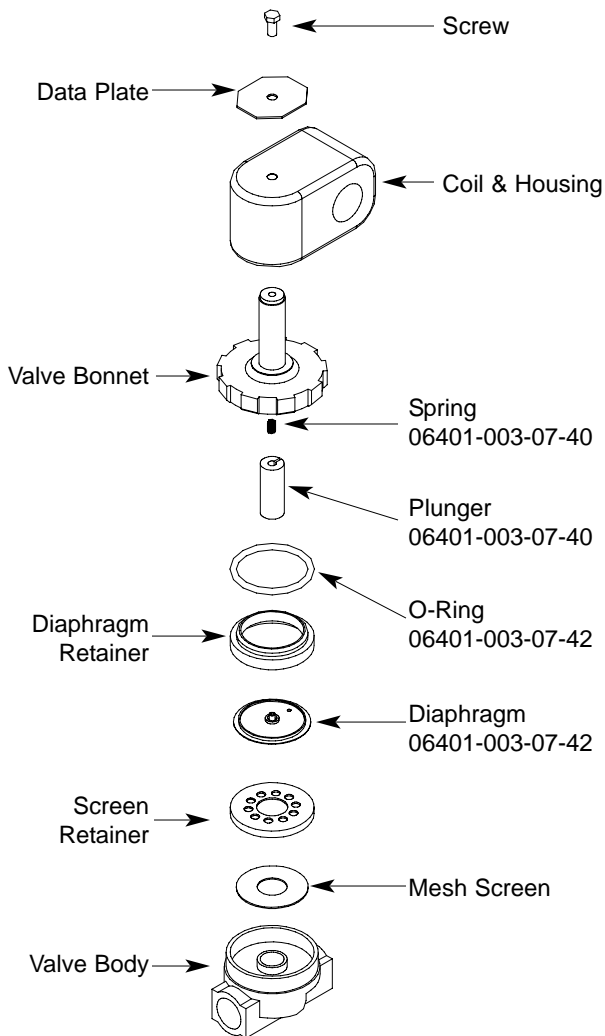
INCOMING PLUMBING ASSEMBLIES



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	3/4" NPT, Solenoid Valve, 120 Volt	04810-100-53-00
1	1	3/4" NPT, Solenoid Valve, 240 Volt (Conservator XL Export Only)	04810-100-03-18
2	1	3/4" x 4" Copper Tube, Conservator XL (Prior to S/N 04D10286)	05700-001-07-38
2	1	3/4" x 6" Copper Tube, Conservator XL (Starting with S/N 04D10286)	05700-011-37-55
2	1	3/4" x 6" Copper Tube, Conservator XL2	05700-011-37-55
3	1	3/4" NPT, Close Brass Nipple, Conservator XL (Prior to S/N 04D10286)	04730-207-34-00
3	1	3/4" NPT x 3" Nipple, Conservator XL (Starting with S/N 04D10286)	04730-011-38-29
3	1	3/4" NPT x 3" Nipple, Conservator XL2 Series	04730-011-38-29

SECTION 5: PARTS SECTION

3/4" SOLENOID VALVE & 3/4" NPT VACUUM BREAKER REPAIR PARTS KITS



Complete 110 Volt Solenoid Valve Assembly

04810-100-53-00

Coil & Housing only

04810-200-01-18

Complete 240 Volt Solenoid Valve Assembly

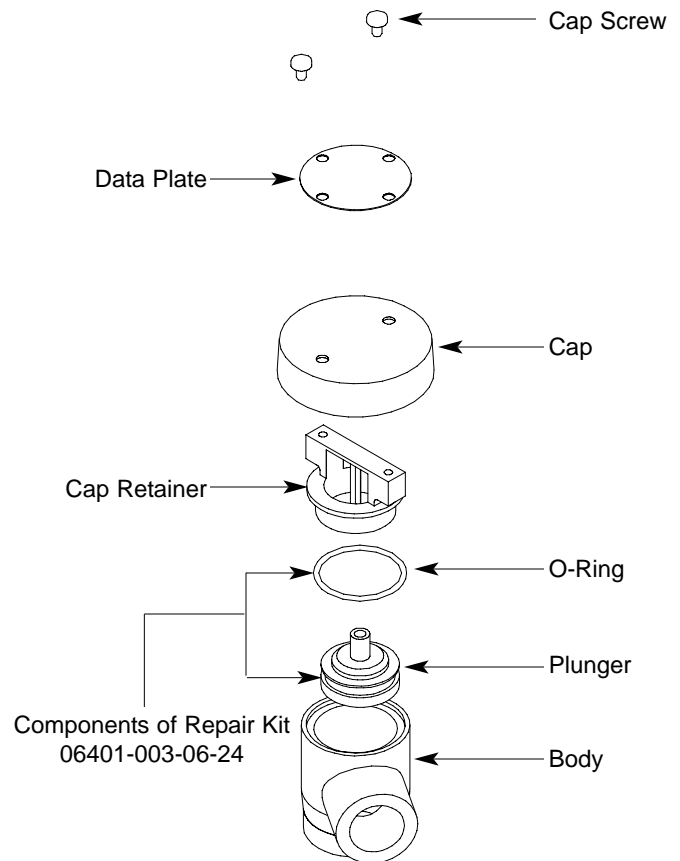
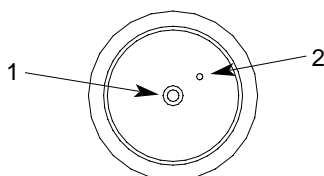
04810-100-03-18

Coil & Housing only

04810-200-02-18

Possible Problems:

1. Pilot port extension #1 clogged. Clean hole.
2. Hole #2 Clogged. Pass heated straight pin through hole.



Complete Vacuum Breaker Assembly

04820-002-53-77

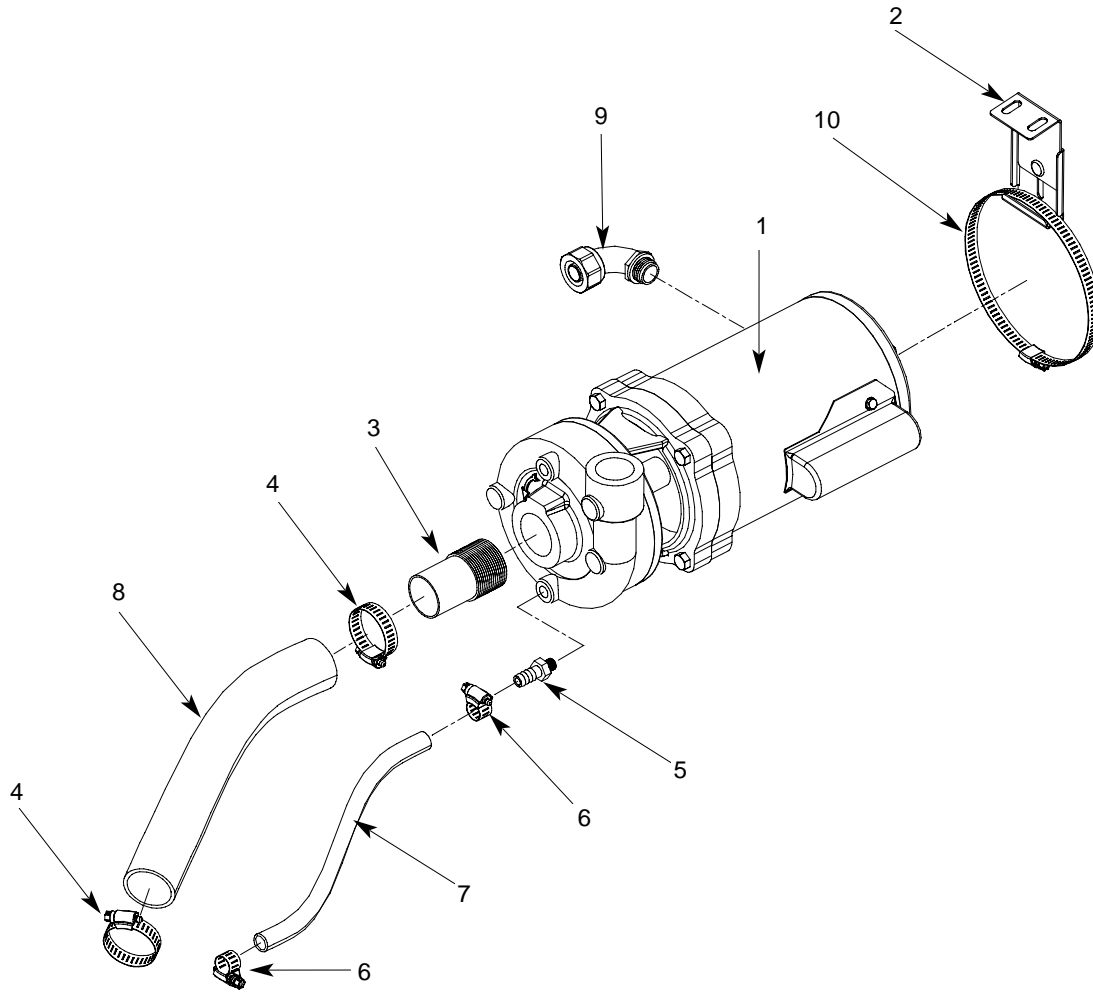
TO TAKE THE SOLENOID VALVE APART

DISASSEMBLY - These valves may be taken apart by unscrewing the bonnet and the enclosing tube assembly from the valve body assembly. After unscrewing, carefully lift off the bonnet and enclosing tube assembly. Don't drop the plunger. The o-ring seal and diaphragm cartridge can now be lifted out. Be careful not to damage the machined faces while the valve is apart.

TO REASSEMBLE - Place the diaphragm cartridge in the body with the pilot port extension UP. Hold the plunger with the synthetic seat against the pilot port. Make sure the o-ring is in place, then lower the bonnet and enclosing tube assembly over the plunger. Screw the bonnet assembly snugly down on the body assembly.

SECTION 5: PARTS SECTION

CONSERVER XL WASH MOTOR ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Pump & Motor Assembly, 50 HZ	06105-002-19-87
	1	Pump Assembly, 50 HZ	05700-002-85-38
	1	Motor Assembly, 50 HZ	06105-002-85-36
1	1	Pump & Motor Assembly, 60 HZ	06105-002-69-78
	1	Pump Assembly, 60 HZ	05700-002-79-51
	1	Motor Assembly, 60 HZ	06105-002-79-61
2	1	Pump Support Assembly	05700-002-05-88
3	1	Nipple, Pump Outlet	05700-021-33-50
4	2	Clamp, 1 5/16" to 2 1/4"	04730-719-01-37
5	1	Fitting, Brass Elbow	04730-002-18-96
6	2	Clamp, 7/16" to 25/32"	04730-011-36-05
7	1	Hose, 3/8" ID x 12" Long (115 Volt Machine)	05700-002-69-73
7	1	Hose, 3/8" ID x 14" Long (240 Volt Machine)	05700-002-04-40
8	1	Hose, 1 1/2" ID x 7 3/4" Long	05700-111-33-52
9	1	Connector, Liquidtite, 90°	05975-111-01-00
10	1	Clamp, 5 5/8" to 6"	04730-011-34-90
11	2	Locknut, 1/4"-20, with Nylon Insert, S/S	05310-374-01-00

SECTION 5: PARTS SECTION

MOTOR & PUMP ASSEMBLY

Complete Pump & Motor Assembly, 60HZ
06105-002-69-78

Complete Pump & Motor Assembly, 50HZ
06105-002-19-87

Motor Only, 60HZ
06105-002-79-61

Pump Only Assembly, 60HZ
(Area indicated within box, Casing is included)
05700-002-79-51

Pump Only Assembly, 50HZ
(Area indicated within box, Casing is included)
05700-002-85-38

Motor Only, 50HZ
06105-002-85-36

Pump Casing (Not shown), 60HZ
05700-002-85-01

Pump Casing (Not shown), 50HZ
05700-002-41-50

Shim Kit, 60HZ
05330-002-41-28

Case Capscrew, 60HZ
05305-002-81-88

Mechanical Seal, 60HZ
05330-002-34-22

Seal, 50HZ
05330-002-06-21

Case O-Ring, 60HZ
05330-002-81-83

Seal Plate, 60HZ
05700-002-81-87

Gasket, 50HZ
05330-002-41-48

Impeller Assembly, 60HZ
05700-002-81-86

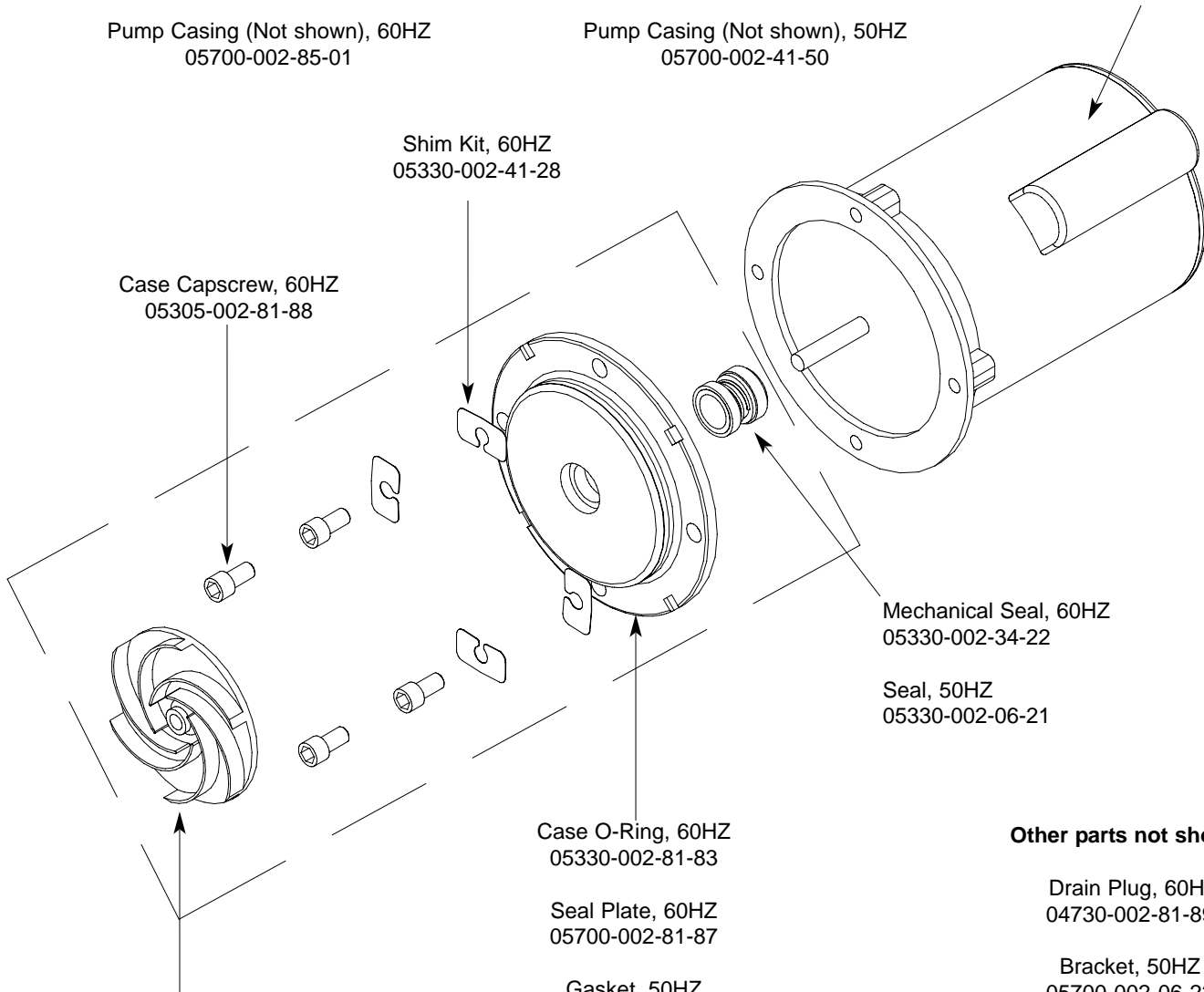
Impeller Assembly, 50HZ
05700-002-41-49

Other parts not shown.

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

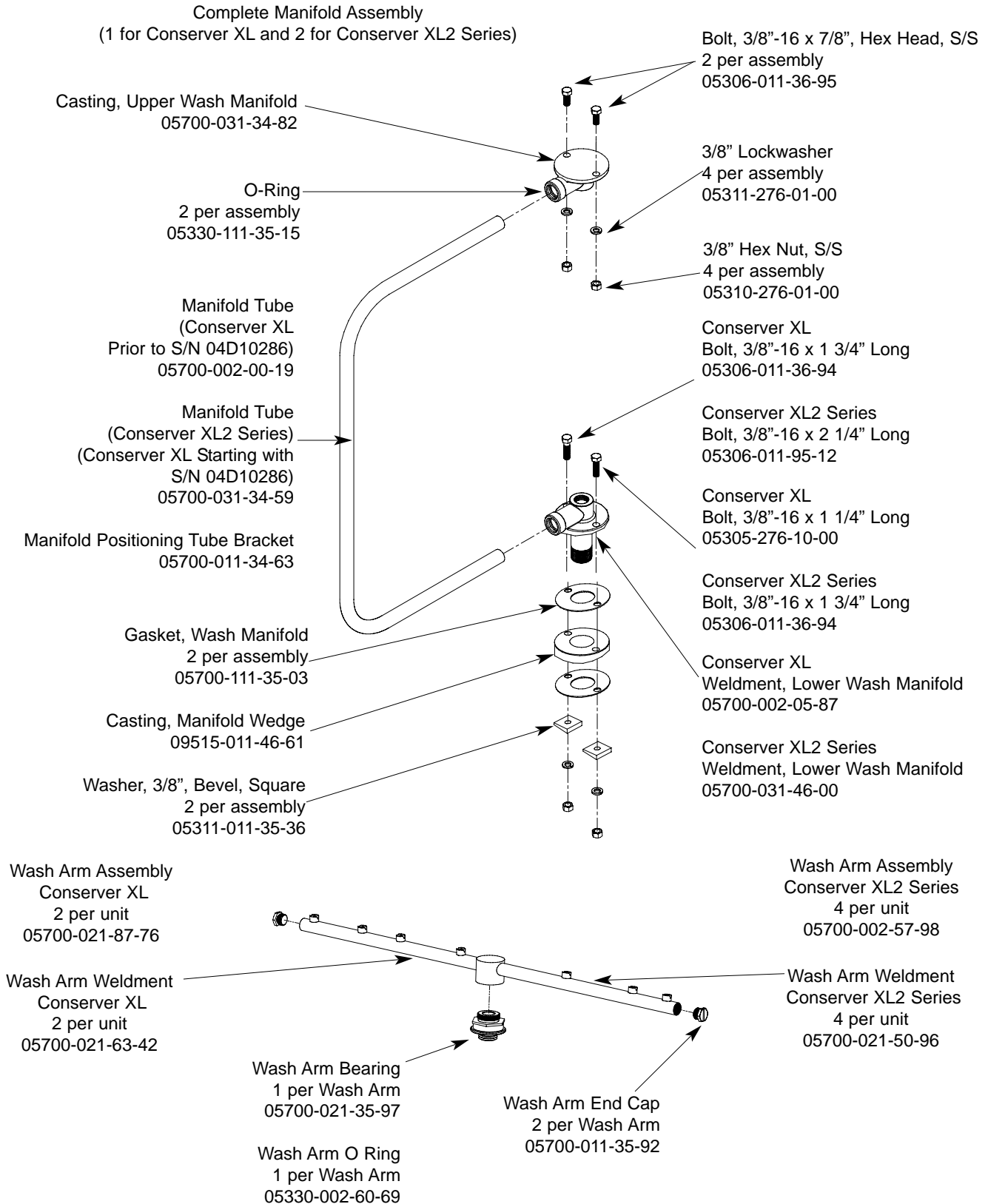
Bracket, 50HZ
05700-002-06-22

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



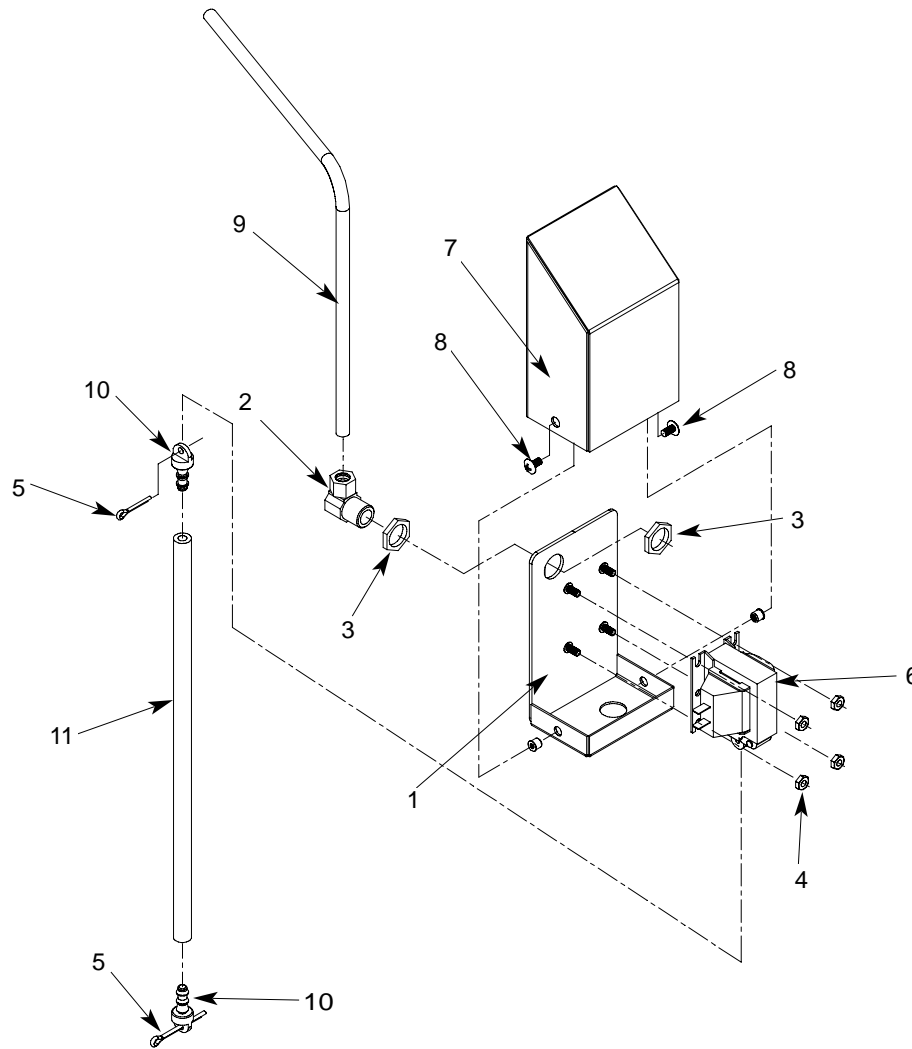
SECTION 5: PARTS SECTION

WASH MANIFOLD ASSEMBLY



SECTION 5: PARTS SECTION

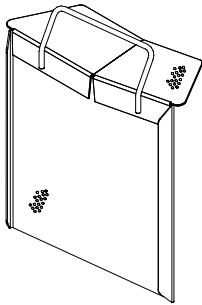
DRAIN SOLENOID ASSEMBLY



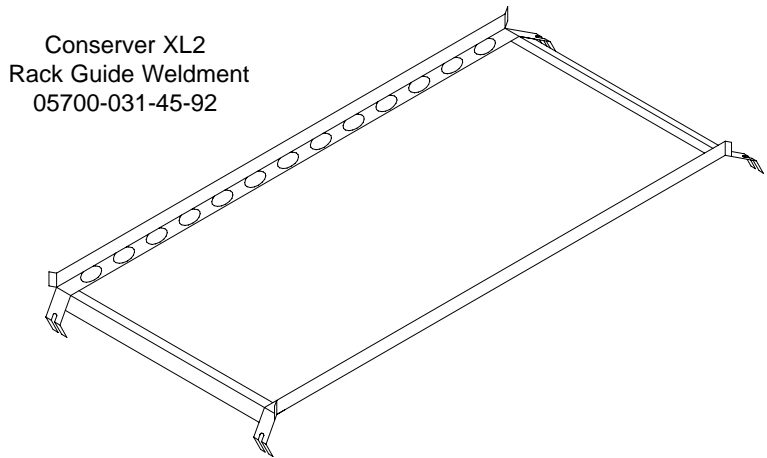
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Solenoid Bracket Weldment, Conservor XL (Prior to S/N 04D10286)	05700-002-05-91
1	1	Solenoid Housing Weldment, Conservor XL (Starting with S/N 04D10286)	05700-002-79-29
2	1	Elbow, 3/8" Tube x 3/8"-18 NPT	04730-206-23-00
3	2	Locknut, Brass, 3/8"-18 NPT	05700-000-66-01
4	4	Locknut, 10-24 S/S Hex with Nylon Insert	05310-373-01-00
5	2	Cotter Pin, 3/32 x 3/4" Long	05315-207-01-00
6	1	Drain, Solenoid, 115 V	04810-200-11-00
6	1	Kit, Drain, Solenoid, 115 V	06401-003-08-58
6	1	Drain, Solenoid, 240 V	04810-111-87-74
6	1	Kit, Drain, Solenoid, 240 V	06401-003-08-59
7	1	Cover, Solenoid Weldment	05700-002-05-90
8	2	Screw, 10-24 x 3/8", Phillips Head	05305-173-03-00
9	1	Solenoid Conduit, Conservor XL (Prior to S/N 04D10286)	05700-002-04-55
9	1	Solenoid Conduit, Conservor XL (Starting with S/N 04D10286)	05700-002-92-47
10	2	Hose Eye	05700-002-05-61
11	1	Hose, Plunger Link	05700-002-05-70

SECTION 5: PARTS SECTION

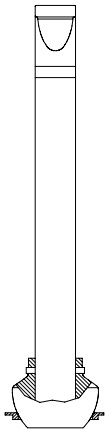
MISCELLANEOUS PARTS



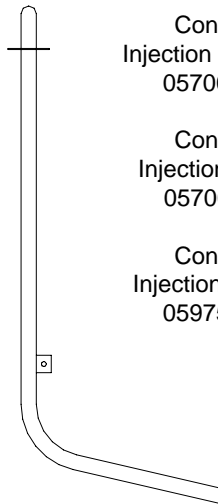
Conserver XL2
Intake Pump Strainer Weldment
05700-031-45-26



Conserver XL2
Rack Guide Weldment
05700-031-45-92



Stand Pipe Assembly
05700-031-35-55

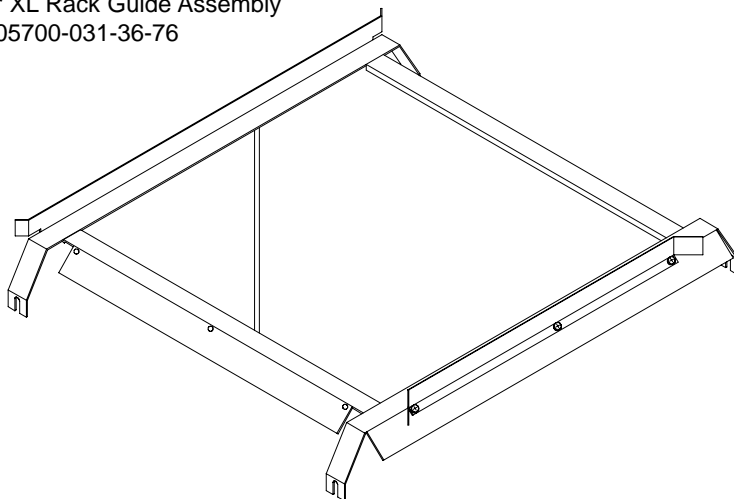


Conserver XL2
Injection Tube Weldment
05700-002-21-52

Conserver XL2
Injection Tube Gasket
05700-011-45-36

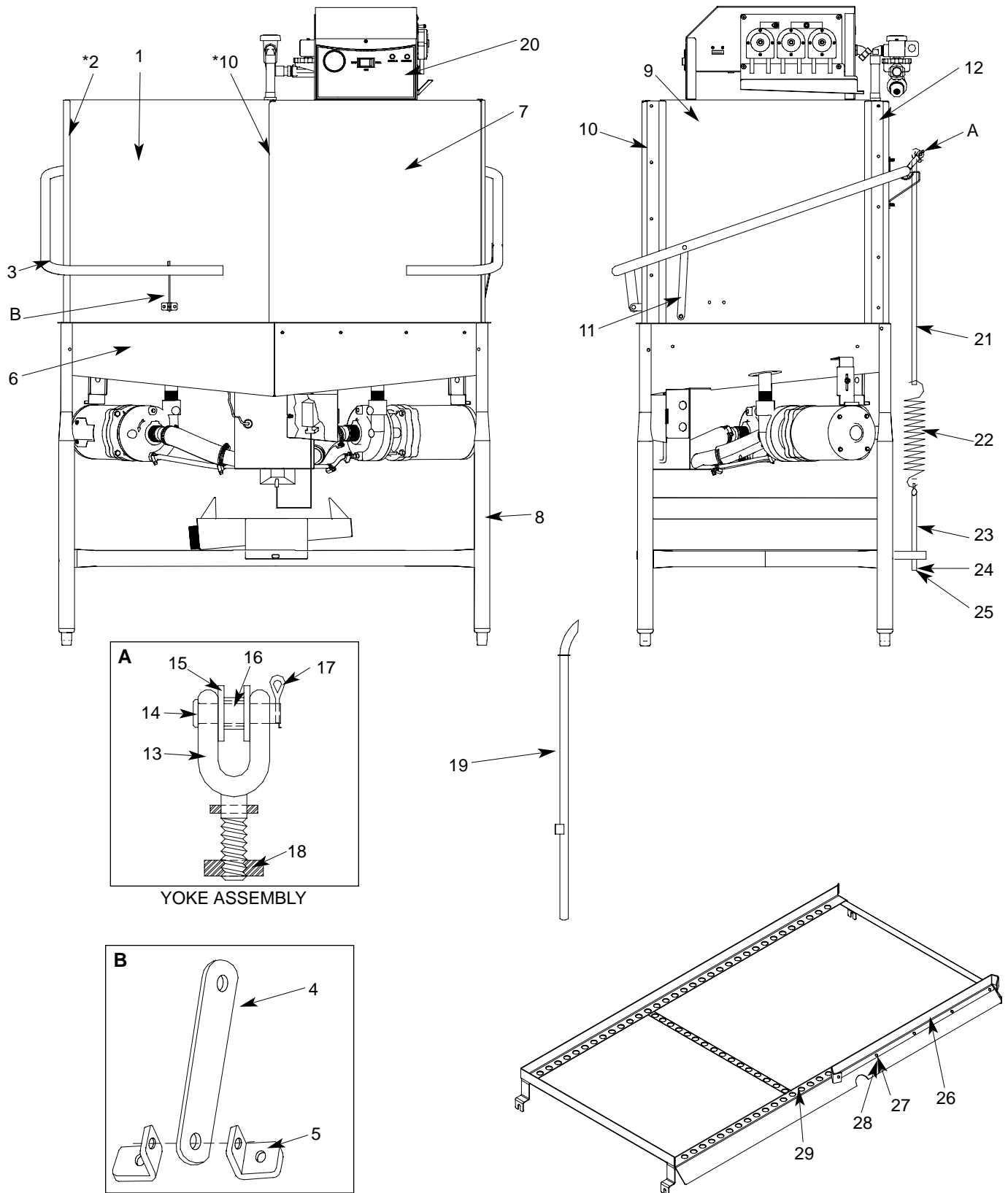
Conserver XL2
Injection Tube Bushing
05975-002-47-54

Conserver XL Rack Guide Assembly
05700-031-36-76



SECTION 5: PARTS SECTION

CML ASSEMBLY OPTIONS



SECTION 5: PARTS SECTION

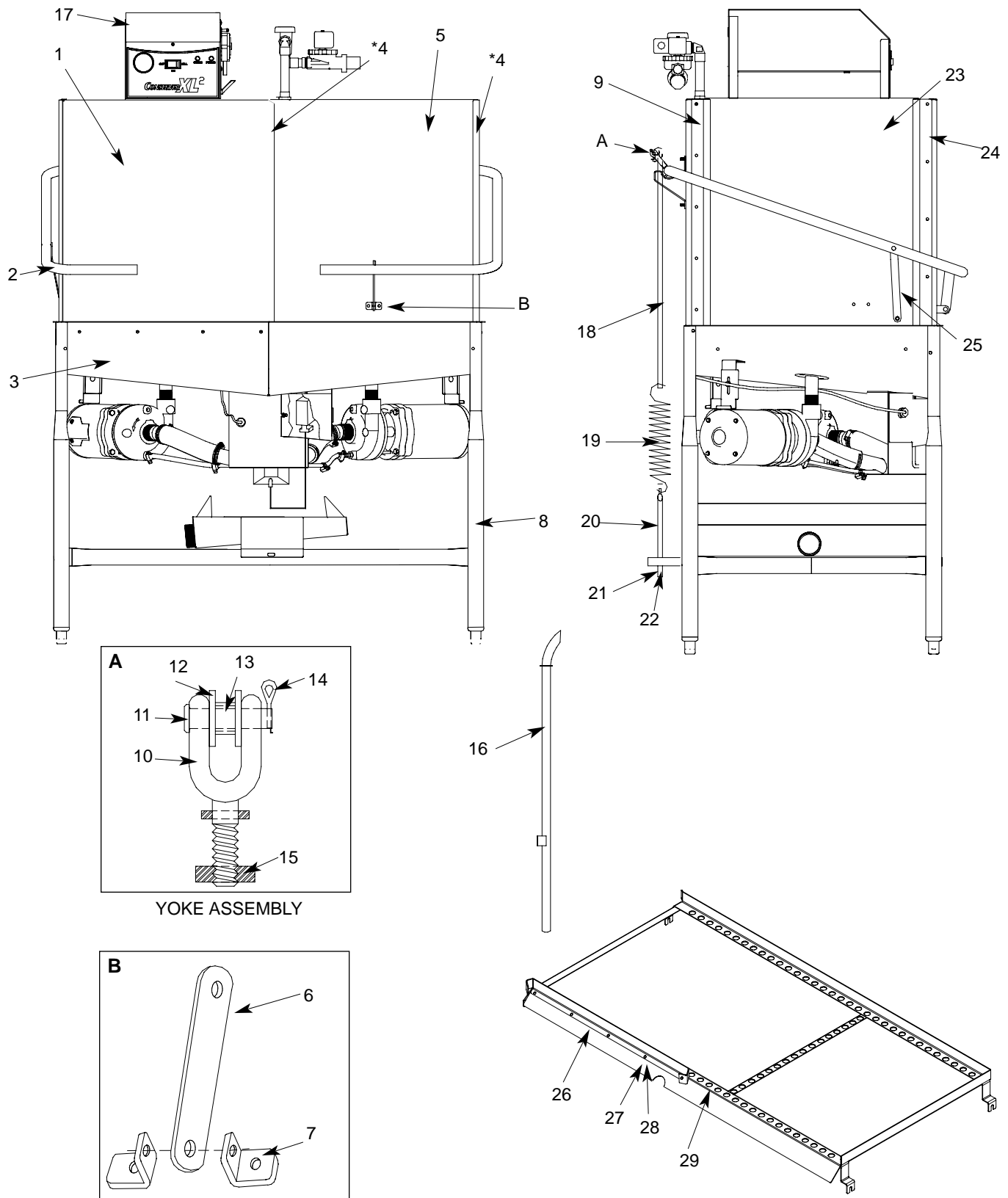
CML ASSEMBLY OPTIONS (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Front Door Assembly	05700-003-01-62
	1	Front Door	05700-003-01-61
	2	Door Glides UHMW	05700-111-33-59
2	1	Inner Door Guide	05700-002-07-21
3	1	Cantilever Arm Assembly	05700-002-07-69
	1	Cantilever Arm Weldment	05700-002-09-14
	2	Plug	05340-011-35-00
	2	Spring Pin, 1/4" Dia. X 1 1/8" Long	05315-407-06-00
	2	Yoke Assembly	05700-000-75-77
4	1	Hinge, Slotted	05700-002-07-39
5	2	Front Door Bracket	05700-002-07-37
6	1	Tub Weldment	05700-002-72-64
7	1	Hood Weldment	05700-002-72-67
8	1	Frame Weldment	05700-002-61-22
9	1	Right Door Assembly	05700-002-08-63
	1	Right Door Weldment	05700-002-08-61
	2	Door Glides UHMW	05700-111-33-59
	1	Magnet, Reed Switch	05930-111-51-68
	2	Locknut, 8-32 Hex, with Nylon Insert	05310-272-02-00
10	2	Front Door Guide	05700-021-44-94
11	1	Bracket, Side Door Connecting	05700-002-07-33
12	1	Right Rear Door Guide	05700-021-84-70
A		Yoke Assembly	05700-000-75-77
13	1	Yoke	05700-000-75-78
14	1	Pin, Clevis 5/16" x 1 3/8"	05315-700-01-00
15	2	Washer, Nylon	05311-369-03-00
16	1	Bushing	03120-100-03-00
17	1	Cotter Pin, 3/32" x 3/4"	05315-207-01-00
18	1	Nut, 3/8"-16 S/S, Center Locknut	05310-256-04-00
19	1	Chemical Feed Tube Weldment	05700-002-08-14
	1	Gasket, Chemical Feed Tube	05700-011-45-36
	1	Bushing, 3/4" Hole Snap	05975-002-47-54
20	1	Control Box Assembly	N/A
21	2	Spring Rod	05700-001-28-18
22	2	Spring	05340-109-02-00
23	2	Bolt, Hanger Eye	05306-956-05-00
24	2	Washer, Impeller	05311-176-02-00
25	4	Nut, Hex 3/8"-16 S/S	05310-276-01-00
		Rack Rail Assembly	05700-002-08-64
26	1	Rack Rail Weldment	05700-002-07-65
27	3	Locknut, 10-24 Hex, S/S, with Nylon Insert	05310-373-01-00
28	3	Screw, 10-24 x 1/2" Long S/S	05305-173-18-00
29	1	Guard, Front Track	05700-002-07-44

* Represents an item not shown.

SECTION 5: PARTS SECTION

CMR ASSEMBLY OPTIONS



SECTION 5: PARTS SECTION

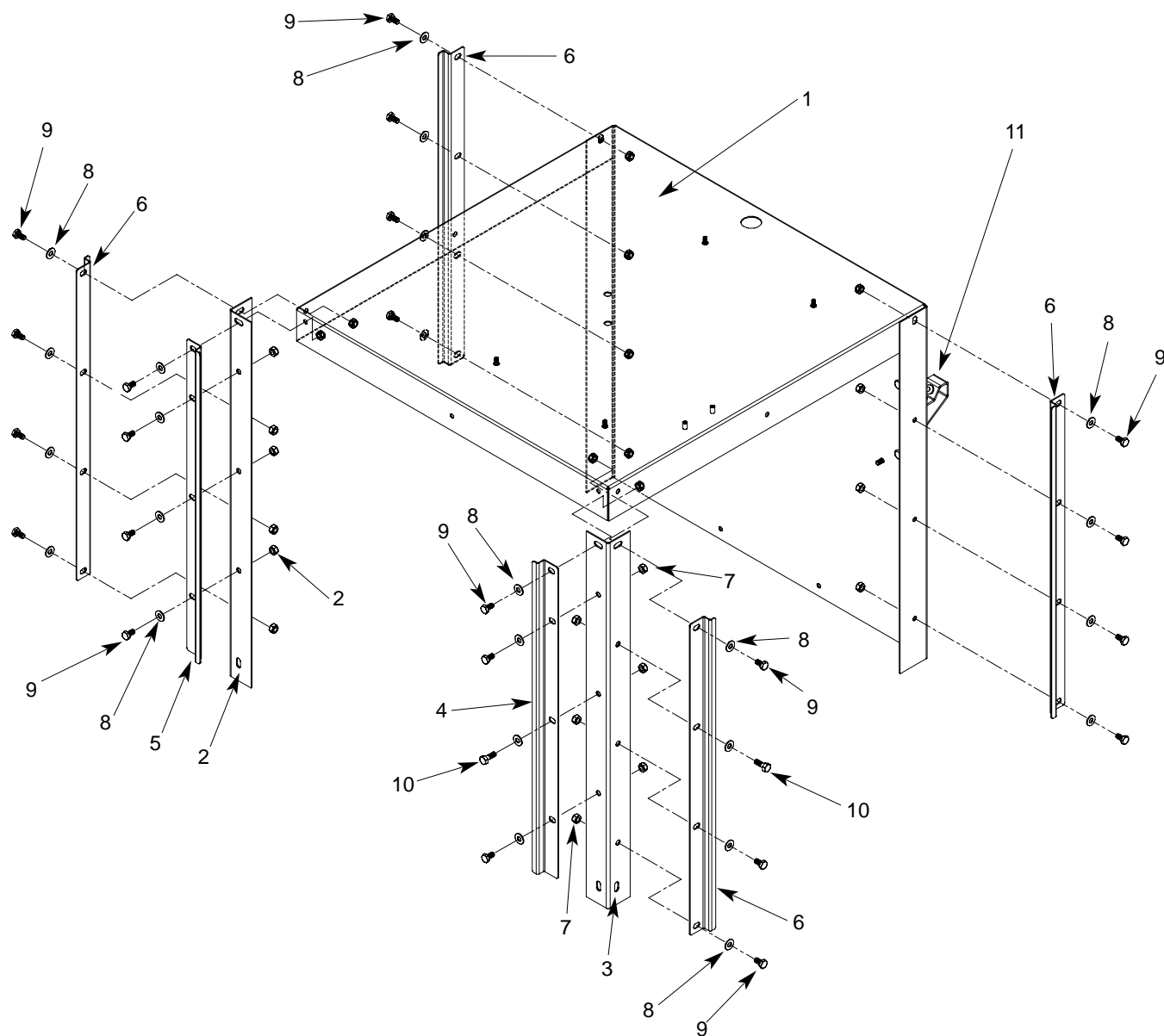
CMR ASSEMBLY OPTIONS (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment (Conserver XL2-CMR Shown)	05700-002-54-36
1	1	Hood Weldment (Conserver AXL2-CMR with Centered Control Box Not Shown)	05700-003-38-90
2*	1	Cantilever Arm Assembly	05700-002-07-70
	1	Cantilever Arm Weldment	05700-002-09-13
	2	Plug	05340-011-35-00
	2	Spring Pin, 1/4" Dia. x 1-1/8" Long	05315-407-06-00
	2	Yoke Assembly	05700-000-75-77
3	1	Tub Weldment	05700-002-54-34
4*	2	Inner Door Guide	05700-002-07-21
5	1	Front Door Assembly	05700-003-01-62
	1	Front Door	05700-003-01-61
	2	Door Glide, UHMW	05700-111-33-59
6	1	Hinge, Slotted	05700-002-07-39
7	2	Front Door Bracket	05700-002-07-37
8	1	Frame Weldment	05700-002-61-22
9	1	Left Rear Door Guide	05700-021-84-71
A		Yoke Assembly	05700-000-75-77
10	1	Yoke	05700-000-75-78
11	1	Pin, Clevis, 5/16" x 1-3/8"	05315-700-01-00
12	2	Washer, Nylon	05311-369-03-00
13	1	Bushing	03120-100-03-00
14	1	Cotter Pin, 3/32" x 3/4"	05315-207-01-00
15	1	Nut, 3/8"-16, SS, Center Locknut	05310-256-04-00
16	1	Chemical Feed Tube Weldment	05700-002-08-14
	1	Gasket, Chemical Feeding Tube	05700-011-45-36
	1	Bushing, 3/4" Hole, Snap	05975-002-47-54
17	1	Control Box Assembly	N/A
18	2	Spring Rod	05700-001-28-18
19	2	Spring	05340-109-02-00
20	2	Bolt, Hanger Eye	05306-956-05-00
21	2	Washer, Impeller	05311-176-02-00
22	4	Nut, Hex, 3/8"-16, SS	05310-276-01-00
23	1	Left Door Assembly	05700-002-08-84
	1	Left Door Weldment	05700-002-08-60
	2	Door Glide, UHMW	05700-111-33-59
	1	Magnet, Reed Switch	05930-111-51-68
	2	Locknut, 8-32 Hex with Nylon Insert	05310-272-02-00
24	1	Front Door Guide	05700-021-44-94
25	1	Bracket, Side Door Connecting	05700-002-07-33
		Rack Rail Assembly	05700-002-08-85
26	1	Rack Rail Weldment	05700-002-07-64
27	3	Locknut, 10-24 with Nylon Insert	05310-373-01-00
28	3	Screw, 10-24 x 1/2" Long SS	05305-173-18-00
29	1	Guard, Front Track	05700-002-07-44

* Represents an item not shown.

SECTION 5: PARTS SECTION

CONSERVER XL HOOD ASSEMBLY (Prior to S/N 04D10286)

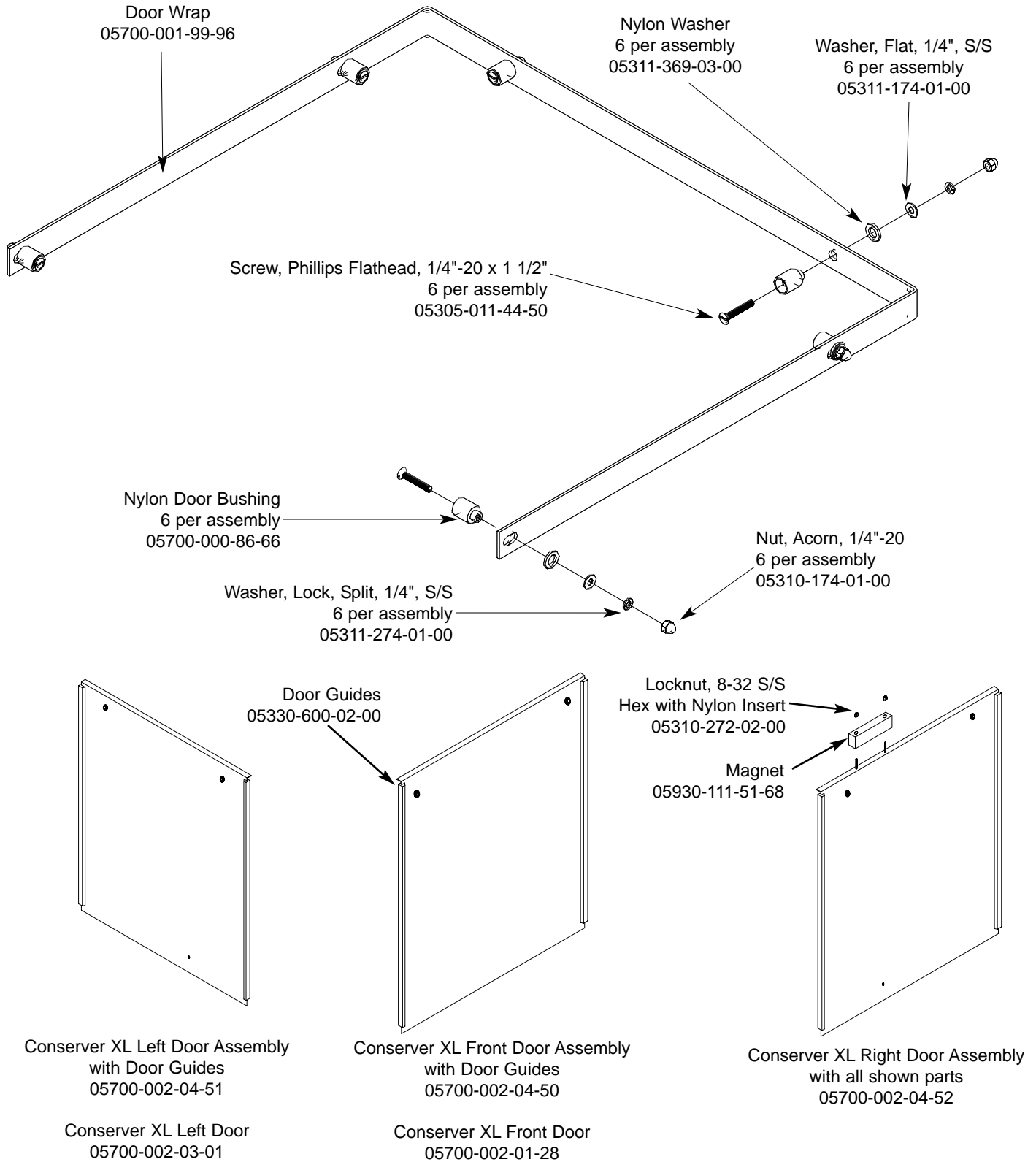


ITEM	QTY	DESCRIPTION
1	1	Hood Weldment
2	1	Support, Left, Hood
3	1	Support, Right, Hood
4	1	Right Door Guide
5	1	Left Door Guide
6	4	Door Guide
7	26	Locknut, 1/4"-20 with Nylon Insert, S/S
8	26	Washer, 1/4"-20
9	22	Bolt, 1/4"-20 x 1/2" Long
10	2	Bolt, 1/4"-20 x 3/4" Long
11	2	Support Bracket
11	6	Wear Buttons

Mfg. No.
05700-002-04-44
05700-002-00-18
05700-002-00-17
05700-002-05-74
05700-002-05-75
05700-002-05-73
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09515-003-15-64
05700-011-88-01

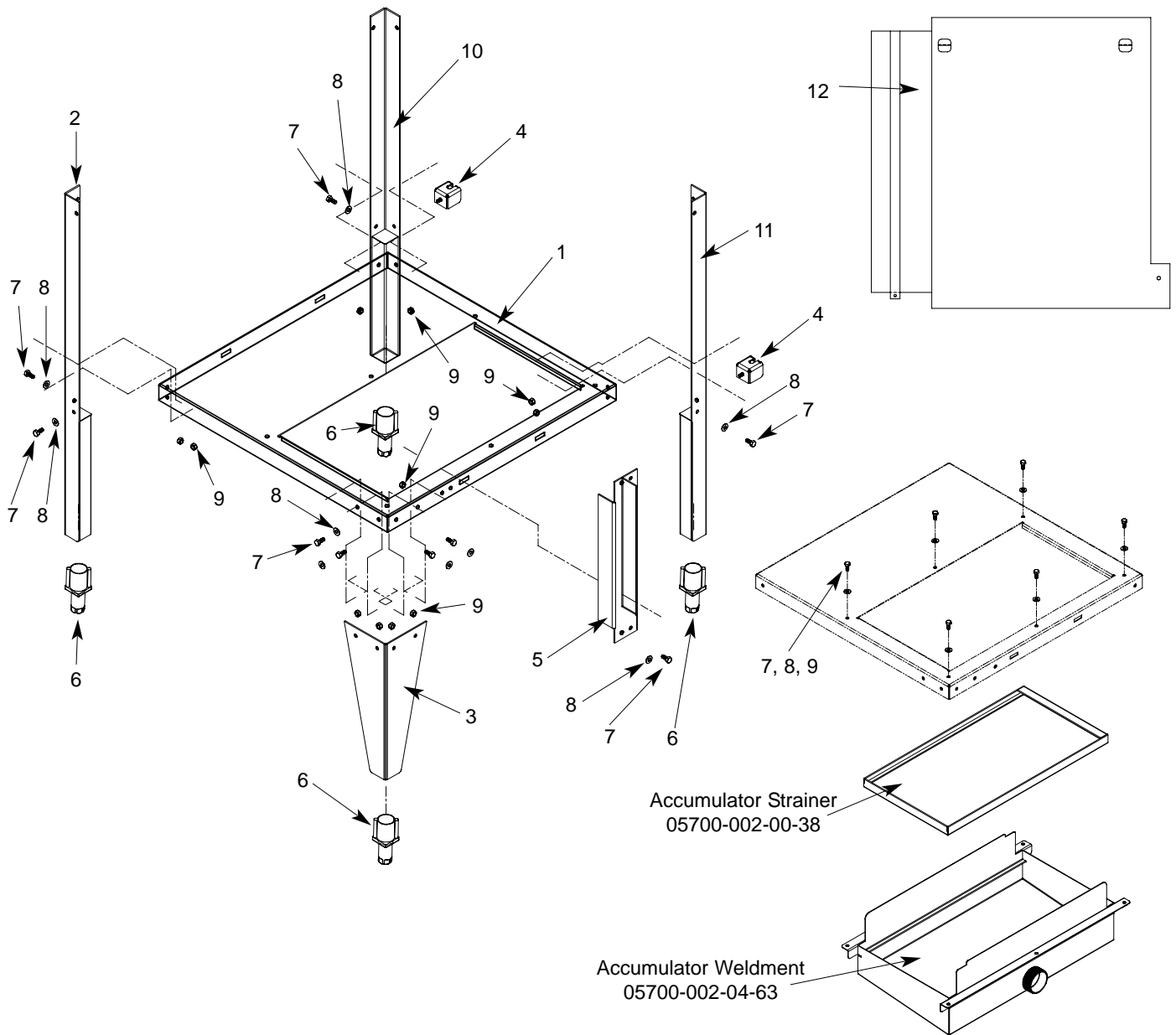
SECTION 5: PARTS SECTION

CONSERVER XL DOOR & WRAP ASSEMBLIES (Prior to S/N 04D10286)



SECTION 5: PARTS SECTION

CONSERVER XL FRAME ASSEMBLY & LEFT HANDED FALSE PANEL WELDMENT (Prior to S/N 04D10286)



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Lower Frame, Conserver XL	05700-001-99-80
2	1	Leg, Front Left Frame Assembly	05700-002-04-36
3	1	Leg, Short, Conserver XL	05700-002-03-72
4	2	Bracket, Spring Mounting	05700-002-04-37
5	1	Tub Support	05700-001-99-83
6	4	Bullet Feet	05340-108-02-06
7	-	Bolt, 1/4"-20 x 1/2" Long	05305-274-02-00
8	-	Washer, Flat, 1/4" ID	05311-174-01-00
9	11	Locknut, 1/4"-20, with Nylon Insert, S/S	05310-374-01-00
10	1	Leg, Rear Left Frame Assembly	05700-002-24-69
11	1	Leg, Rear Right Frame Assembly	05700-002-23-96
12	1	Left Handed False Panel Weldment	05700-002-30-95

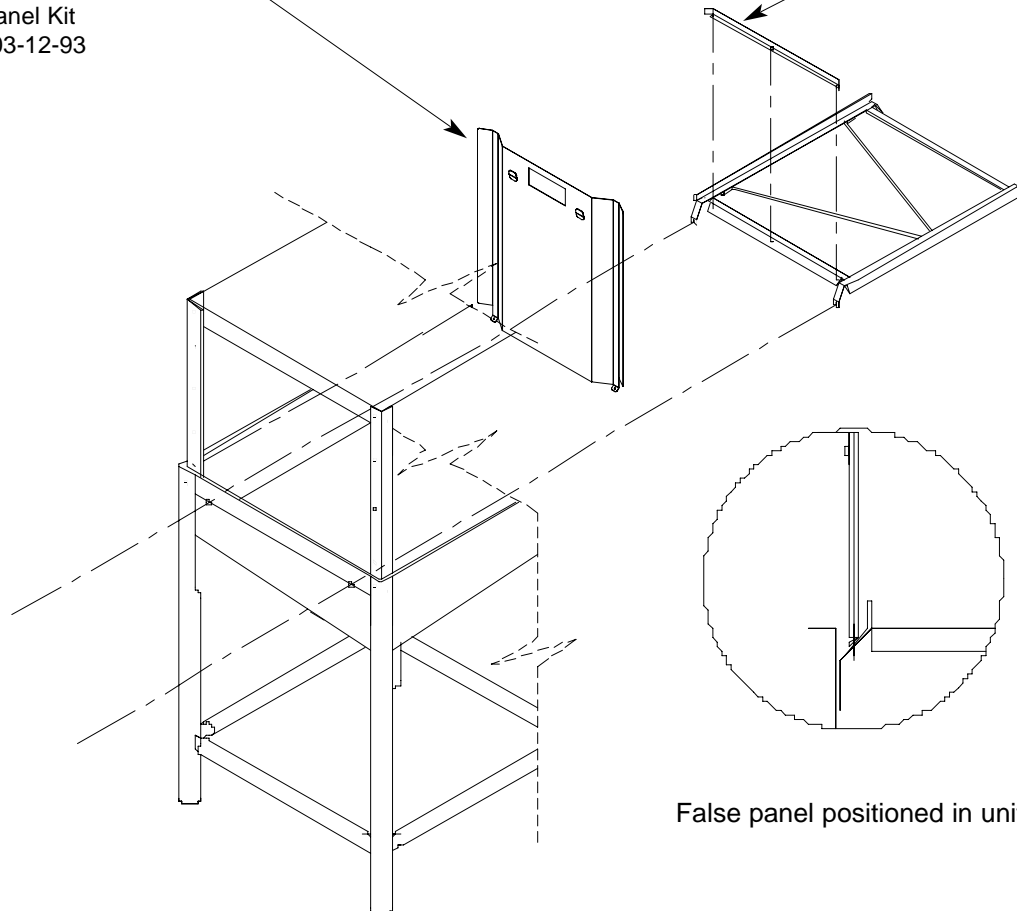
SECTION 5: PARTS SECTION

FALSE PANEL INSTALLATION

False Panel Weldment
05700-002-51-66

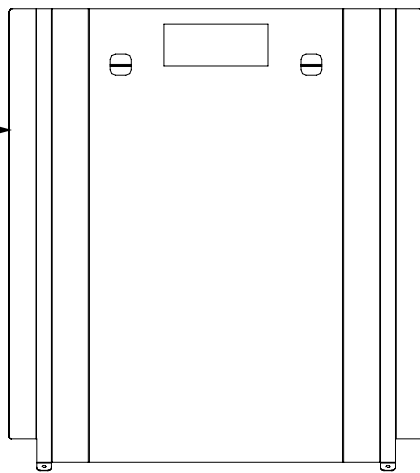
False Panel Kit
05700-003-12-93

Rack rail removed & repositioned for a corner operation.



False panel positioned in unit.

Insert this
side first.



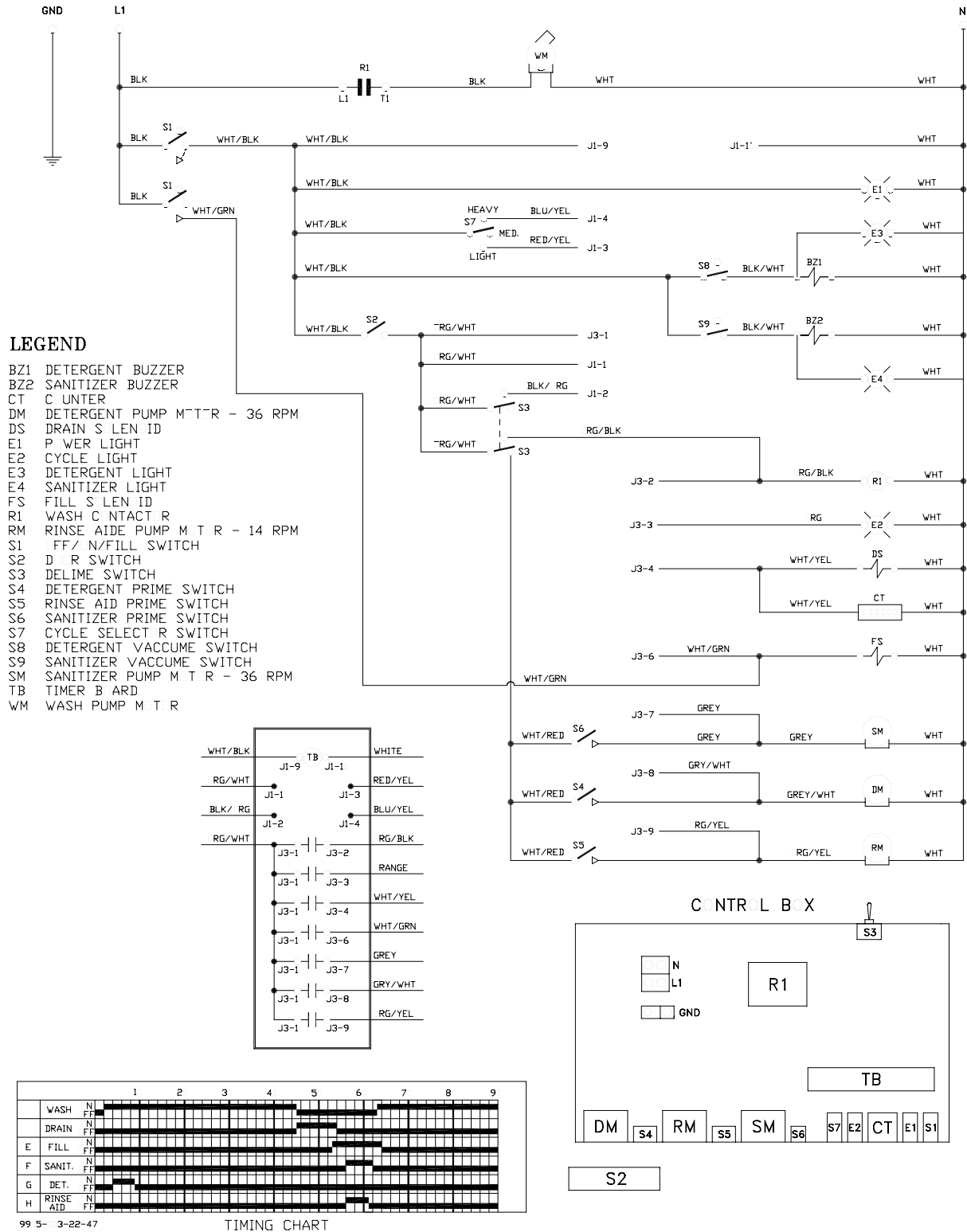
Bottom of side panel.

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

SECTION 6: ELECTRICAL SCHEMATICS

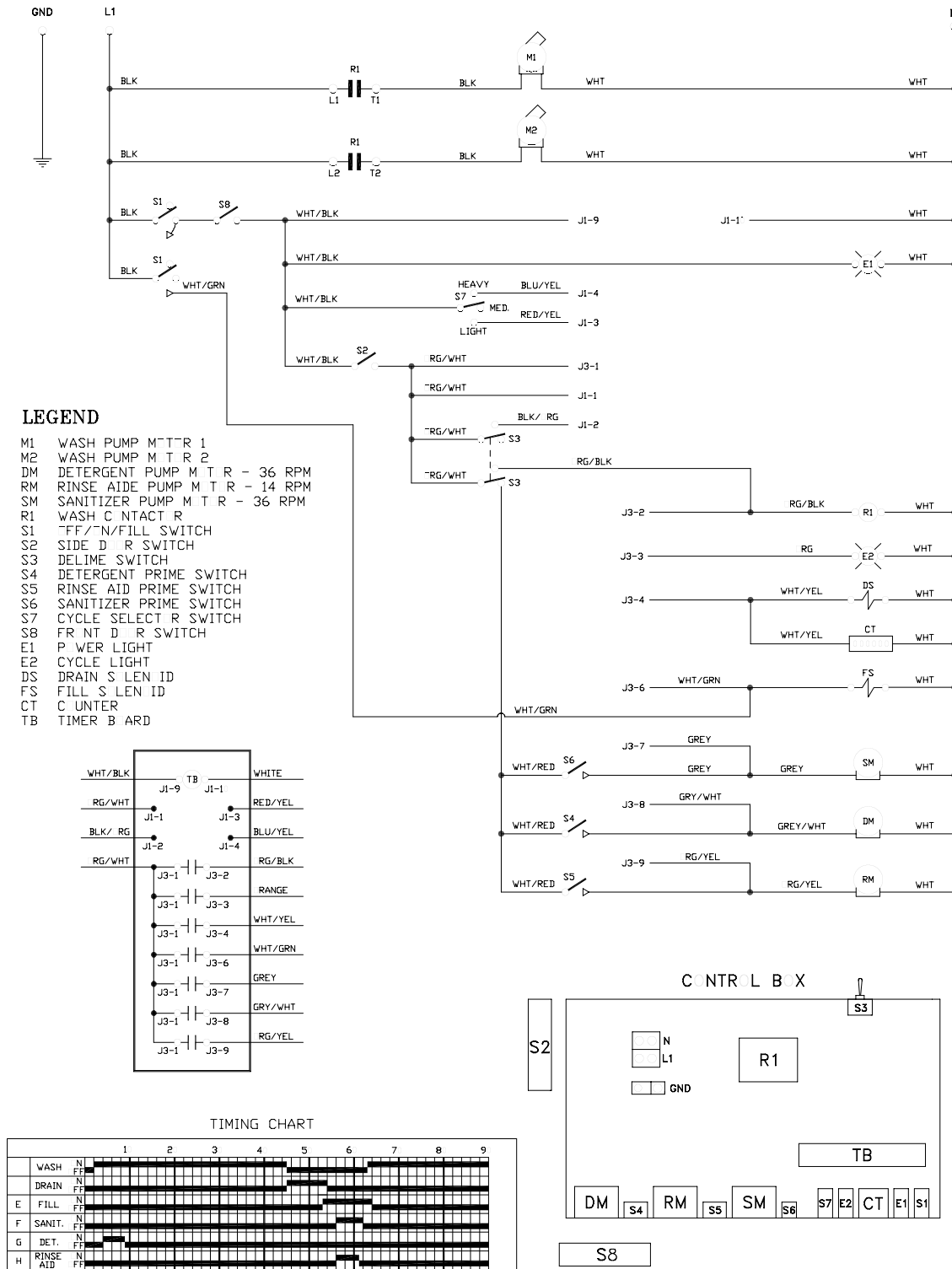
SECTION 6: ELECTRICAL SCHEMATICS

CONSERVER AXL 115 VOLT - 60 HERTZ - SINGLE PHASE



SECTION 6: ELECTRICAL SCHEMATICS

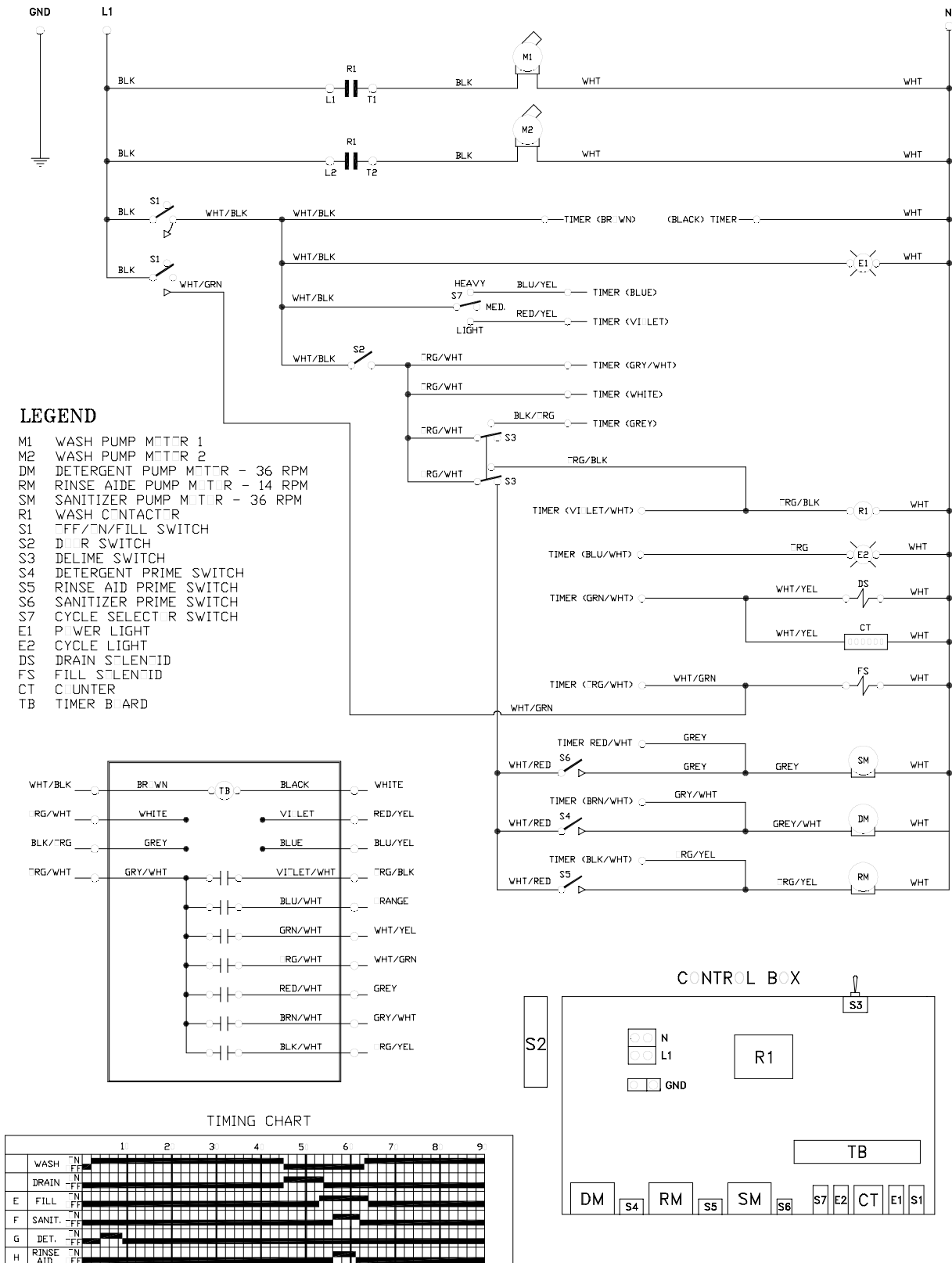
CONSERVER AXL2 115 VOLT - 60 HERTZ - SINGLE PHASE



99 5- 3-22-49

SECTION 6: ELECTRICAL SCHEMATICS

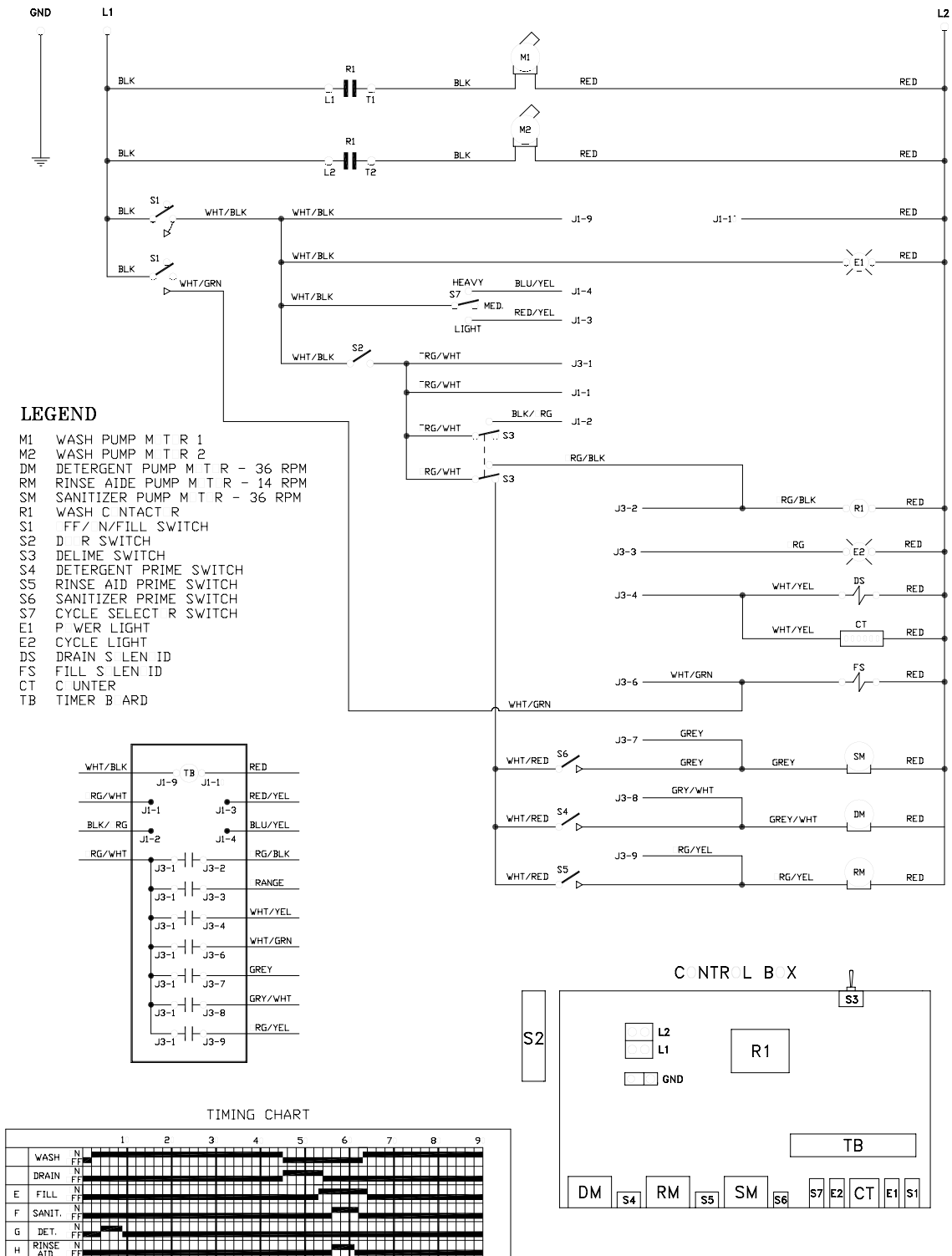
CONSERVER AXL2-CML/CMR 115 VOLT - 60 HERTZ - SINGLE PHASE



99-5-113-22-51

SECTION 6: ELECTRICAL SCHEMATICS

CONSERVER AXL2-CML/CMR 208-230 VOLT - 60 HERTZ - SINGLE PHASE



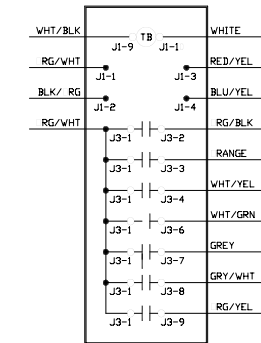
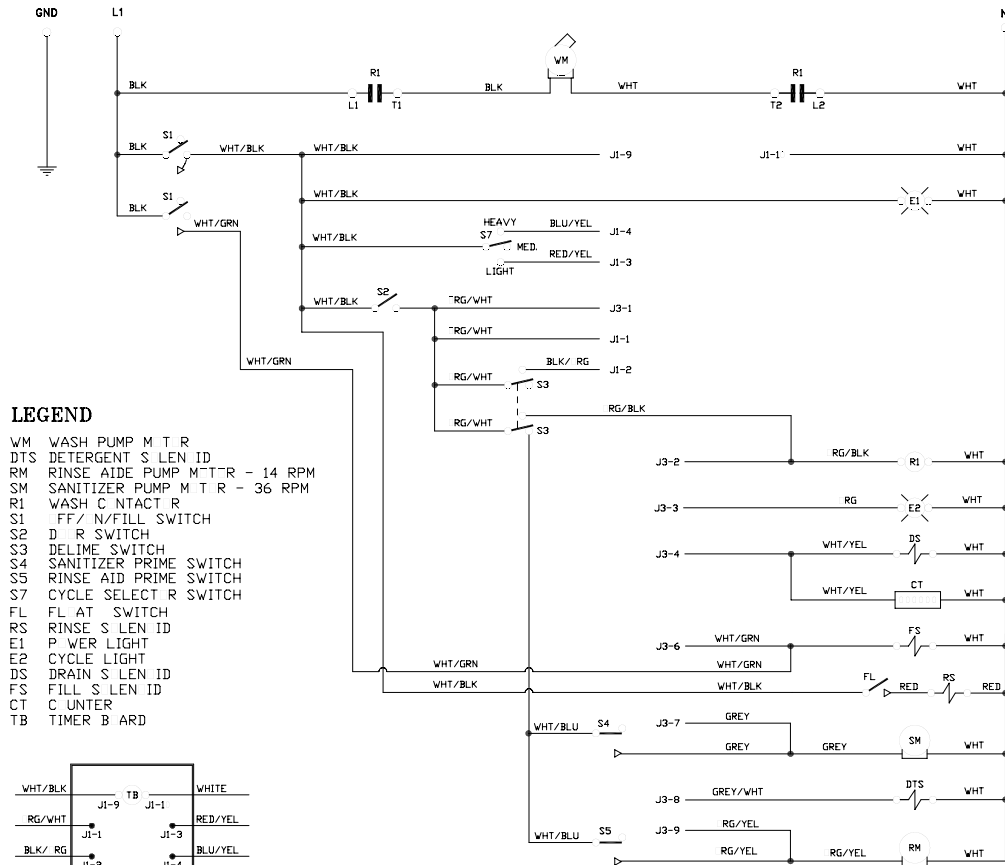
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SECTION 6: ELECTRICAL SCHEMATICS

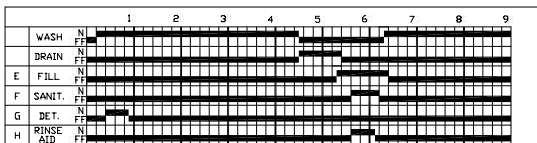
CONSERVER AXLS 115 VOLT - 60 HERTZ - SINGLE PHASE

CONSERVER XL (Bowl Dispenser Option) ELECTRICAL DIAGRAM

115 V.LTS 60 HERTZ 1 PHASE

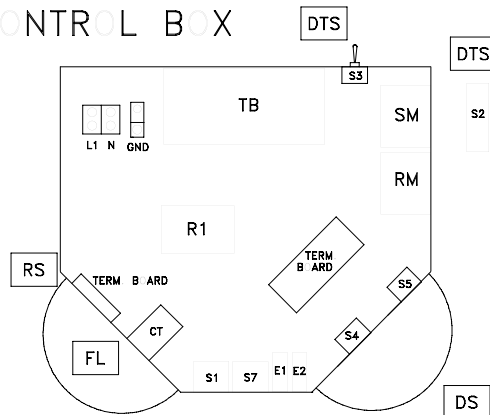


TIMING CHART



99 5- 3-24-34

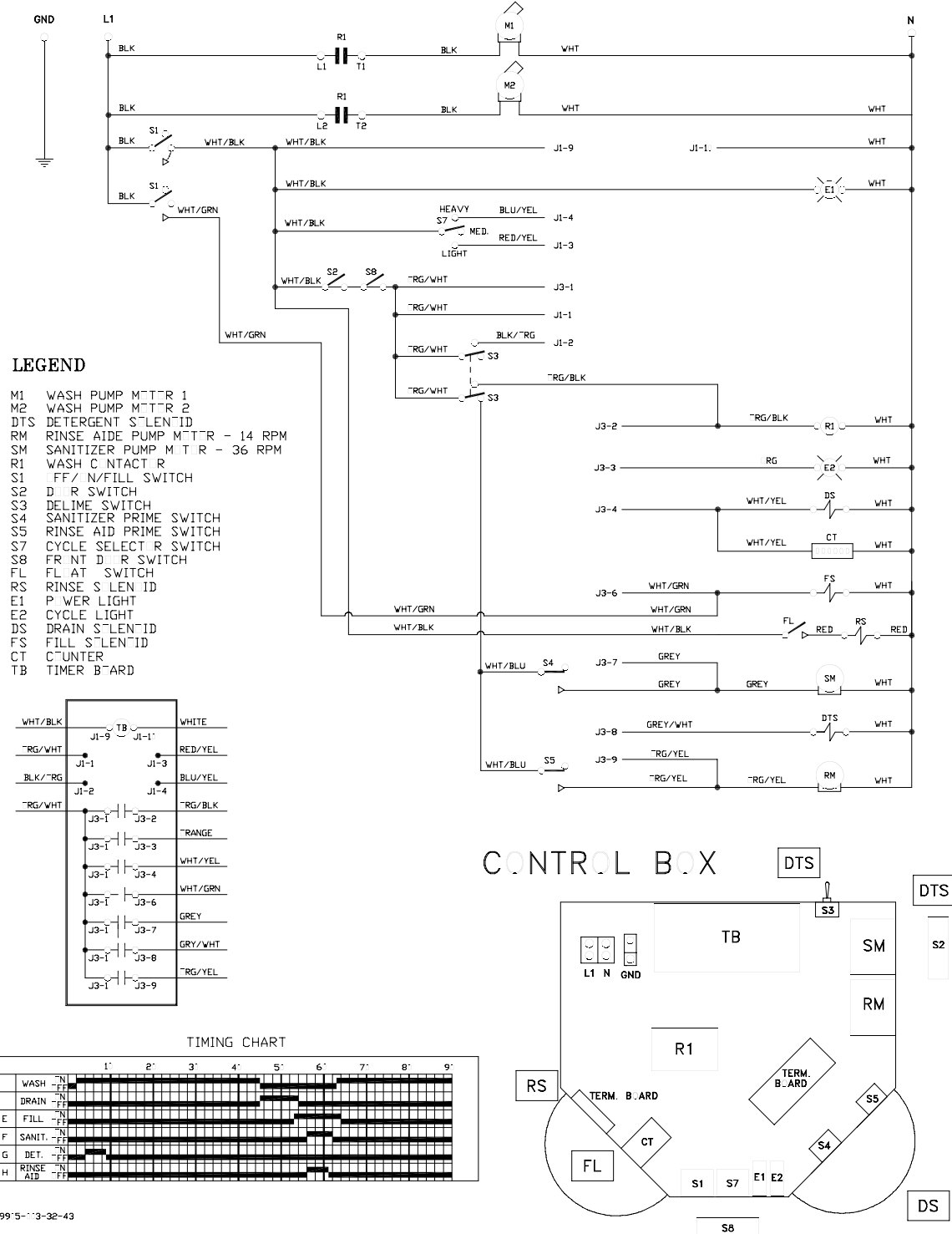
CONTROL BOX



SECTION 6: ELECTRICAL SCHEMATICS

CONSERVER AXLS2 115 VOLT - 60 HERTZ - SINGLE PHASE

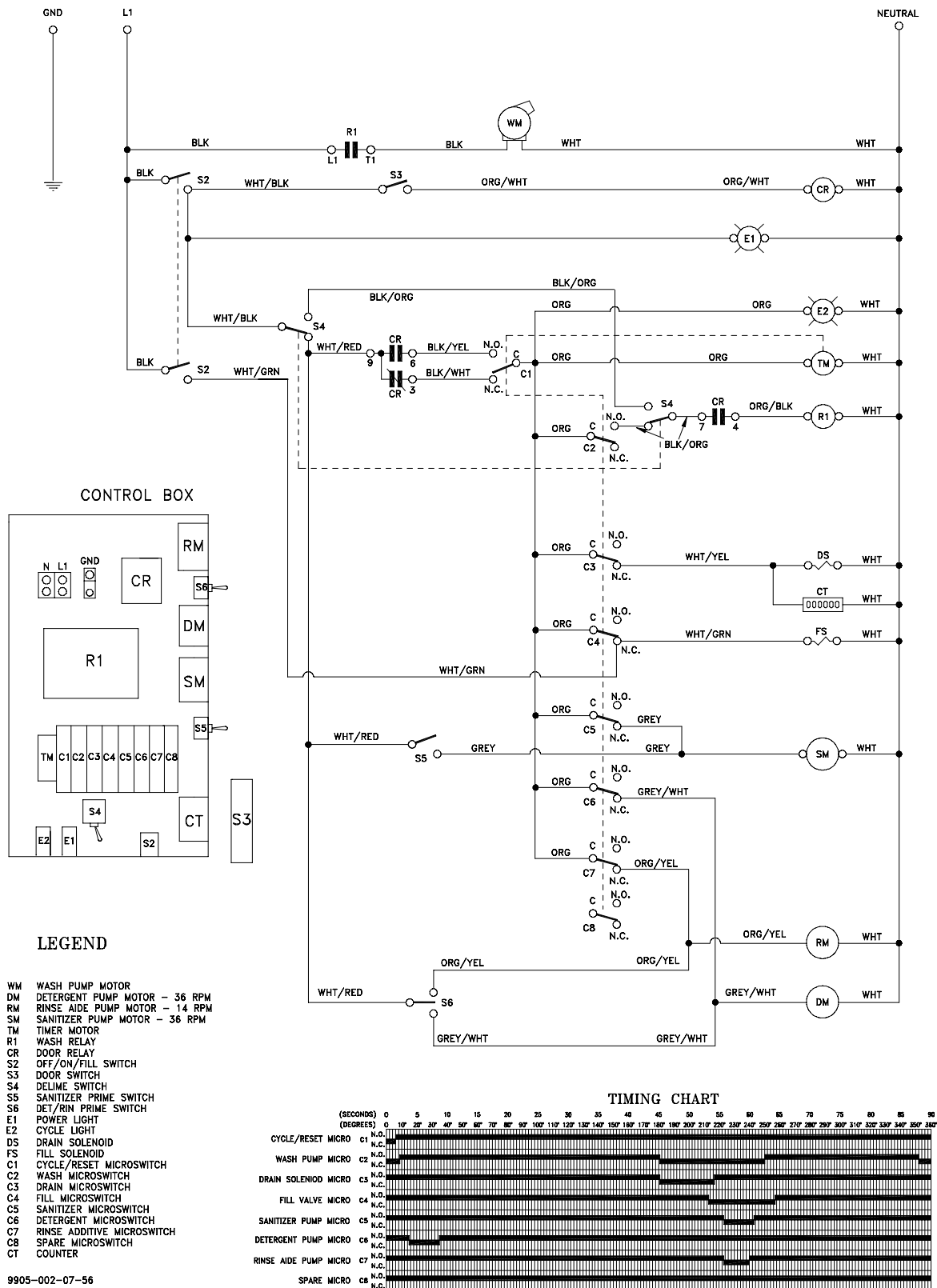
CONSERVER XL 2 (Bowl Dispenser Option) ELECTRICAL DIAGRAM 115 VOLTS 60 HERTZ 1 PHASE



99'S-113-32-43

SECTION 6: ELECTRICAL SCHEMATICS

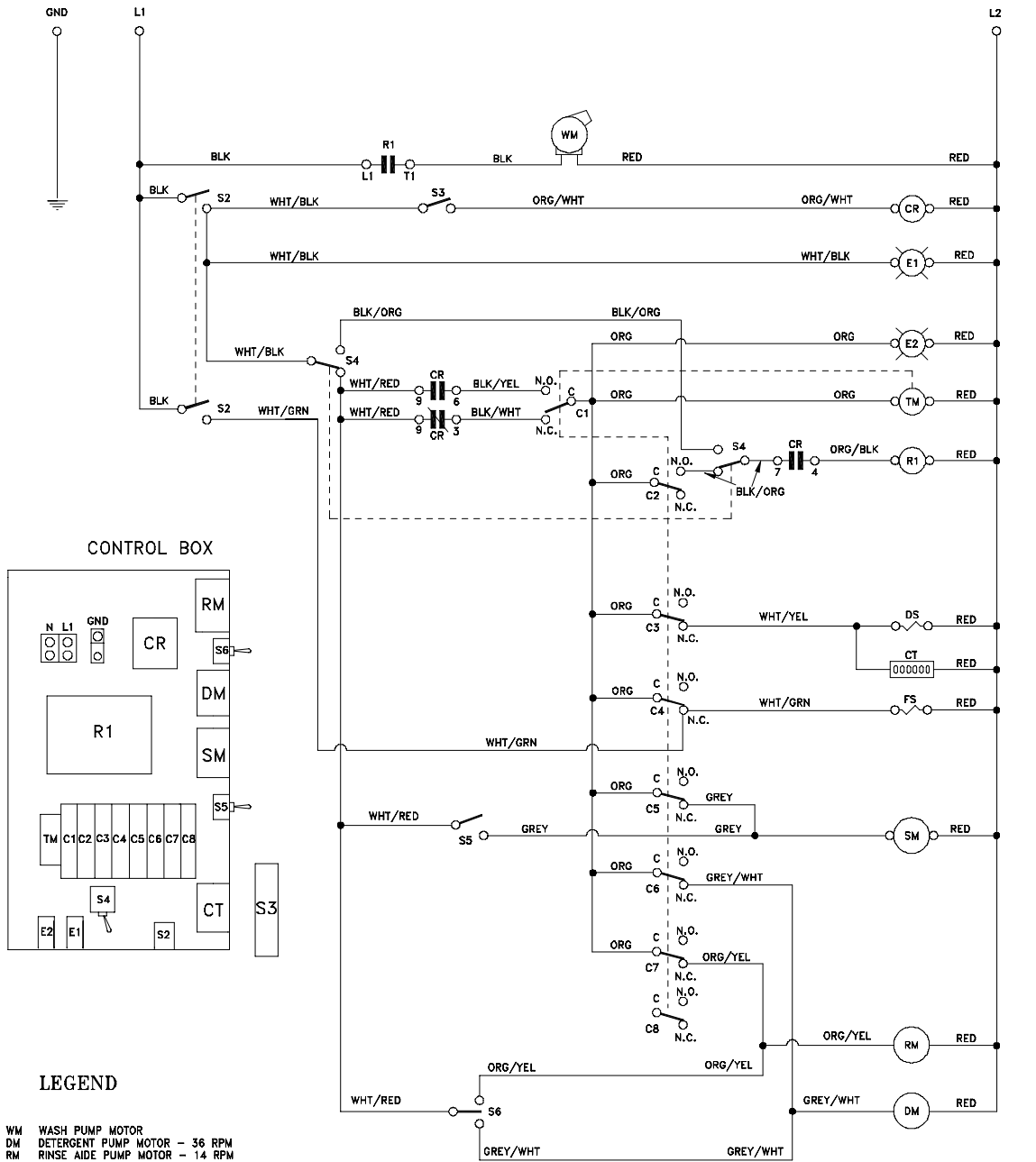
CONSERVER XL (MECHANICAL TIMER) 115 VOLT - 60 HERTZ - SINGLE PHASE



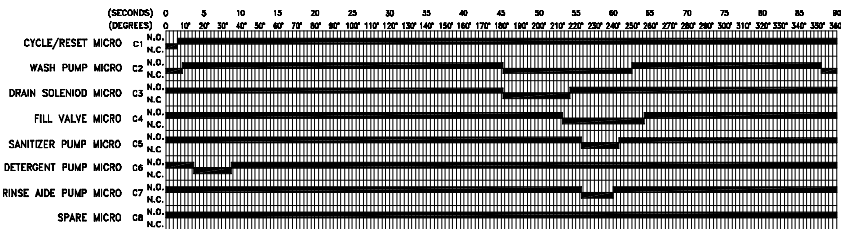
9905-002-07-56

SECTION 6: ELECTRICAL SCHEMATICS

CONSERVER XL2 SERIES (MECHANICAL TIMER) 220 VOLT - 50 HERTZ - SINGLE PHASE



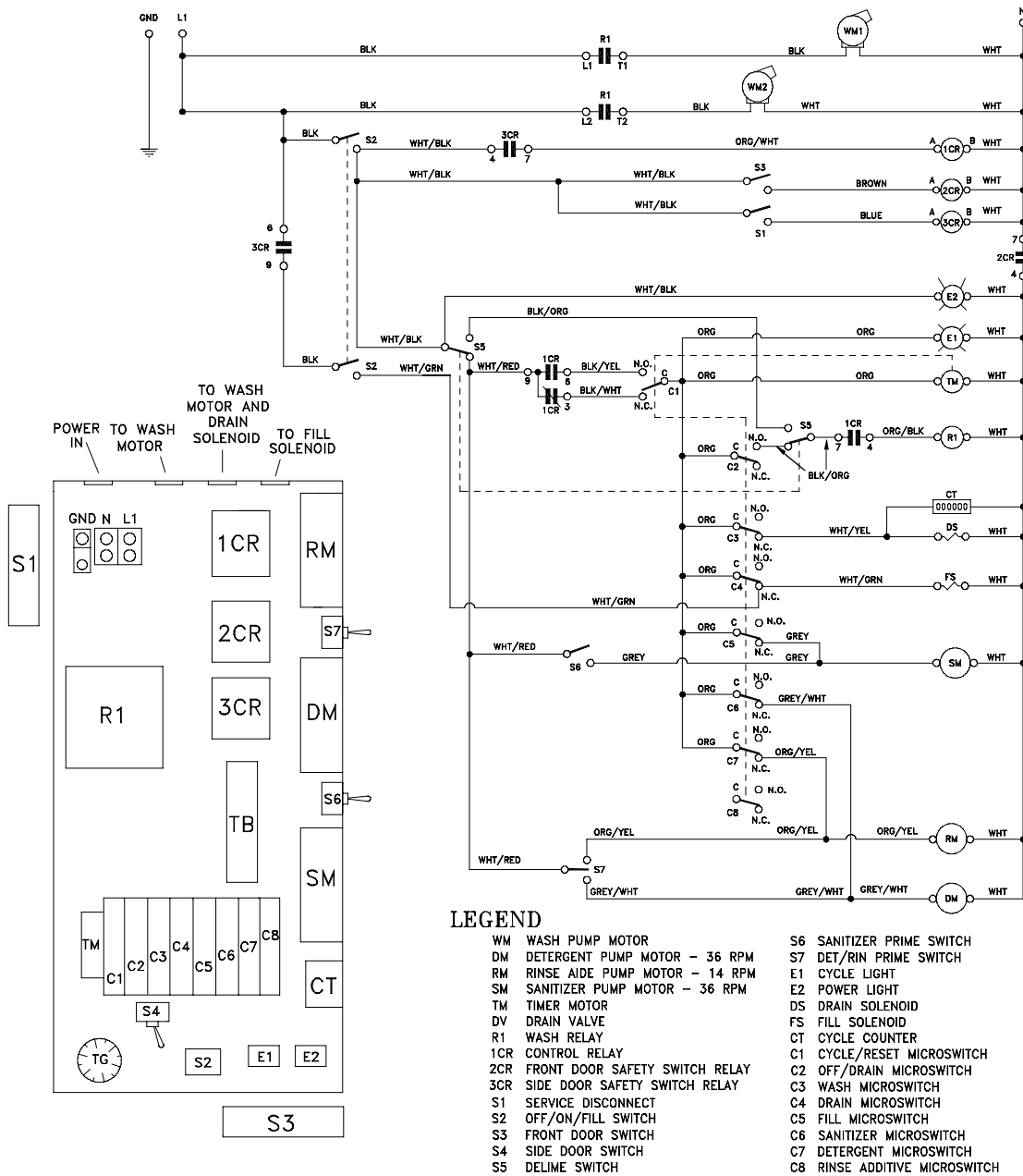
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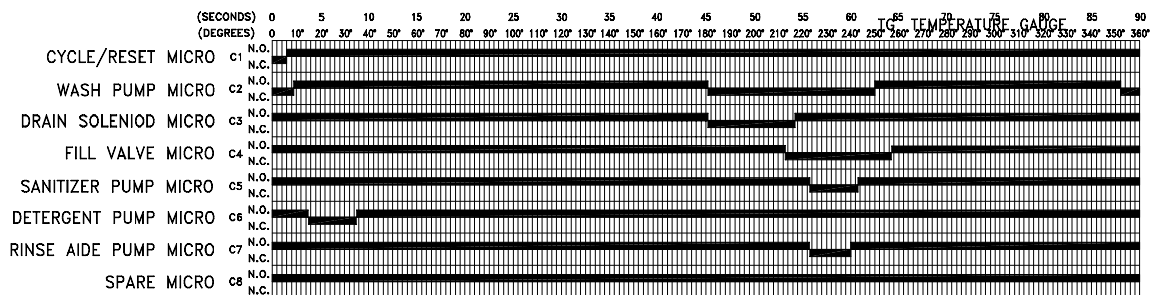
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SECTION 6: ELECTRICAL SCHEMATICS

CONSERVER XL2 (MECHANICAL TIMER) 115 VOLT - 60 HERTZ - SINGLE PHASE



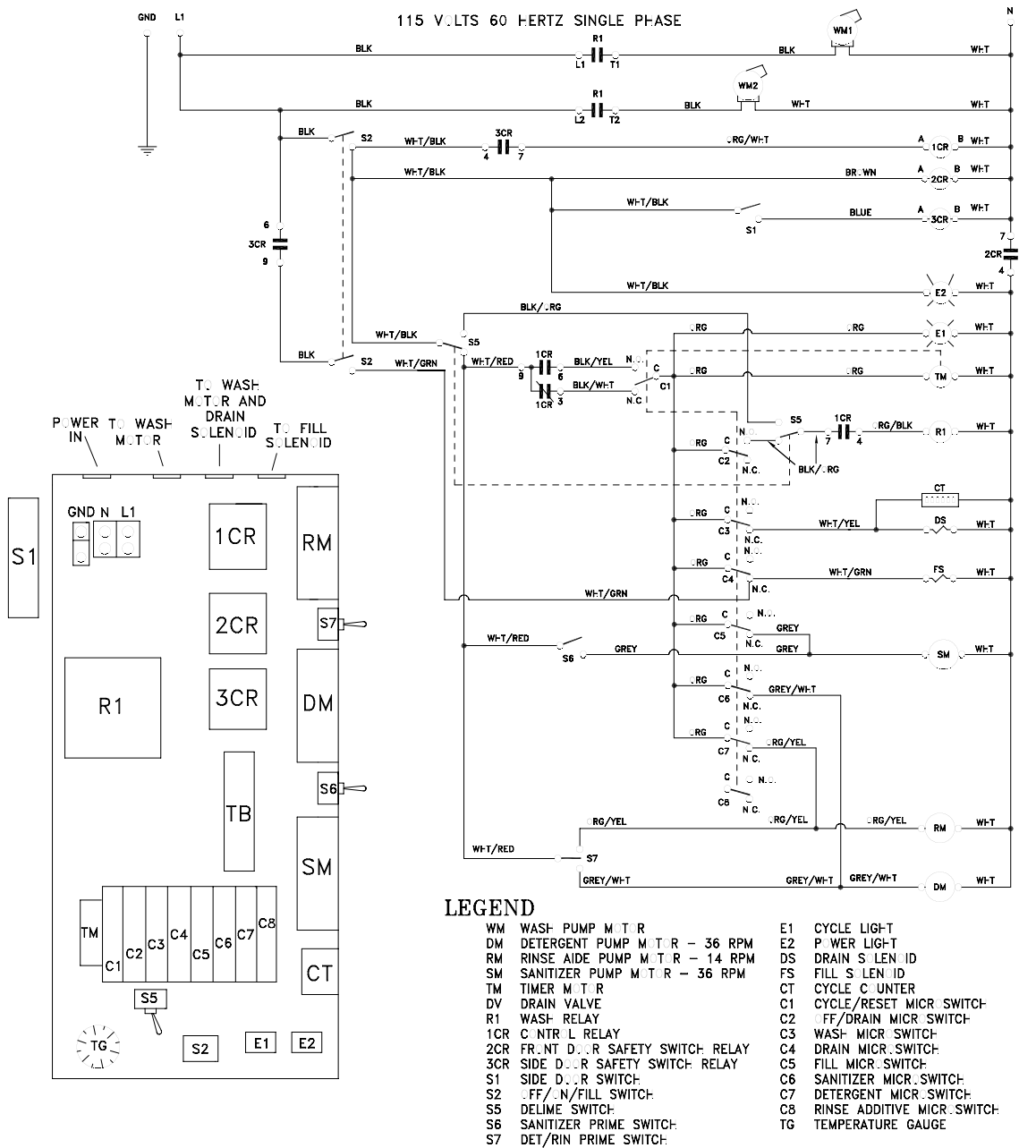
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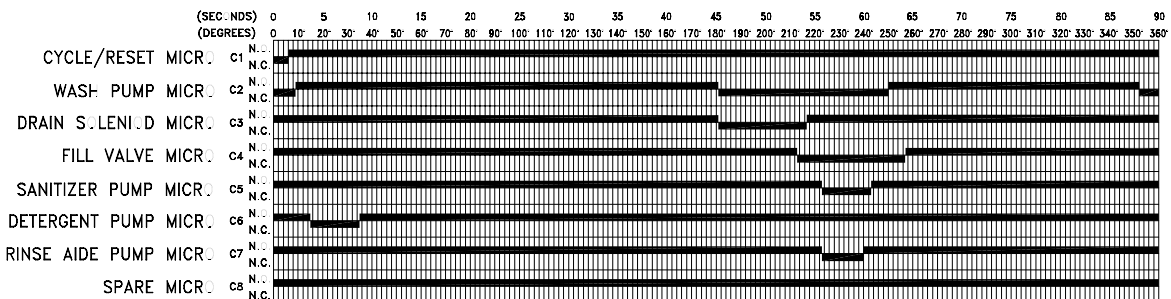
9905-002-23-33

SECTION 6: ELECTRICAL SCHEMATICS

CONSERVER XL2-CM (MECHANICAL TIMER) 115 VOLT - 60 HERTZ - SINGLE PHASE



TIMING CHART



9905-003-01-69a

SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

ALABAMA TO FLORIDA

ALABAMA

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FAX: (205) 322-1440
service@jones-mcleod.com

JONES-McLEOD APPLIANCE SVC

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MOBILE, AL 36693
(251) 666-7278
800-237-9859
FAX: (251) 661-0223

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800-433-9390
FAX: (206) 525-2890
info@restappl.com

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FAX: (602) 232-5862
acsboss@aol.com

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(602) 474-4510
800-510-3497
FAX: (602) 470-4511

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800-482-9269
FAX: (501) 374-8352
service@bromleyparts.com
parts@bromleyparts.com

GCS SERVICE, INC.

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800-262-9155
FAX: (901) 366-4588

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service@barkers.com

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(213) 683-2090
800-327-1433
FAX: (213) 683-2099

GCS SERVICE INC.

SANTA ANA, CA
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800-540-0719
FAX: (714) 542-4787

GCS SERVICE INC.

S. SAN FRANCISCO, CA
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800-969-4427
FAX: (650) 871-4019

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STOCKTON, CA 95207
(916) 567-0203
(800) 464-2222
(916) 567-0266 FAX

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800-422-7278
FAX: (858) 549-2323

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(800-457-3783
FAX: (714) 379-7109

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S. SAN FRANCISCO, CA 94080
(650) 635-1900
800-424-1414
FAX: (650) 635-1919
pndappl@aol.com

P & D APPLIANCE

4220-C ROSEVILLE ROAD
NORTH HIGHLANDS, CA 95660
(916) 974-2772
800-824-7219
FAX: (916) 974-2774

COMMERCIAL APPLIANCE SERVICE, INC.

281 LATHROP WAY, #100
SACRAMENTO, CA 95815
(916) 567-0203
(800) 464-2222
(916) 567-0324 FAX

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GCS SERVICE INC.

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(303) 371-9054
800-972-5314
FAX: (303) 371-4754

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ENGLEWOOD, CO 80110
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(800) 624-2117
FAX: (303) 761-5561
johns@hawkinscommercial.com

METRO APPLIANCE SERVICE

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800-525-3532
FAX: (303) 778-0268
metroappls@aol.com

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GCS SERVICE INC.

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(860) 549-5575
800-423-1562
FAX: (860) 527-6355

SUPERIOR KITCHEN SERVICE INC.

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WINDSOR, CT 06088
(888) 590-1899
(888) 590-1996 FAX

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2101 PARKWAY SOUTH
BROOMALL, PA 19008
(610) 356-6900
FAX: (610) 356-2038
dancerule@aol.com

GCS SERVICE INC.

PHILADELPHIA, PA
(215) 925-6217
800-441-9115
FAX: (215) 925-6208

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36 BELMONT AVE.
WILLMINGTON, DE 19804
(302) 655-8900
800-225-0599
FAX: (302) 656-3673
elmer2@erols.com

EMR SERVICE DIVISION

106 WILLIAMSPORT CIRCLE
SALISBURY, MD 21804
(410) 543-8197
FAX: (410) 548-4038

FLORIDA

COMMERCIAL APPLIANCE SERVICE

8416 LAUREL FAIR CIRCLE
BLDG 6, SUITE 114
TAMPA, FL 33610
(813) 663-0313
800-282-4718
FAX: (813) 663-0212
commercialappliance@world-net.att.net

GCS SERVICE INC

MIAMI, FL
(305) 621-6666
800-766-8966
FAX: (305) 621-6656

GCS SERVICE INC

ORLANDO, FL
(407) 841-2551
800-338-7322
FAX: (407) 423-8425

NASS PARTS AND SERVICE, INC.

1144 BELVILLE ROAD, UNIT 359
DAYTONA BEACH, FL 32114
(386) 226-2642
(800) 432-2795
(386) 736-7695 FAX

GCS SERVICE INC

TAMPA, FL
(813) 626-6044
800-282-3008
FAX: (813) 621-1174

SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

FLORIDA TO MARYLAND

JONES-McLEOD APPLIANCE SVC

854 LAKESIDE DRIVE
MOBILE, AL 36693
(251) 666-7278
800-237-9859
FAX: (251) 661-0223
service@jones-mcleod.com

NASS PARTS AND SERVICE, INC.

1108 SOUTH WOODS AVENUE
ORLANDO, FL 32805
(407) 425-2681
(800) 432-2795
(407) 425-3463 FAX

NASS PARTS AND SERVICE, INC.

1376 HEIDE AVENUE
PALM BAY, FL 32907
(321) 952-2012
(800) 432-2795
(321) 953-0266 FAX

GEORGIA

GCS SERVICE INC

ATLANTA, GA
(770) 452-7322
800-334-3599
FAX: (770) 452-7473

HERITAGE FOODSERVICE

GROUP OF ATLANTA
2100 NORCROSS PKWY.
SUITE 130
NORCROSS, GA 30071
(770) 368-1465
866-388-9837
FAX: (866) 388-9838

WHALEY FOODSERVICE REPAIRS

109-A OWENS INDUSTRIAL DRIVE
SAVANNAH, GA 31405
(912) 447-0827
888-765-0036
FAX: (912) 447-0826

PIERCE PARTS & SERVICE

2422 ALLEN ROAD
MACON, GA 31216
(478) 781-6003
800-368-2512
FAX: (478) 781-7186

HAWAII

FOOD EQMT. PARTS & SERVICE CO.

300 PUUHALE RD.
HONOLULU, HI 96819
(808) 847-4871
FAX: (808) 842-1560
fepsco@hula.net

IDAHO

RESTAURANT APPLIANCE SVC.

7219 ROOSEVELT WAY NE
SEATTLE, WA 98115
(206) 524-8200
800-433-9390
FAX: (206) 525-2890
info@restappl.com

RON'S SERVICE

703 E 44TH STREET STE 10
GARDEN CITY, ID 83714
(208) 375-4073
FAX: (208) 375-4402

ILLINOIS

CONES REPAIR SVC.

2408 40TH AVE.
MOLINE, IL 61265
(309) 797-5323
800-716-7070
FAX: (309) 797-3631
jackb@cones.com

EICHENAUER SERVICES INC.

130 S OAKLAND ST.
DECATUR, IL 62522
(217) 429-4229
800-252-5892
FAX: (217) 429-0226
esi@esiquality.com

GCS SERVICE INC.

ELMHURST, IL
(630) 941-7800
800-942-9689
FAX: (630) 941-6048

GCS SERVICE INC.

ST. LOUIS, MO
(314) 683-7444
800-284-4427
FAX: (314) 638-0135

GENERAL PARTS, INC.

248 JAMES STREET
BENSONVILLE, IL 60106
(630) 595-3300
(800) 880-3604
FAX: (630) 595-0006

INDIANA

GCS SERVICE INC.

INDIANAPOLIS, IN
(317) 545-9655
800-727-8710
FAX: (317) 549-6286

B622 LA PAS TRAIL

INDIANAPOLIS, IN 46268
(317) 290-8060
(800) 410-9794
(317) 290-8085 FAX

IOWA

GOODWIN TUCKER GROUP

2900 DELAWARE AVENUE

DES MOINES, IA 50317
(515) 262-9308
800-372-6066
FAX: (515) 262-2936
parts@goodwintucker.com

CONES REPAIR SVC.

1056 27TH AVENUE SW
CEDAR RAPIDS, IA 52404
(319) 365-3325
800-747-3326
FAX: (319) 365-0885

KANSAS

GCS SERVICE INC.

KANSAS CITY, MO
(816) 920-5999
800-229-6477
FAX: (816) 920-7387

GENERAL PARTS, INC.

1101 E. 13TH STREET
KANSAS CITY, MO 64106
(816) 421-5400
(800) 279-9967
(816) 421-1270 FAX

KENTUCKY

CERTIFIED SERVICE CENTER

127 DISHMAN LANE
BOWLING GREEN, KY 42101
(270) 783-0012
(877) 907-0012
FAX: (270) 783-0058

CERTIFIED SERVICE CENTER

RAMCO BUSINESS PARK

4283 PRODUCE ROAD
LOUISVILLE, KY 40218
(502) 964-7007
800-637-6350
FAX: (502) 964-7202
cwalker@certifiedsc.com
droenigk@certifiedsc.com

CERTIFIED SERVICE CENTER

1051 GOODWIN DRIVE
LEXINGTON, KY 40505
(606) 254-8854
800-432-9269
FAX: (606) 231-7781
jatkings@certifiedsc.com

GCS SERVICE INC.

LOUISVILLE, KY
(502) 367-1788
800-752-6160
FAX: (502) 367-0400

GCS SERVICE INC.

LEXINGTON, KY
(606) 255-0746
800-432-9260
FAX: (606) 255-0748

LOUISIANA

HERITAGE SERVICE GROUP

1532 RIVER OAKS WEST
NEW ORLEANS, LA 70123
(504) 734-8864
(800) 499-2351
(504) 733-2559 FAX

MAINE

GCS SERVICE INC.

CHELSEA, MA
(617) 889-9393
800-225-1155
FAX: (617) 889-1222

MASSACHUSETTS RESTAURANT SUPPLY

34 SOUTH STREET
SOMERVILLE, MA 02143
(617) 868-1930
800-338-6737
FAX: (617) 686-5331

PINE TREE FOOD EQUIPMENT

175 LEWISTON ROAD
GRAY, ME 04039
(207) 657-6400
(800) 540-5427
(207) 657-5464 FAX

MARYLAND

EMR SERVICE DIVISION

700 EAST 25TH STREET
BALTIMORE, MD 21218
(410) 467-8080
800-879-4994
FAX: (410) 467-4191
baltparts@emrco.com

SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

MARYLAND TO NEW YORK

EMR SERVICE DIVISION
106 WILLIAMSPORT CIRCLE
SALISBURY, MD 21804
(410) 543-8197
888-687-8080
FAX: (410) 548-4038
baltparts@emrco.com

EMR SERVICE DIVISION

5316 Sunnyside Ave.
Beltsville, MD 20715
(301) 931-7000
800-348-2365
FAX: (301) 931-3060
baltparts@emrco.com

GCS SERVICE INC.
SILVER SPRING, MD
(301) 585-7550 (DC)
(410) 792-0338 (BALT)
(800) 638-7278
FAX: (301) 495-4410

MASSACHUSETTS

ACE SERVICE CO.
95 HAMPTON AVE.
NEEDHAM, MA 02494
(781) 449-4220
800-225-4510 MA & NH
FAX: (781) 444-4789
taceservice@aol.com

MASSACHUSETTS RESTAU- RANT SUPPLY

34 SOUTH STREET
SOMERVILLE, MA 02143
(617) 868-1930
800-338-6737
FAX: (617) 868-5331

GCS SERVICE INC.
CHELSEA, MA
(617) 889-9393
800-225-1155
FAX: (617) 889-1222

GCS SERVICE INC.
HARTFORD, CT
(860) 549-5575
800-723-1562
FAX: (860) 527-6355

SUPERIOR KITCHEN SER- VICE INC.

399 FERRY STREET
EVERETT, MA 02149
(617) 389-1899
(888) 590-1899
(617) 389-1996 FAX

MICHIGAN

GCS SERVICE INC.
LIVONIA, MI
(248) 426-9500
800-772-2936
FAX: (248) 426-7555

JACKSON SERVICE COMPA- NY

3980 BENSTEIN RD.
COMMERCE TWSHP, MI 48382
(248) 363-4159
800-332-4053
FAX: (248) 363-5448

GCS SERVICE INC.
GRAND RAPIDS, MI
(616) 241-0200
800-823-4866
FAX: (616) 241-0541

MINNESOTA

GCS SERVICE INC.
MINNEAPOLIS, MN
(612) 546-4221
800-345-4221
FAX: (612) 546-4286

GENERAL PARTS, INC.
11311 HAMPSHIRE AVENUE
SOUTH
BLOOMINGTON, MN 55438-
2456
(952) 944-5800
(800) 279-9980
(800) 279-9980 FAX

MISSISSIPPI

GCS SERVICE INC.
JACKSON, MS
(601) 956-7800
800-274-5954
FAX: (601) 956-1200

GCS SERVICE INC.
MEMPHIS, TN
(901) 366-4587
800-262-9155
FAX: (901) 366-4588

MISSOURI

GCS SERVICE INC.
KANSAS CITY, MO
(816) 920-5999
800-229-6477
FAX: (816) 920-7387

GCS SERVICE INC.
ST. LOUIS, MO
(314) 638-7444
800-284-4427
FAX: (314) 638-0135

KAEMMERLIN PARTS & SVC.
2728 LOCUST STREET
ST. LOUIS, MO 63103
(314) 535-2222
FAX: (314) 535-6205
petek@kps.stl.com

GENERAL PARTS, INC.
1101 EAST 13TH STREET
KANSAS CITY, MO 64106
(816) 421-5400
(800) 279-9967
(816) 421-1270 FAX

MONTANA

**RESTAURANT APPLIANCE
SVC.**
7219 ROOSEVELT WAY NE
SEATTLE, WA 98115
(206) 524-8200
800-433-9390
FAX: (206) 525-2890
info@restappl.com

NEBRASKA

GOODWIN - TUCKER GROUP
7535 D STREET
OMAHA, NE 68124
(402) 397-2880
800-228-0342
FAX: (402) 397-2881
askme@goodwintucker.com

NEVADA

**HI TECH COMMERCIAL SER-
VICE**
1840 STELLA LAKE STREET
NORTH LAS VEGAS, NV 89106
(702) 649-4616
(877) 924-4832
FAX: (702) 649-4607
larry@hitechnv.com

5454 LOUIE LANE
RENO, NV 89511
(775) 852-9696
FAX: (775) 852-5104

GCS SERVICE INC.
LAS VEGAS, NV
(702) 450-3495
800-500-9060
FAX: (702) 450-3491

NEW HAMPSHIRE

GCS SERVICE INC.
CHELSEA, MA
(617) 889-9393
800-225-1155
FAX: (617) 889-1222

ACE SERVICE CO.
95 HAMPTON AVE.
NEEDHAM, MA 02494
(781) 449-4220
800-225-4510 MA & NH
FAX: (781) 444-4789
taceservice@aol.com

MASSACHUSETTS RESTAU- RANT SUPPLY

34 SOUTH STREET
SOMERVILLE, MA 02143
(617) 868-1930
800-338-6737
FAX: (617) 868-5331

NEW JERSEY

JAY HILL REPAIRS
90 CLINTON RD.
FAIRFIELD, NJ 07004
(973) 575-9145
800-836-0643
FAX: (973) 575-5890
jhrepair@aol.com

GCS SERVICE INC.
EAST RUTHERFORD, NJ
(973) 614-0003
800-399-8294
FAX: (973) 614-0230

GCS SERVICE INC.
PHILADELPHIA, PA
(215) 925-6217
800-441-9115
FAX: (215) 925-6208

ELMER SCHULTZ SERVICES
201 W. WASHINGTON AVE.
PLEASANTVILLE, NJ 08232
(609) 641-0317
800-378-1641
FAX: (609) 641-8703
elmer2@erols.com

NEW YORK

**APPLIANCE INSTALLATION
AND SERVICE CORP.**
1336 MAIN STREET
BUFFALO, NY 14209
(716) 884-7425
800-722-1252
FAX: (716) 884-0410
ais@worldnet.att.net

SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

NEW YORK TO PENNSYLVANIA

B.E.S.T. INC.

3003 GENESEE STREET
BUFFALO, NY 14225
(716) 893-6464
800-338-5011
FAX: (716) 893-6466
bestserv@aol.com

DUFFY'S EQUIPMENT SVC.

3138 ONEIDA STREET
SAUQUOIT, NY 13456
(315) 737-9401
800-443-8339
FAX: (315) 737-7132
duffyequip@aol.com

NORTHERN PARTS & SVC.

21 NORTHERN AVENUE
PLATTSBURGH, NY 12903
(518) 563-3200
800-634-5005
FAX: (800) 782-5424
info@northernparts.com

GCS SERVICE INC.

BROOKLYN, NY
(718) 486-5220
800-969-4271
FAX: (718) 486-6772

ALL SERVICE KITCHEN

EQUIPMENT REPAIR
10 CHARLES ST.
NEW HYDE PARK, NY 11040
(516) 378-1176
FAX: (516) 378-1735

ALL ISLAND REPAIRS

40-9 BURT DRIVE
DEER PARK, NY 11729
(631) 242-5588
FAX: (631) 242-6102

NORTH CAROLINA

AUTHORIZED APPLIANCE SERVICECENTER

1020 TUCKASEEGEE RD.
CHARLOTTE, NC 28208
(704) 377-4501
(800) 532-6127
FAX: (704) 377-4504

AUTHORIZED APPLIANCE

SERVICECENTER
800 N. PERSON ST.
RALEIGH, NC 27604
(919) 834-3476
FAX: (919) 834-3477

AUTHORIZED APPLIANCE SERVICECENTER

904 S. MARSHALL ST.
WINSTON-SALEM, NC 27403
(336) 725-5396
FAX: (336) 721-1289

AUTHORIZED APPLIANCE SERVICECENTER

104 HINTON AVE.
WILMINGTON, NC 28403
(910) 313-1250
FAX: (910) 313-6130

WHALEY FOODSERVICE

8334-K ARROWRIDGE BLVD
CHARLOTTE, NC 28273
(704) 529-6242
FAX: (704) 529-1558
info@whaleyfoodservice.com

WHALEY FOODSERVICE REPAIRS

203-D CREEK RIDGE RD.
GREENSBORO, NC 27406
(336) 333-2333
FAX: (336) 333-2533
info@whaleyfoodservice.com

WHALEY FOODSERVICE REPAIRS

335-105 SHERWEE DRIVE
RALEIGH, NC 27603
(919) 779-2266
FAX: (919) 779-2224
info@whaleyfoodservice.com

WHALEY FOODSERVICE REPAIRS

6418-101 AMSTERDAM WAY
WILMINGTON, NC 28405
(910) 791-0000
FAX: (910) 791-6662
info@whaleyfoodservice.com

NORTH DAKOTA

GCS SERVICE INC.

MINNEAPOLIS, MN
(612) 546-4221
800-345-4221
FAX: (612) 546-4286

GENERAL PARTS, INC.

10 SOUTH 18TH STREET
FARGO, ND 58103
(701) 235-4161
(800) 279-9987
(701) 235-0539 FAX

OHIO

CERTIFIED SERVICE CENTER

890 REDNA TERRACE
CINCINNATI, OH 45215
(513) 772-6600
800-543-2060
FAX: (513) 612-6600
sbarasch@certifiedsc.com

CERTIFIED SERVICE CENTER

171J-K NORTH HAMILTON RD.
COLUMBUS, OH 43213
(614) 751-3769
(866) 862-1252
FAX: (614) 751-5792
jadkins@certifiedsc.com

CERTIFIED SERVICE CENTER

6025 N. DIXIE DRIVE
DAYTON, OH 45414
(937) 898-4040
(800) 257-2611
FAX: (937) 898-4177
dharvey@certifiedsc.com

COMMERCIAL PARTS & SVC. OF COLUMBUS

5033 TRANSAMERICA DRIVE
COLUMBUS, OH 43228
(614) 221-0057
800-837-8327
FAX: (614) 221-3622

GCS SERVICE INC.

COLUMBUS, OH
(614) 476-3225
800-282-5406
FAX: (614) 476-1196

ELECTRICAL APPLIANCE REPAIR SVC.

5805 VALLEY BELT ROAD
CLEVELAND, OH 44131
(216) 459-8700
800-621-8259
FAX: (216) 459-8707
tomr@electapplrep.com

OKLAHOMA

HAGAR RESTAURANT EQMT.

1229 W MAIN STREET
OKLAHOMA CITY, OK 73106
(405) 235-2184
800-445-1791
FAX: (405) 236-5592

OREGON

RON'S SERVICE

16364 SW 72ND AVE
PORTLAND, OR 97224
(503) 624-0890
800-851-4118
FAX: (503) 684-6107
lrobinson@ronsservice.com

PENNSYLVANIA

A.I.S. COMMERCIAL PARTS & SERVICE

1816 WEST 26TH STREET
ERIE, PA 16508
(814) 456-3732
800-332-3732
FAX: (814) 452-4843
aiserie@aol.com

ELMER SCHULTZ SVC.

540 NORTH 3RD STREET
PHILADELPHIA, PA 19123
(215) 627-5400
FAX: (215) 627-5408
elmer2@erols.com

GCS SERVICE INC.

PHILADELPHIA, PA
(215) 925-6217
800-441-9115
FAX: (215) 925-6208

GCS SERVICE INC.

HARRISBURG, PA
(717) 564-3282
800-367-3225
FAX: (717) 564-9286

GCS SERVICE INC.

PITTSBURGH, PA
(412) 787-1970
800-738-1221
FAX: (412) 787-5005

K & D PARTS AND SERVICE CO.

1833-41 N CAMERON STREET
HARRISBURG, PA 17103
(717) 236-9039
800-932-0503
FAX: (717) 238-4367
kdparts-service@paonline.com

CLARK SERVICE & PARTS

306 AIRPORT DRIVE
BOX 10
SMOKETOWN, PA 17576
(717) 392-5590
(717) 392-5735

SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

RHODE ISLAND TO WISCONSIN

RHODE ISLAND

GCS SERVICE INC.
EAST PROVIDENCE, RI
(401) 434-6803
800-462-6012
FAX: (401) 438-9400

SUPERIOR KITCHEN SERVICE INC.

669 ELMWOOD AVENUE
PROVIDENCE, RI 02907
(888) 590-1899
(401) 781-1996 FAX

SOUTH CAROLINA

AUTHORIZED APPLIANCE SERVICECENTER

1811 TAYLOR ST.
COLUMBIA, SC 29202
(803) 254-8414
FAX: (803) 254-5146

AUTHORIZED APPLIANCE SERVICECENTER

2249 AUGUSTA RD.
GREENVILLE, SC 29605
(864) 235-9616
FAX: (864) 235-9623

WHALEY FOODSERVICE REPAIRS

I 26&US1
P.O. BOX 4023
WEST COLUMBIA, SC 29170
(803) 791-4420
800-877-2662
FAX: (803) 794-4630
info@whaleyservice.com

WHALEY FOODSERVICE REPAIRS

748 CONGAREE ROAD
GREENVILLE, SC 29607
(864) 234-7011
800-494-2539
FAX: (864) 234-6662
info@whaleyservice.com

WHALEY FOODSERVICE REPAIRS

1406-C COMMERCE PL.
MYRTLE BEACH, SC 29577
(843) 626-1866
FAX: (843) 626-2632
info@whaleyservice.com

WHALEY FOODSERVICE REPAIRS

4740-A FRANCHISE STREET
N. CHARLESTON, SC 29418
(843) 760-2110
FAX: (843) 760-2255
info@whaleyservice.com

SOUTH DAKOTA

GCS SERVICE INC.

MINNEAPOLIS, MN
(612) 546-4221
800-345-4221
FAX: (612) 546-4286

GENERAL PARTS, INC.

10 SOUTH 18TH STREET
FARGO, ND 58103
(701) 235-4161
(800) 279-9987
(701) 235-0539 FAX

TENNESSEE

GCS SERVICE INC.

MEMPHIS, TN
(901) 366-4587
800-262-9155
FAX: (901) 366-4588

GCS SERVICE INC.

NASHVILLE, TN
(615) 244-8050
800-831-7174
FAX: (615) 244-8885

TEXAS

ARMSTRONG REPAIR CENTER

5110 GLENMOUNT DRIVE
HOUSTON, TX 77081
(713) 666-7100
800-392-5325
FAX: (713) 661-0520
gm@armstrongrepair.com

COMMERCIAL KITCHEN REPAIR CO.

1377 N BRAZOS
P.O. BOX 831128
SAN ANTONIO, TX 78207
(210) 735-2811
800-292-2120
FAX: (210) 735-7421
brock@commercialkitchen.com

GCS SERVICE INC.

DALLAS, TX
(972) 484-2954
800-442-5026
FAX: (972) 484-2531

GCS SERVICE INC.

HOUSTON, TX
(713) 785-9187
800-868-6957
FAX: (713) 785-3979

GCS/STOVE PARTS

2120 SOLANA STREET
FORT WORTH, TX 76117
(817) 831-0381
800-433-1804
FAX: (817) 834-7754
bud@stoveparts.com

UTAH

LA MONICA'S RESTAURANT EQMT. SVC.

6182 SOUTH STRATLER AVENUE
MURRAY, UT 84107
(801) 263-3221
800-527-2561
FAX: (801) 263-3229
lamonica81@aol.com

VERMONT

NORTHERN PARTS & SVC.

4874 S. CATHERINE STREET
PLATTSBURGH, NY 12901
(518) 563-3200
800-634-5005
FAX: (800) 782-5424
info@northernparts.com

GCS SERVICE INC.

CHELSEA, MA
(617) 889-9393
800-225-1155
FAX: (617) 889-1222

VIRGINIA

DAUBERS, INC.

7645 DYNATECH COURT
SPRINGFIELD, VA 22153
(703) 866-3600
800-554-7788
FAX: (703) 866-4071
daubers@aol.com

GCS SERVICE INC.

SILVER SPRING, MD
(301) 585-7550(DC)
(410) 792-0388(BALT)
800-638-7278
FAX: (301) 495-4410

GCS SERVICE INC.

RICHMOND, VA
(804) 672-1700
800-899-5949
FAX: (804) 672-2888

GCS SERVICE INC.

VIRGINIA BEACH, VA
(757) 464-3500
800-476-4278
FAX: (757) 464-4106

WASHINGTON

GCS SERVICE INC.

SEATTLE, WA
(206) 763-0353
800-211-4274
FAX: (206) 763-5943

RESTAURANT APPLIANCE SERVICE

7219 ROOSEVELT WAY, NE
SEATTLE, WA 98115
(206) 524-8200
800-433-9390
FAX: (206) 525-2890
info@restappl.com

WEST VIRGINIA

STATEWIDE SERVICE, INC.

603 MAIN AVE.
NITRO, WV 25143
(304) 755-1811
(800) 441-9739
FAX: (304) 755-4001
sws3182@aol.com

WISCONSIN

APPLIANCE SERVICE CENTER, INC.

2439 ATWOOD AVE
MADISON, WI 53704
(608) 246-3160
800-236-7440
FAX: (608) 246-2721
ascmad@execpc.com

APPLIANCE SERVICE CENTER, INC.

6843 W. BELOIT RD.
WEST ALLIS, WI 53219
(414) 543-6460
800-236-6460
FAX: (414) 543-6480
ascmil@execpc.com

APPLIANCE SERVICE CENTER

786 MORRIS AVE
GREEN BAY, WI 54304
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