

TECHNICAL MANUAL

FOR JACKSON MODEL:

DELTA 5



August 3, 2004
P/N 7610-002-50-40 (Revision I)

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DELTA 5

Chemical sanitizing undercounter dishmachine.

Model: _____

Serial No.: _____

Installation Date: _____

Service Rep. Name: _____

Phone No.: _____

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**SECTION 1:
SPECIFICATION INFORMATION**

DELTA 5 SPECIFICATIONS

OPERATING CAPACITY

RACKS PER HOUR	40
DISHES PER HOUR	1000
GLASSES PER HOUR	1000

OPERATING CYCLES (SECONDS)

NORMAL CYCLE

WASH TIME	45
RINSE TIME	25
TOTAL CYCLE TIME	90

HEAVY CYCLE

PREWASH TIME	20
WASH TIME	45
RINSE TIME	25
TOTAL CYCLE TIME	130

WASH TANK CAPACITY (GALLONS)

1.2

OPERATING TEMPERATURES

WASH (MINIMUM)	120°F
WASH (RECOMMENDED)	140°F
RINSE (MINIMUM)	120°F
RINSE (RECOMMENDED)	140°F

WATER REQUIREMENTS

WATER LINE SIZE NPT	1/2"
DRAIN LINE SIZE NPT	2"
FLOW PRESSURE (PSI)	20 ± 5
MINIMUM CHLORINE REQUIRED (PSI)	50

ELECTRICAL REQUIREMENTS

WASH MOTOR HP	3/4
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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.

Delta 5

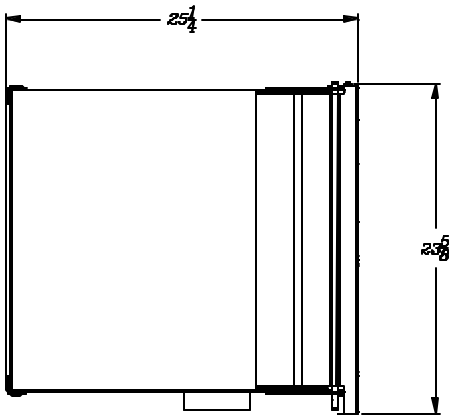
<u>VOLTS</u>	<u>PH</u>	<u>HZ</u>	<u>RINSE HEATER RATINGS</u>	<u>TOTAL AMPS</u>	<u>TYPICAL ELECTRICAL CIRCUIT</u>
115	1	60	2KW@120V	*16 A	20 AMP

* This dishmachine is designed so that the wash motor is never running when the wash heater is on. Service load is based upon the higher of the two amperage loads.

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

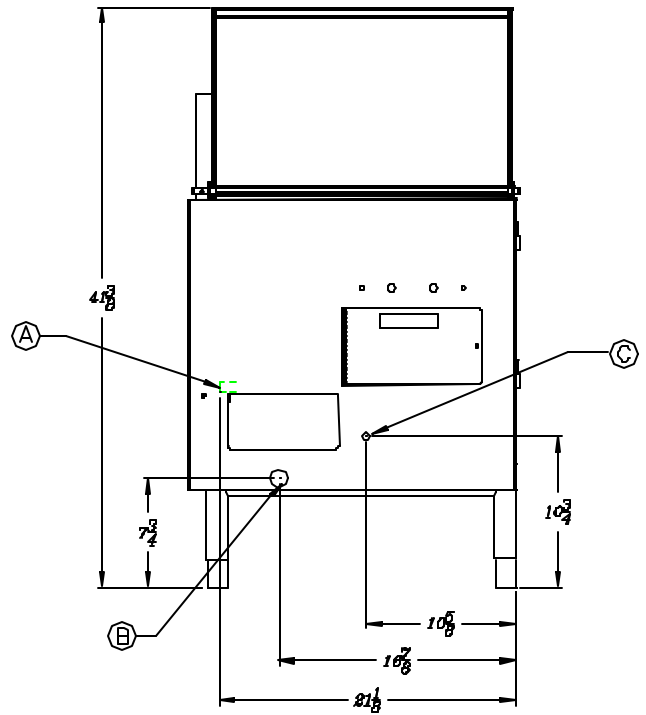
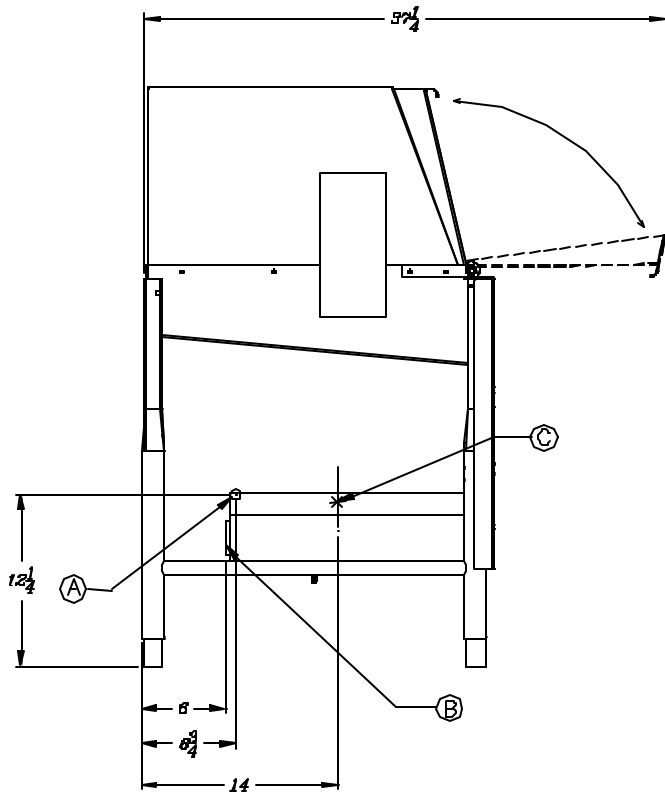


A - Incoming water 1/2" NPT 140°F recommended

B - Drain 2" NPT

C - Electrical 1/2" conduit

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



**SECTION 2:
INSTALLATION/OPERATION
INSTRUCTIONS**

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

VISUAL INSPECTION: Before installing the unit, check the container and the machine for any damage. A damaged container could be an indication of damage to the unit. If there is damage to both the container and the unit, DO NOT throw away the container. The dishmachine has been inspected and packed at the factory with the expectation that it will arrive to you in new, undamaged condition. However, rough handling by carriers or others may damage the unit while in transit. If this situation does occur, do not return the unit to Jackson; instead contact the carrier and ask them 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 you purchased the machine through.

UNPACKING THE DISHMACHINE: Remove the machine from the container and inspect for any missing parts. If an item appears to be missing, contact Jackson immediately to report it.

LEVEL THE DISHMACHINE: The dishmachine(s) covered in this manual are designed to operate on a level surface. Ensure that the machine is level from side to side and from front to back; adjust the unit's bullet feet as required. Failure to level the dishmachine may cause decreased washing performance.

PLUMBING THE DISHMACHINE: All plumbing connections must comply with all applicable local, state and national plumbing codes. The plumber is responsible for flushing the incoming water line prior to connecting it to remove all foreign debris that may get trapped in the valves or cause an obstruction. Any valves that are fouled by matter left in the water line and the expenses resulting are not the responsibility of the manufacturer.

CONNECTING THE DRAIN LINE: The Delta 5 drain requires a minimum 2" NPT piping that is pitched at least 1/4" per foot. 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: Install the water supply line (1/2" IPS minimum) to the dishmachine line strainer using copper pipe. It is recommended that a water shut-off valve be installed between the main supply and the machine to allow for service. The water supply line must be capable of 20 ± 5 PSI "flow" pressure at the recommended temperature as 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. The Delta 5 does not come with a water pressure regulator as standard equipment.

It is also recommended that a shock absorber (not supplied with the DELTA 5) be installed in the incoming water line. This prevents line hammer (hydraulic shock), induced by the solenoid valve, which can cause damage to the equipment.

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

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

ELECTRICAL POWER CONNECTION

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


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

The dishmachine data plate is located on the left front corner of the machine. Refer to this data plate for information concerning the unit's specific electrical requirements.

To install the incoming power lines, open the connection box by removing the connection box lid. Install 1/2" conduit into the pre-punched holes in the back of the connection box. Route the power wires and connect to the power block and grounding lug. Install the service wires (L1 and N) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided. Wires should be firmly secured in place. It is recommended that "De-Ox" or another similar anti-oxidation agent be used on all voltage connections.

VOLTAGE CHECK: Ensure that the machine is off and apply power to the machine. Check the incoming power at the terminal block and ensure it corresponds to the voltage on the machine data plate. 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 personnel of the location of the service breaker. Replace all covers and tighten the screws.

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.

 **WARNING:** 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

OPERATION INSTRUCTIONS

OPERATIONAL START-UP AND CHECK: Before proceeding with the start-up, verify the following:

1. Open the door and verify that the sump strainer is correctly installed in the sump.
2. Verify that the drain stopper is in position.
3. Check that the plugs are securely screwed into the ends of the wash arm.
4. Check that the wash arm is securely screwed into the stationary base and that it rotates freely.
5. Check the levels in all chemical containers and replace if necessary.

INSTALLATION/INITIAL START-UP PROCEDURE:

1. Turn on dishmachine
 - a) Turn on the incoming power to the machine at the circuit disconnect box. The display will indicate OFF.
 - b) Turn on the dishmachine by pressing the ON/OFF button. The display will indicate HEATER DISABLED.
2. Fill rinse booster heater with water
 - a) Before the heater element can be energized, the rinse booster heater must be initially filled with water. Damage to the heater element will occur if the element is not submerged in water. To initially fill the booster heater with water:
 - i) Press and hold the PROGRAM button.
 - ii) The display will indicate ENTER CODE. Press CYCLES, DELIME, ENTER and CYCLES.
 - iii) The display will indicate PROG DRAIN/FILL. Repeatedly press the PROGRAM button until ENGINEERING is displayed. Press ENTER to enter the engineering mode.
 - iv) Repeatedly press the PROGRAM button until PRESS ENTER TO OPEN FILL is displayed.
 - v) Press and hold the ENTER button to turn on the incoming water solenoid valve. Continue holding the button until you hear water entering the wash chamber through the airgap, then release the button. The rinse booster heater is now filled with water.
 - vi) Repeatedly press the PROGRAM button until PRESS ENTER TO EXIT is displayed. Press the ENTER button to exit the ENGINEERING mode.
3. Enable heater element
 - a) For the initial start-up only, the heater element must be enabled. The machine is shipped from the factory with the heater element disabled. This is done to ensure that the heater element is not damaged by energizing the element without the element being submerged in water. To enable the heater element:

Note: After completing step 2.v., you will still be in the programming mode. However, if you do not press any keys for 45 seconds, the controller will automatically log out of the programming mode. Follow steps 2.i. and 2.ii. above to re-enter the programming mode.

 - i) Repeatedly press the PROGRAM button until SYSTEM is displayed. Press ENTER to enter the SYSTEM programming mode.
 - ii) Repeatedly press the ENTER button until HEATER ELEMENT IS DISABLED is displayed.
 - iii) Press the NORMAL button to change the display to HEATER ELEMENT IS ENABLED.

OPERATION INSTRUCTIONS (CONTINUED)

- iv) Press the PROGRAM key to exit the SYSTEM programming mode. You should hear the heater contactor close.
- v) Repeatedly press the PROGRAM button until EXIT is displayed. Press the ENTER button to exit the programming mode.
- vi) The display will indicate HEATING WATER.

4. Adjust dishmachine fill level

- a) Once the temperature in the rinse booster heater has reached its preset value, the incoming water solenoid valve will open to fill the wash tank with water (FILLING and the time remaining for the will be displayed during the fill sequence).
- b) The display will then indicate OPEN DOOR.
- c) Open the door and observe the water level in the wash tank sump. The water level should be between the two score lines on the drain stopper.
- d) If the water level is not satisfactory, drain the sump by lifting the drain stopper. Close the door. Enter the programming mode and adjust the fill time as necessary (PROG DRAIN/FILL menu). Press the AUTO FILL button to refill the wash tank. Open the door and observe the water level. Repeat these steps until the proper water level is obtained.

5. Adjust dishmachine drain time

- a) At the very end of the drain cycle, open the doors to interrupt the cycle. Observe the sump area. All water from the wash cycle should be drained from the wash tank sump.
- b) In the programming section, adjust the DRAIN time (PROG DRAIN/FILL menu) as necessary. Allow enough time for the machine to completely drain before the rinse begins. Avoid making the drain time too long, which will unnecessarily lengthen the total cycle time.

6. Adjust dishmachine flush time


- a) The FLUSH will use fresh water to rinse out the detergent residue and soils in the wash tank before the rinse begins. The FLUSH time is the time that the drain valve will remain open at the beginning of the FILL cycle. Avoid making the flush time too long, which will increase the water usage per machine cycle.
- b) In the programming section, increase or decrease the FLUSH time (PROG DRAIN/FILL menu) as necessary.

7. Measure and adjust chemical concentrations.

8. Check all water and drain fittings for leaks.

9. Instruct machine operators on proper cleaning and operating procedures.

GENERAL OPERATION SEQUENCE:

 **CAUTION: Water must be in the wash tank sump while the wash pump is running in order to avoid damage to the pump seal.**

Close the machine's door. Turn on the machine by pressing the PUSH ON/OFF button on the front panel. The display will indicate HEATING WATER while the rinse water is heated in the booster heater. This heating may take several minutes, depending on how long the machine has set idle.

When the water in the booster heater reaches the specified temperature, the machine will automatically fill the wash sump with water (FILLING and the time remaining for filling will be indicated on the display). The minimum water level should be between the two score lines on the drain stopper. To adjust the water level, see programming instructions. During this initial fill, the detergent dispensing pump will run to dispense into the wash tank sump.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

OPERATION INSTRUCTIONS (CONTINUED)

The display will indicate OPEN DOOR. Open the door and insert a rack of soiled dishes. The display will indicate CLOSE DOOR. Close the door. The display will indicate PRESS START TO START CYCLE. At any time between cycles, the operator can press select the NORMAL or HEAVY cycles by pressing the appropriate button on the keypad. The default cycle is the normal cycle. When either of these cycle keys is pressed, the display will momentarily display the selection. The cycle will begin when the PUSH TO START button on the front panel is pressed.

At the start of the cycle, a PREWASH sequence is initiated and the wash pump is turned on. The length of this PREWASH sequence is 20 seconds. PREWASH and the time remaining will be displayed on the first line of the display. The TEMPERATURE of the wash water will be displayed on the second line of the display.

At the end of the prewash sequence, if the wash tank water temperature is less than 120°F, or if the HEAVY cycle has been selected, the machine will drain the wash water, and refill the sump with fresh, heated water from the booster tank. The display will indicate DRAINING, FLUSH and FILLING and will countdown the time remaining for each during these steps. Detergent will be dispensed during the filling sequence.

If the detergent dispensing time is longer than the fill time, the incoming water solenoid valve will be opened for one second at the completion of the detergent dispensing, in order to flush out any remaining detergent from the air gap. No rinse aid or sanitizer are dispensed. At the end of the prewash sequence, if the temperature of the wash water is greater than 120°F and the NORMAL cycles was selected, these steps are skipped and control goes directly to the washing sequence.

During the washing sequence, the wash pump is turned on. WASHING and the time remaining will be displayed on the first line of the display. The TEMPERATURE of the wash water will be displayed on the second line of the display. If the length of the DETERGENT WASH is longer than the length of DETERGENT PREWASH, the detergent dispenser pump will run for the difference in these time values, dispensing additional detergent into the wash tank sump. The length of the wash cycle is 45 seconds.

At the end of the wash cycle, if the temperature in the rinse booster tank has not reached 120°F (regardless of the rinse tank temperature setting), the wash time will be extended until the 120°F is reached, or three minutes, whichever is shorter. The display will indicate EXTENDED WASH.

At the completion of the wash cycle, the machine will drain the wash water, and refill the sump with fresh, heated water from the booster tank. The display will indicate DRAINING, FLUSH and FILLING and will countdown the time remaining for each during these steps. During the FILLING sequence, rinse aid and sanitizer are dispensed.

The rinsing sequence now begins.

RINSING and the time remaining will be displayed on the first line of the display. The TEMPERATURE of the rinse water will be displayed on the second line of the display.

The completion of the rinse sequence is the end of the cycle, and the display will indicate OPEN DOOR. Detergent is now dispensed into the wash tank sump for the next wash cycle. Open the door, remove the clean dishes, load a rack of soiled dishes, close the door and press the start button to start the next cycle. If the next cycle is started before the completion of the detergent dispensing, the display will indicate DETERGENT DISPENSE, and countdown the time remaining until the cycle will automatically begin.

If the door is opened at any time during a cycle, CLOSE DOOR will be displayed. The cycle will restart at the beginning of the prewash sequence when the door is closed again.

The cycle counter will only increment when cycles are fully completed. To display the number of cycles completed, between cycles, press the CYCLES button on the keypad. Then number of NORMAL cycles completed will be displayed. Press the CYCLES button again to display the number of completed HEAVY cycles.

DETERGENT PREWASH - The run time of the detergent dispensing pump before the prewash sequence which controls the amount of detergent dispensed.

DETERGENT WASH - The run time of the detergent dispensing pump before the wash sequence which controls the amount of detergent dispensed.

OPERATION INSTRUCTIONS (CONTINUED)

SANITIZER - The run time of the sanitizer dispensing pump before the rinse sequence which controls the amount of sanitizer dispensed.

RINSE TANK TEMPERATURE - When the water in the rinse water booster heater reaches this temperature value, the heating element will be turned off.

SHUTDOWN AND CLEANING: To turn off the machine, press the ON/OFF button. The machine will automatically drain (TURNING OFF will be displayed) and then will turn off (OFF will be displayed).

Remove, clean and install the lower wash arm.

Remove, clean and install the four upper spray nozzles.

Remove, clean and install the accumulator strainer.

PRIMING THE CHEMICAL DISPENSING PUMPS: To prime the chemical feeder pumps that dispense the detergent, rinse aid and sanitizer chemicals, press and hold the corresponding prime button on the keypad. The machine must be idle (between cycles) for these prime buttons to be active.

DELIMING OPERATIONS: The DELTA 5 machine has a pre-programmed delime sequence which will lead the operator through the steps required to properly delime the machine.

To begin, the machine must be OFF. Press and hold the DELIME button on the keypad. The machine will automatically fill with fresh water (FILLING will be indicated on the display). The display will then indicate to OPEN DOOR - ADD LIME-A-WAY (deliming chemical agent). Open the doors and add the delime chemical agent. The display will indicate CLOSE DOORS TO START DELIME. When the doors are closed, the wash pump will turn on to circulate the delime agent throughout the machine. At any time, the doors can be opened in order to inspect the inside of the machine. The wash pump will restart when the doors are closed. The display will indicate PRESS DELIME TO STOP CYCLE.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

PROGRAMMING INSTRUCTIONS

To access the programming mode, the machine must be ON, and idle (between cycles). Press and hold the PROGRAM button on the keypad. The display will prompt to ENTER CODE. At this prompt, enter the keys corresponding to the access code. Once in the programming mode, the PROGRAM button is used to scroll between the programming categories, the ENTER button is used to select a program section or parameter. To change the value of the parameter, use the HEAVY button to decrease the value of the parameter, and the NORMAL button to increase the value. To confirm a change to a programmable value, press the ENTER button. To abort or escape out of a change, press the PROGRAM button.

Once in the programming mode, if there have been no keypad inputs for approximately 45 seconds, the system will automatically exit out of the programming mode.

All time adjustments are in minutes and seconds (minutes:seconds).

The following parameters can be adjusted in the programming mode:

1. In the PROG(RAM) DRAIN/FILL section:

- a) FILL TIME - Length of fill cycles. The minimum water level should be between the score lines of the drain stopper.
- b) FLUSH TIME - Time of overlap between the drain and fill times.
- c) DRAIN TIME - Time that the drain is open after the wash cycle.

2. In the PROG(RAM) CHEMICAL section:

- a) DETERGENT PREWASH - The run time of the detergent dispensing pump before the prewash sequence which controls the amount of detergent dispensed.
- b) DETERGENT WASH - The run time of the detergent dispensing pump before the wash sequence which controls the amount of detergent dispensed.
- c) RINSE AID - The run time of the rinse aid dispensing pump before the rinse sequence which controls the amount of rinse aid dispensed.
- d) SANITIZER - The run time of the sanitizer dispensing pump before the rinse sequence which controls the amount of sanitizer dispensed.

3. In the SYSTEM section:

- a) ENABLE/DISABLE HEATER ELEMENT - Selects whether or not the rinse water booster element can be energized. The selection options are ENABLE or DISABLE.
- b) RINSE TANK TEMPERATURE - When the water in the rinse water booster heater reaches this temperature value, the heating element shall be turned off.
- c) DISPLAY IN FAHRENHEIT OR CELSIUS - Selects the unit of measure for water temperature display.

4. The ENGINEERING section is used when trouble-shooting problems with the machine. In the ENGINEERING section:

- a) TOTAL WASH CYCLES - This counter accumulates the total number of cycles which the machine has been run. It is a total of all wash cycles and it cannot be reset.
- b) PRESS ENTER TO:
 - i) RUN PUMP - Press and hold the ENTER button to run the wash pump motor. Release the ENTER button to make it stop.
 - ii) OPEN DRAIN - Press and hold the ENTER button to energize (open) the drain solenoid. Release the ENTER button to de-energize the solenoid.

PROGRAMMING INSTRUCTIONS (CONTINUED)

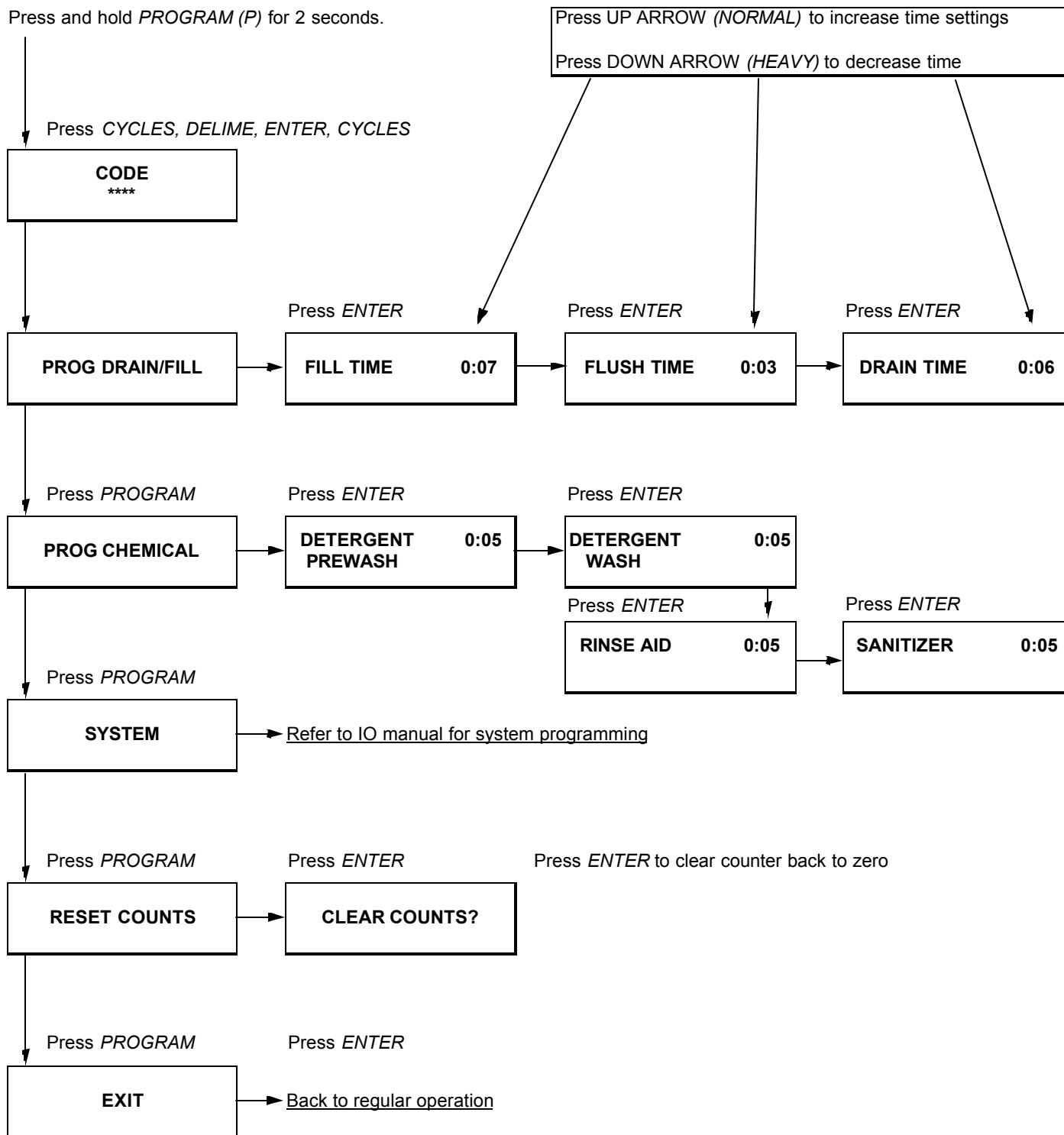
iii) OPEN FILL - Press and hold the ENTER button to energize (open) the fill water valve solenoid. Release the ENTER button to de-energize the solenoid.

iv) EXIT - Press the ENTER button to exit the ENGINEERING section.

5. RESET CYCLES - The system will prompt CLEAR COUNT(S)? E(YES) or P(NO) to confirm that the cycle counter is to be reset. Press the ENTER button on the keypad to reset the counter or press the PROGRAM button to exit without resetting the counter.

6. EXIT - Press the ENTER button on the keypad to exit the programming mode.

Short Version



SECTION 3: 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 a **QUALIFIED SERVICE AGENCY**.

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.

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 4: TROUBLESHOOTING

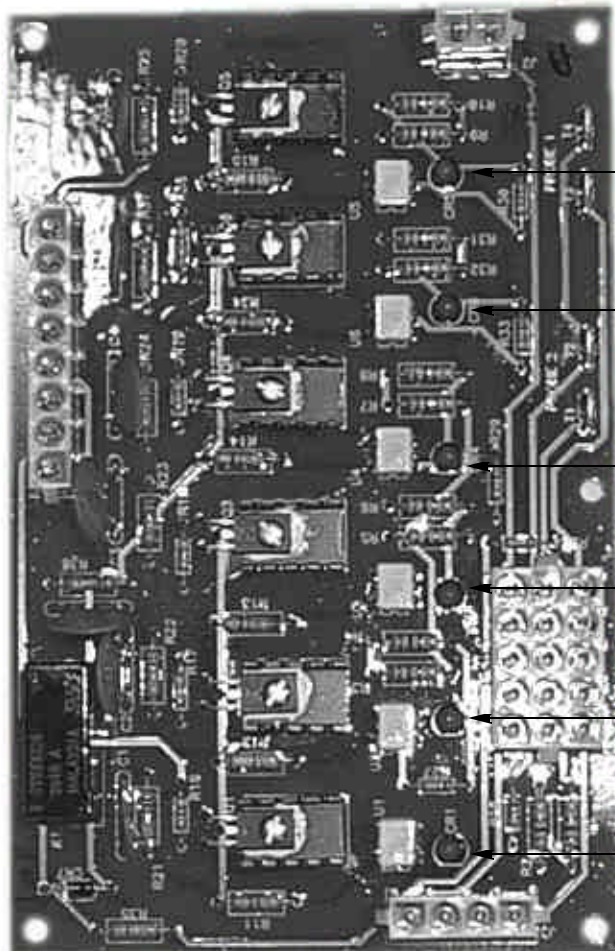
TROUBLESHOOTING GUIDE

The Delta 5 dishmachine uses a microprocessor-based electronic controller to control function of the machine. The microprocessor is pre-programmed at the factory to run a machine that is installed in a typical application. A LCD display is used to indicate the status of the machine.

The electronic controller board with LCD display controls all timing functions. The controller board is connected to the interface board. It sends signals to the interface board to turn components on and off. The remaining electrical control components in the machine are connected to the interface board.

To aid in troubleshooting, the interface board contains six red LED (light emitting diodes). These diodes are illuminated whenever the output signal to the corresponding control item is ON. The following example will illustrate the troubleshooting sequence that should be used for all electrical control components. The wash pump runs at the first sequence of every cycle. The LED corresponding to the wash pump motor contactor will be ON when the pump is to be On. If the LED is ON, and the pump motor is not running, measure the voltage at the pump motor contactor coil (when the LED is on, meaning voltage should be applied to the coil from the interface board). If there is no voltage, then replace the interface board. If there is voltage, then there is a problem in the pump motor and pump motor contactor. If the display indicates that the machine is in a wash cycle, and both the pump motor is not running and the LED is not ON, check the continuity of the cable that connects the controller board to the interface board. If continuity exists, replace the controller board. If the controller board has been replaced and the problem still exists, replace the interface board.

The interface board contains six triacs, which are essentially electronic relays. Use a multimeter to verify that the interface board output is supplying voltage to a control item (solenoid valve, peristaltic pump, motor contactor, etc.). During any troubleshooting, it is critical to remember that a 120 volt signal will always be measured at the outputs of the interface board (pins 1 through 8 on connector J4) if the corresponding load (solenoid valve, peristaltic pump, motor contactor, etc.) is not connected to the output. To avoid false readings, the control item that is being tested must be connected to the interface board output.



Drain LED

Pump LED

Fill LED

Sanitizer LED

Rinse Aid LED

Detergent Fill LED

COMMON PROBLEMS

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: Machine will not run; no power to the unit.

1. Verify that the service disconnect or service breaker are not off.
2. Verify that electrical service has been hooked to the machine.
3. Verify that the correct voltage, phase and frequency have been hooked to the machine.
4. Verify wiring of power switch to the schematic. Check continuity of switch. If switch is wired correctly, switch may need replaced.
5. Check the transformer for 24 Volts output.

Problem: Machine has power, but will not cycle.

1. Verify that the correct voltage, phase and frequency have been hooked to the machine.
2. Faulty control board. Replace the control board.
3. Check cycle switch for continuity.

Problem: Machine runs, but there is no water.

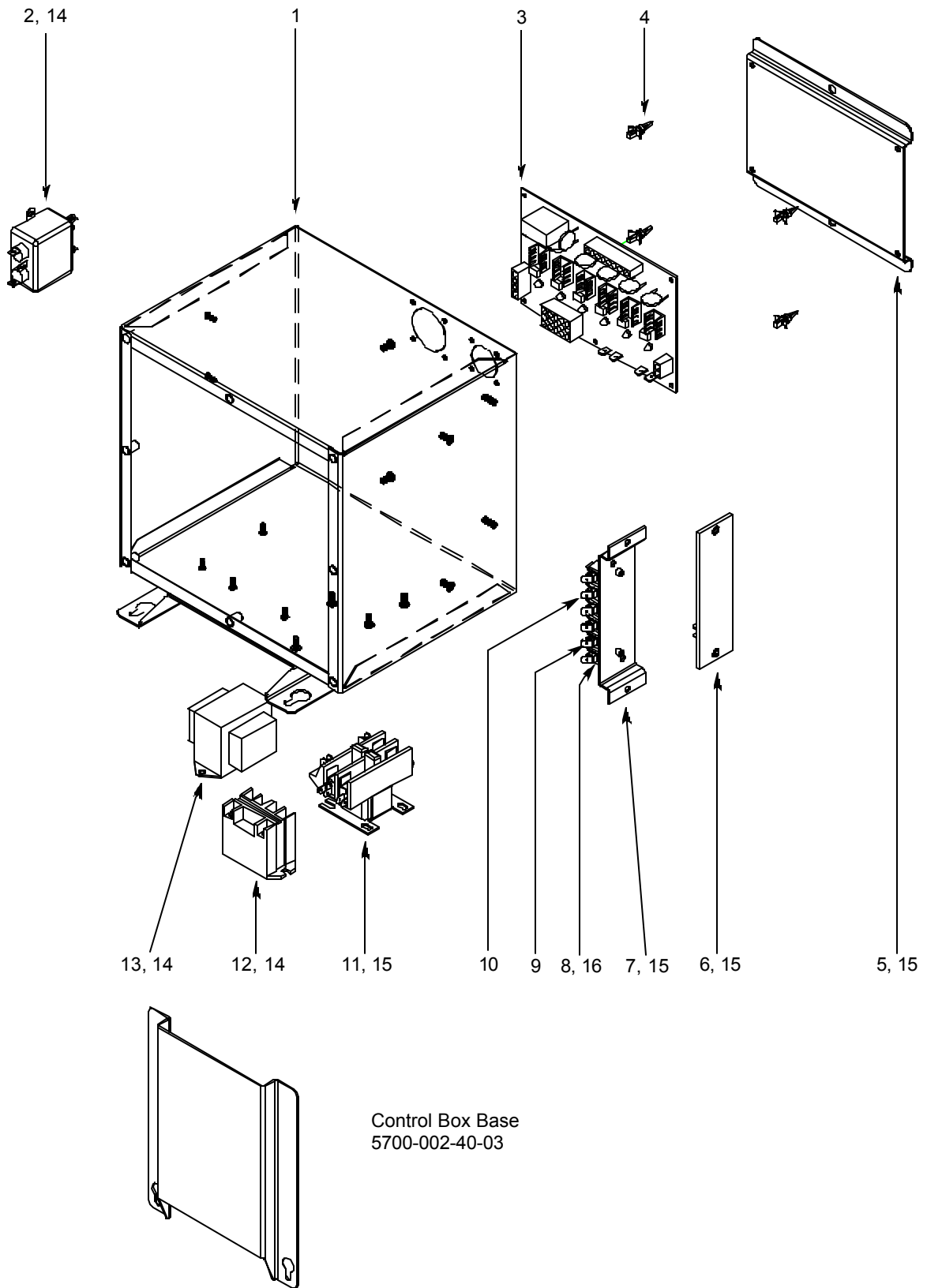
1. Verify that there is water connected to the machine and that it is turned on.
2. If a strainer is placed in line with the machine, ensure that it is not clogged.
3. Verify that there is 20 ± 5 PSI of water flow pressure to the machine.
4. Water fill valve may be faulty and may need to be replaced.

Problem: Machine runs and there is water, but dishes are dirty.

1. Ensure that good prescrapping occurs by removing as much heavy soil from the ware as possible before starting the cycle.
2. Verify that chemical concentrations for detergent are correct for the given water conditions.
3. Verify that the correct voltage, phase and frequency have been hooked to the machine.
4. Verify that none of the wash or rinse arms have clogged nozzles.
5. Ensure that the unit is filling to the correct water level.

SECTION 5: PARTS SECTION

CONTROL BOX ASSEMBLY



SECTION 5: PARTS SECTION

CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Weldment	5700-002-45-72
2	1	Noise Filiter	5910-002-20-37
3	1	Interface Board	6680-002-16-81
4	4	Circuit Board Holder	5940-002-21-87
5	1	Inner Control Panel	5700-002-21-71
6	1	Terminal Strip	5940-002-78-97
7	1	Bracket, Fuse Strip Assembly	5700-002-42-60
8	1	6 Pole Fuse Holder	5920-002-42-13
9	1	Fuse, 3 amp	5920-002-44-12
10	5	Fuse, 1.5 amp	5940-002-42-15-
11	1	Motor Contactor	5945-109-05-69
12	1	Relay	5945-002-45-20
13	1	Transformer 115V to 24V	5950-002-16-78
14	6	Locknut, 6-32 S/S Hex with Nylon Insert	5310-373-03-00
15	8	Locknut, 10-24 S/S Hex with Nylon Insert	5310-373-01-00
16	2	Screw, 6-32 x 3/8" Round Head	5305-171-02-00
17*	1	Harness Assembly	5700-002-93-48
18*	1	Assembly, Cable	5700-002-16-77
19*	1	Temperature Probe	6680-002-16-80
20*	1	Cable Assembly, Control Box to Connection Box	5700-002-45-76
21*	1	Conduit Nipple, 1/2" Bushed	5975-002-51-81
22*	1	Locknut, Conduit 1/2"	5975-002-51-82
23*	1	Fitting, 1/2" Staight Plastic	5975-011-45-13
24*	1	Connector, 1/2", 90° Metal	5975-111-01-00
25*	1	Fitting, .231 x .394	5975-011-49-03
26*	1	Fitting, Nut & Cap	5975-205-43-00

* Represents an item not shown.

ORDERING REPLACEMENT WIRES

Jackson dishmachines have several color and gauges of wire used in them and it may become necessary to replace these wires. Wire may be ordered from Jackson MSC Inc., but please note that it is only available in feet. Ensure that you order the correct color and gauge.

BLACK WIRE:

6 Gauge	6145-002-15-91	14 Gauge	6145-104-05-00
8 Gauge	6145-104-43-00	18 Gauge	6145-104-37-00
10 Gauge	6145-104-16-00	18 Gauge with Black Stripes	6145-011-59-56
12 Gauge	6145-112-01-00	18 Gauge with Blue Stripes	6145-011-81-74
14 Gauge	6145-104-09-00	18 Gauge with White Stripes	6145-011-81-73
18 Gauge	6145-104-01-97	18 Gauge with Yellow Stripes	6145-011-81-75
18 Gauge with Orange Stripes	6145-011-35-66	20 Gauge	6145-104-02-97
18 Gauge with White Stripes	6145-011-35-65		
18 Gauge with Yellow Stripes	6145-011-35-64		

BLUE WIRE:

6 Gauge	6145-002-15-93	10 Gauge	6145-104-19-00
8 Gauge	6145-104-44-00	14 Gauge	6145-104-10-00
10 Gauge	6145-104-42-00	18 Gauge	6145-104-39-00
14 Gauge	6145-104-04-00	18 Gauge with Black Stripes	6145-011-35-70
18 Gauge	6145-104-35-00	18 Gauge with Blue Stripes	6145-011-46-40
18 Gauge with Black Stripes	6145-011-46-35	18 Gauge with Green Stripes	6145-011-35-69
18 Gauge with Red Stripes	6145-011-46-37	18 Gauge with Grey Stripes	6145-002-20-18
18 Gauge with White Stripes	6145-011-46-36	18 Gauge with Red Stripes	6145-011-35-67
18 Gauge with Yellow Stripes	6145-011-46-38	18 Gauge with Yellow Stripes	6145-011-35-68
20 Gauge	6145-104-06-97	20 Gauge	6145-104-04-97
20 Gauge with Black Stripes	6145-104-17-97	20 Gauge with Orange & Yellow Stripes	6145-104-16-97
20 Gauge with White Stripes	6145-104-13-97	20 Gauge with Yellow Stripes	6145-104-15-97

GREEN WIRE:

8 Gauge	6145-002-15-94	18 Gauge	6145-104-33-00
14 Gauge	6145-104-03-00	18 Gauge with Black Stripes	6145-011-81-68
18 Gauge	6145-104-32-00	18 Gauge with Blue Stripes	6145-011-81-70
18 Gauge with Yellow Stripes	6145-001-44-96	18 Gauge with Red Stripes	6145-011-81-69
20 Gauge	6145-104-05-97	20 Gauge	6145-104-07-97
20 Gauge with Black Stripes	6145-011-59-57		
20 Gauge with Yellow Stripes	6145-104-11-97		

GREY WIRE:

18 Gauge	6145-104-36-00	18 Gauge	6145-104-33-00
18 Gauge with Black Stripes	6145-011-81-71	18 Gauge with Black Stripes	6145-011-81-68
18 Gauge with Blue Stripes	6145-011-81-72	18 Gauge with Blue Stripes	6145-011-81-70
18 Gauge with Red Stripes	6145-011-46-41	18 Gauge with Red Stripes	6145-011-81-69
18 Gauge with White Stripes	6145-011-35-60	20 Gauge	6145-104-07-97
18 Gauge with Yellow Stripes	6145-011-46-42		
20 Gauge	6145-104-03-97		

RED WIRE:

6 Gauge	6145-002-15-92	18 Gauge	6145-104-33-00
8 Gauge	6145-104-45-00	18 Gauge with Black Stripes	6145-011-81-68
10 Gauge	6145-104-08-00	18 Gauge with Blue Stripes	6145-011-81-70

14 Gauge	6145-104-05-00
18 Gauge	6145-104-37-00
18 Gauge with Black Stripes	6145-011-59-56
18 Gauge with Blue Stripes	6145-011-81-74
18 Gauge with White Stripes	6145-011-81-73
18 Gauge with Yellow Stripes	6145-011-81-75
20 Gauge	6145-104-02-97

WHITE WIRE:

10 Gauge	6145-104-19-00
14 Gauge	6145-104-10-00
18 Gauge	6145-104-39-00
18 Gauge with Black Stripes	6145-011-35-70
18 Gauge with Blue Stripes	6145-011-46-40
18 Gauge with Green Stripes	6145-011-35-69
18 Gauge with Grey Stripes	6145-002-20-18
18 Gauge with Red Stripes	6145-011-35-67
18 Gauge with Yellow Stripes	6145-011-35-68
20 Gauge	6145-104-04-97
20 Gauge with Orange & Yellow Stripes	6145-104-16-97
20 Gauge with Yellow Stripes	6145-104-15-97

YELLOW WIRE:

18 Gauge	6145-104-33-00
18 Gauge with Black Stripes	6145-011-81-68
18 Gauge with Blue Stripes	6145-011-81-70
18 Gauge with Red Stripes	6145-011-81-69
20 Gauge	6145-104-07-97

MISCELLANEOUS WIRE:

Brown (18 Gauge)	6145-104-20-00
Brown (20 Gauge)	6145-104-08-97
Orange (18 Gauge)	6145-104-34-00
Orange with Black Stripes (18 Gauge)	6145-011-35-62
Orange with Blue Stripes (18 Gauge)	6145-011-46-39
Orange with White Stripes (18 Gauge)	6145-011-35-63
Orange with Yellow Stripes (18 Gauge)	6145-011-35-61
Orange (20 Gauge)	6145-104-10-97
Pink (18 Gauge)	6145-011-82-69
Purple (18 Gauge)	6145-104-31-00
Violet (20 Gauge)	6145-104-09-97

Plug, GFI	6145-001-97-90
Cable, 16 Gauge, 3 Wire Romex	6145-001-98-29
Cord, Hubble Plug MC	6145-011-47-23
Cord, S-J	6145-011-49-02
Cord, Power	6145-011-70-28
Cord, 115V Power	6145-309-02-00
Cord, 125V Power, 96" Long	6145-309-04-00

SECTION 5: PARTS SECTION

ORDERING REPLACEMENT CONDUIT, HOSES & TUBING

Jackson dishmachines come with a wide variety of conduit and fittings for use in routing the wires of the machine. The list below provides for most of stock of such items. When ordering, remember that Jackson does not offer pre-cut sections of conduit for your machine, instead it is sold by the foot. Please take into account the slack that will be necessary once installing the new conduit to ensure that it fits correctly. It is recommended that you order at least 6" more conduit than you require to ensure that you have enough for trimming. Tubing and hose are ordered by the foot. Jackson MSC Inc. reserves the right to require minimum ordering quantities for the items below.

CONDUIT:

Conduit, 1/2", Liquidtite	5975-101-25-00
Conduit, 1/2", Non-Metallic	5975-111-46-57
Conduit, 1/2", PVC	5975-105-04-00
Conduit, 1/2", Sealtite	5975-105-01-00
Conduit, 1/2", Xtraflex	5975-105-06-44
Conduit, 3/8", Liquidtite	5975-105-02-00
Conduit, 3/4", Cole-Flex	5975-105-05-00
Conduit, 3/4", Liquidtite	5975-105-03-00
Conduit, 3/4", Non-Metallic	5975-011-47-71
Conduit, 3/4" Xtraflex	5975-105-07-44
Conduit, 1", Carlon	5975-011-68-42

CONDUIT FITTINGS:

Elbow, Cole-Flex, 1/2", 90°	5975-205-40-00
Elbow, Xtraflex, 1/2", 90°	5975-205-44-44
Elbow, Xtraflex, 3/4", 90°	5975-205-45-44
Fitting, 1/2" Straight	5975-011-45-13
Fitting, 1/2", Straight, Zinc Plated	5975-111-89-89
Fitting, 1/2", 45°	5975-011-45-23
Fitting, 1/2", 45°, Zinc Plated	5975-111-89-86
Fitting, 1/2", 90°	5975-011-45-14
Fitting, 1/2", 90°, Zinc Plated	5975-111-89-88
Fitting, 3/4", Straight	5975-011-47-72
Fitting, 3/4", 45°	5975-011-47-74
Fitting, 3/4", 90°	5975-011-47-73
Fitting, 1", Straight	5975-011-70-75
Fitting, 1", 90°	5975-011-68-43
Fitting, Cole-Flex, 1/2" Straight	5975-205-03-00
Fitting, Cole-Flex, 3/4" Straight	5975-205-41-00
Fitting, Cole-Flex, 3/4", 90°	5975-204-42-00
Fitting, Liquidtite, .231 ID/.394 OD	5975-011-49-03
Fitting, Liquidtite, .25 ID/.546 OD	5975-011-65-51
Fitting, Liquidtite, .27 ID/.48 OD	5975-011-59-50
Fitting, Liquidtite, 1/2", 90°	5975-111-01-00
Fitting, Liquidtite, 3/8", Straight	5975-205-03-82
Fitting, Liquidtite, 3/8", 90°	5975-205-02-82
Fitting, Liquidtite, 3/4", Straight	5975-205-15-02
Fitting, Liquidtite, 3/4", 45°	5975-205-01-82
Fitting, Liquidtite, 3/4", 90°	5975-205-07-82
Fitting, Xtraflex, 1/2", Straight	5975-205-47-44
Fitting, Xtraflex, 3/4", Straight	5975-205-46-44
Nut, 1-1/4"	5975-011-42-54

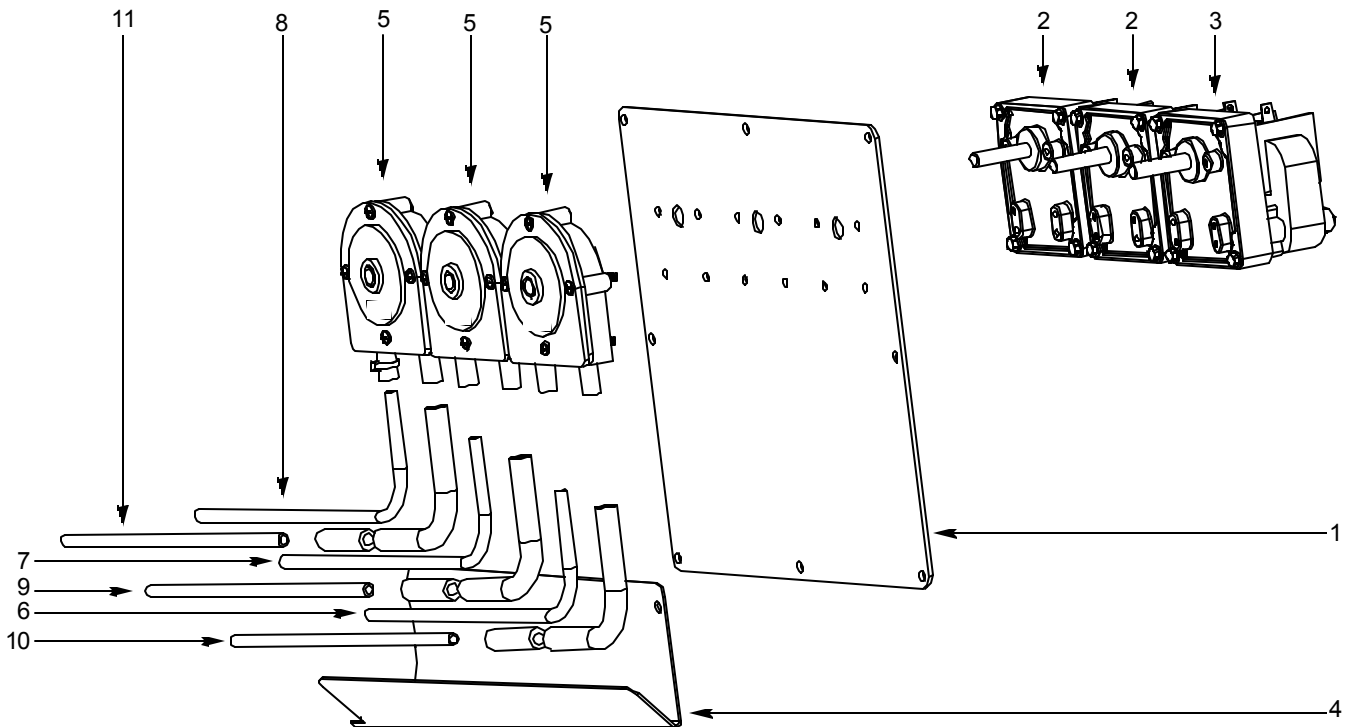
HOSE:

Hose, 3/16" ID x 5/16" OD	4720-601-40-00
Hose, 1/4" ID x .062" Wall, Excelon	4720-111-59-46
Hose, 1/4" ID x 1/2" OD, 300-350	4720-011-95-43
Hose, 3/8" ID x 5/8" OD, 300 PSI	4720-002-31-63
Hose, 3/8" ID x 5/8" OD, PVC	4720-011-35-41
Hose, 3/8" ID x 3/4" OD, PVC	4720-111-35-41
Hose, 1/2" ID x 3/4" OD	4720-011-94-01
Hose, 1/2" ID, Reinforced	4720-011-63-06
Hose, 5/8" ID x 7/8" OD, PVC	4720-601-14-00
Hose, 3/4" ID x 1" OD	4720-011-94-10
Hose, 3/4" ID, Nylon Reinforced	4720-011-63-02
Hose, 1" ID x 1-1/4" OD, EPDM	4720-111-39-73
Hose, 1 1/4" ID x 1 1/2" OD	4720-601-42-00
Hose, 1 1/4" ID, Reinforced	4720-011-44-47
Hose, 1 1/2" ID, Clear Wire	4720-111-34-60
Hose, 2" ID, Nylon Reinforced	4720-011-63-25
Hose, 2" ID, Reinforced Flex Drain	4720-011-63-04
Hose, 2" ID x 3" OD, EPDM	4720-011-88-02

TUBING:

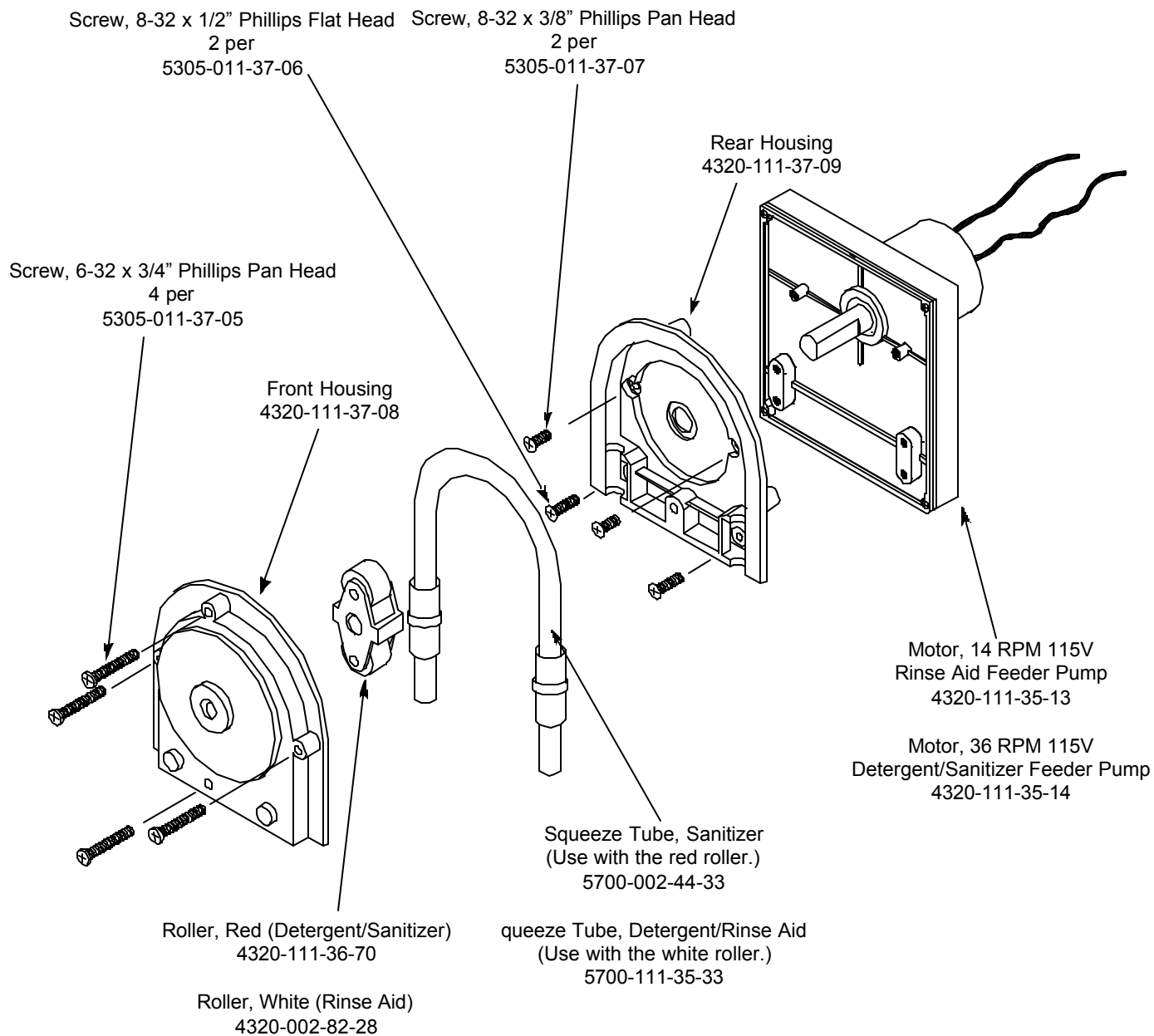
Tubing, 1/8" OD, Paraflex	4720-111-58-09
Tubing, 3/16" ID x .54" OD, CPVC	4720-111-35-31
Tubing, 1/4" OD	4720-111-51-65
Tubing, 1/4" OD, Blue	4720-601-11-00
Tubing, 1/4" OD, Red	4720-601-12-00
Tubing, 1/4" OD, White	4720-601-13-00
Tubing, 1/4" OD, Paraflex	4720-111-51-70
Tubing, 1/4" ID x 3/8" OD, Tygon	4720-001-97-65
Tubing, 1/2" ID x 13/16" OD, Poly	4720-601-24-00
Tubing, 5/16" x 7/16" OD, Clear	4720-111-35-34
Tubing, 5/16" ID x 1/2" OD, Flex	4720-011-35-21
Tubing, 3/8" ID x 1/16" Wall, Clear	4720-601-22-00
Tubing, 3/8" OD, White Poly	4720-011-50-49
Tubing, 5/8" ID with .125" Wall	4720-002-12-20
Tubing, 3/4" ID x 1/8" Wall, Poly	4720-601-25-00
Tubing, 3/4" ID x 1-1/8" OD, Nylon	4720-001-84-01
Tubing, 1" Polybrade	4720-011-69-16
Tubing, 1" ID x 1-3/8" OD, Poly	4720-601-23-00
Tubing, 1 1/2" Polybrade	4720-011-69-17

CONTROL BOX COVER ASSEMBLY

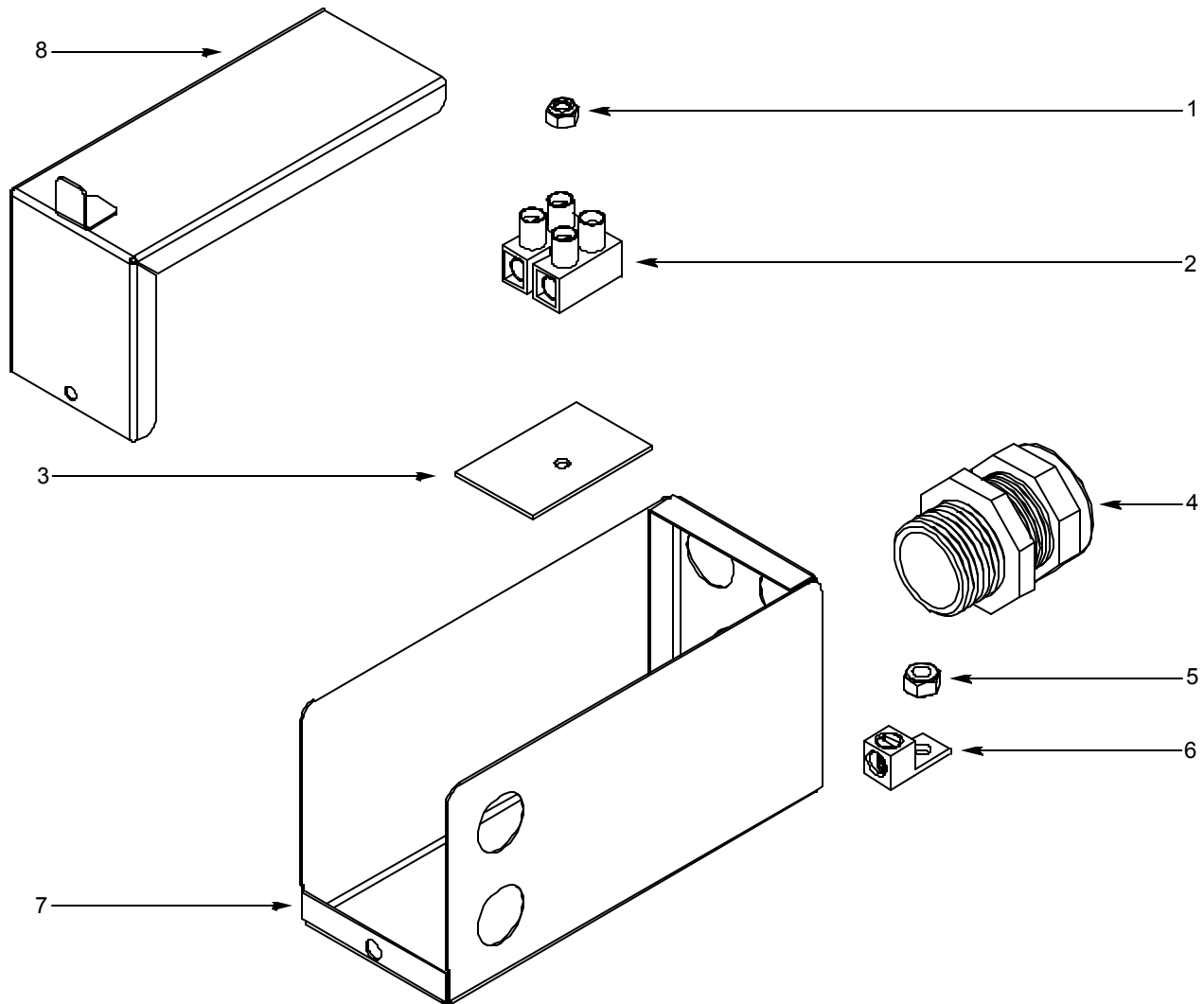


* Represents an item not shown.

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Cover	5700-002-40-00
2	2	Motor Chemical Feeder Pump, 36 RPM	4320-111-35-14
3	1	Motor, Chemical Feeder Pump, 14 RPM	4320-111-35-13
4	1	Drip Channel	5700-002-40-65
5	1	Chemical Feeder Pump Kit	4320-121-37-10
6	1	Tubing, 1/4" OD x 120" Long, White	5700-011-37-13
7	1	Tubing, 1/4" OD x 120" Long, Red	5700-011-37-15
8	1	Tubing, 1/4" OD x 120" Long, Blue	5700-011-37-17
9	1	Tubing, 1/4" OD x 60" Long, Red	5700-011-63-18
10	1	Tubing, 1/4" OD x 60" Long, Blue	5700-002-52-34
11	1	Tubing, 1/4" OD x 60" Long, Blue	5700-002-52-34
12*	1	Stiffener	5700-002-66-49
13*	1	Decal, Detergent / Rinse Prime	9905-011-34-95
14*	1	Decal, Sanitizer Prime	9905-011-34-98
15*	1	Tygon Sight Tube	5700-011-34-91

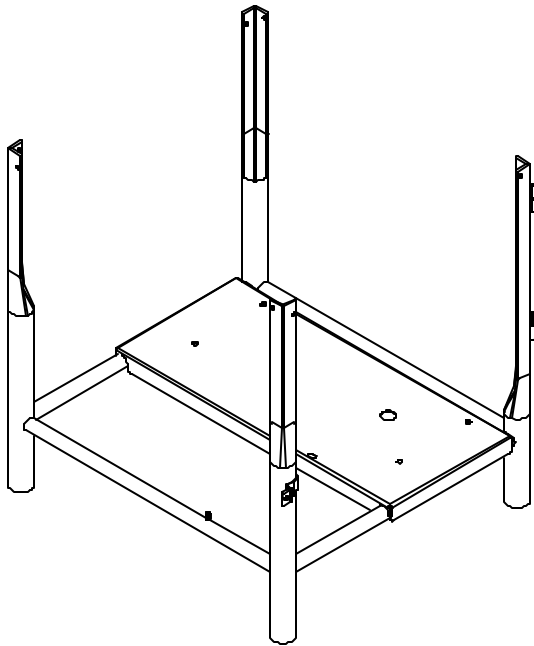


ELECTRICAL CONNECTION BOX ASSEMBLY



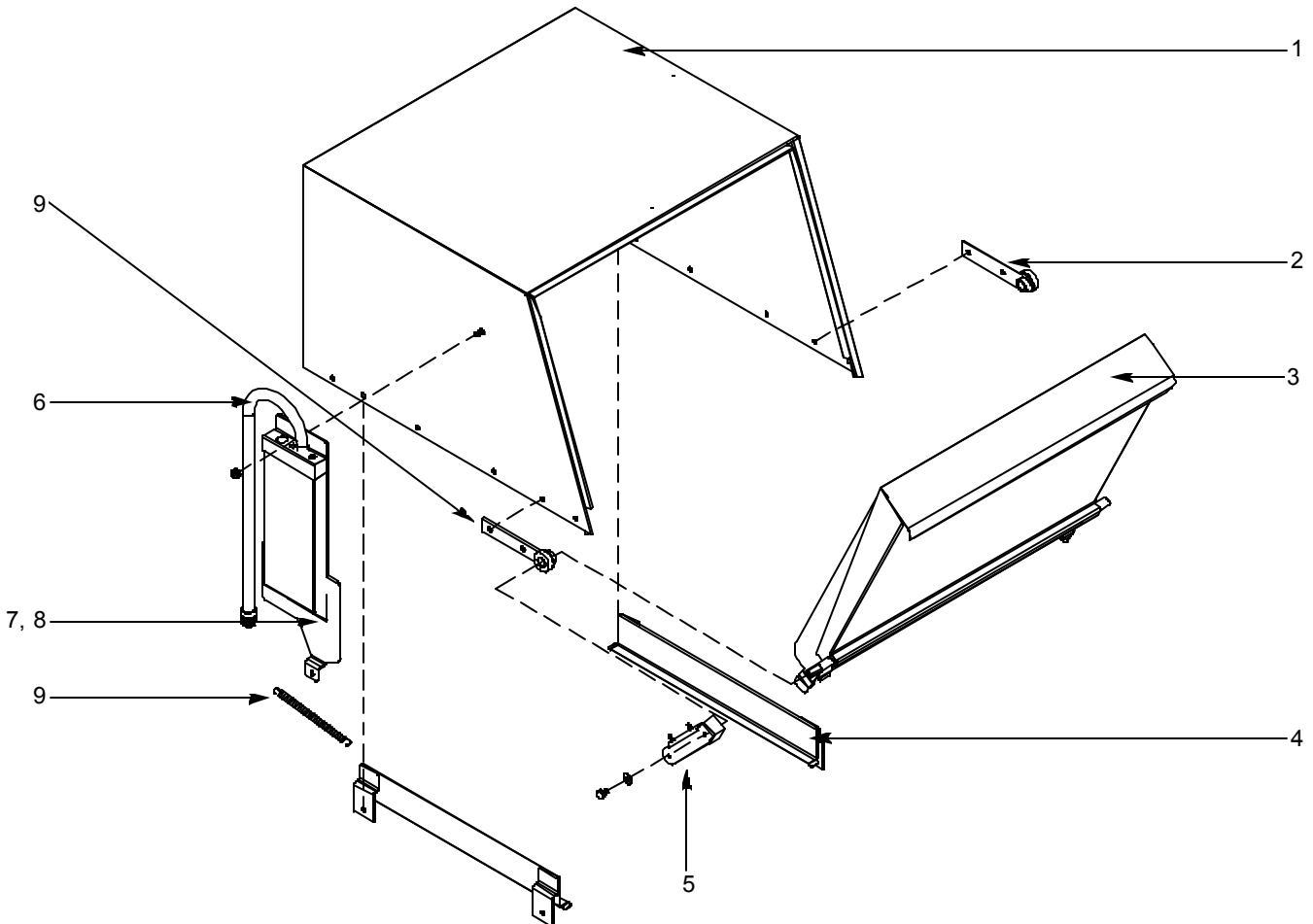
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Locknut, 6-32 with Nylon Insert	5310-373-03-00
2	1	Terminal Block	5940-500-09-61
3	1	Terminal Block Spacer	5700-011-40-05
4	1	Fitting, Straight Through, Liquidite (1.375")	5975-002-30-67
	1	Nut, 1" NPT Locking Heyco	5975-002-35-55
5	1	Locknut, 10-24 with Nylon Insert	5310-373-01-00
6	1	Lug, Ground	5940-200-76-00
7	1	Electrical Connection Box Weldment	5700-002-45-69
	1	Decal, Power Connection	9905-011-47-64
	1	Decal, Copper Conductors Only	9905-011-47-35
8	1	Electrical Connection Box Cover	5700-002-45-70
	1	Screw, 10-32 x 3/8" Long, Phillips Trusshead	5305-173-12-00
	1	Decal, Warning to Disconnect Power	9905-100-75-93

FRAME WELDMENT/HOOD ASSEMBLY



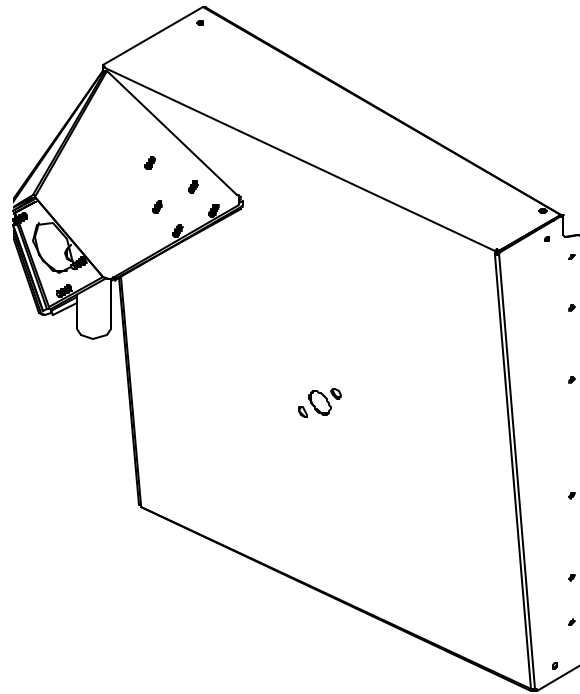
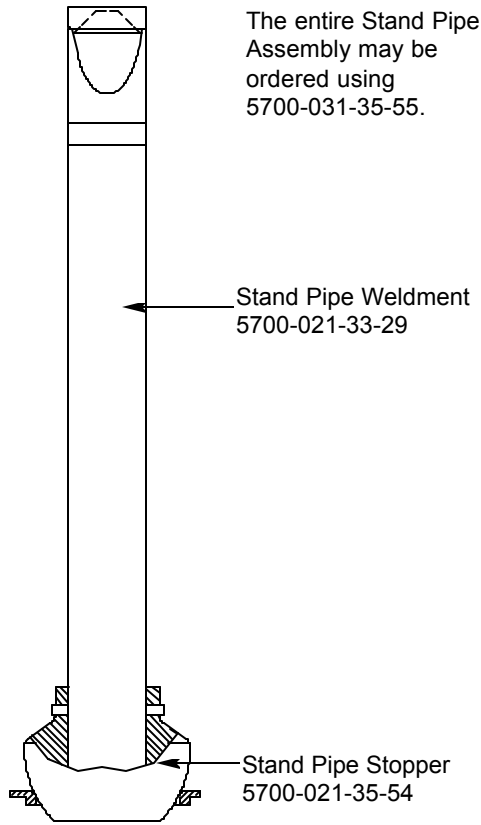
Frame Assembly
5700-002-54-64

To order the Bullet Feet
4 per Frame Weldment
5340-002-14-55

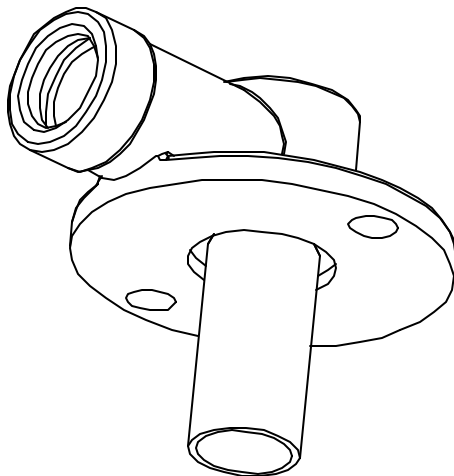


HOOD ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment	5700-002-44-36
2	1	Plate, Door Pivot (Right Side) Assembly	5700-002-52-95
3	1	Door Weldment	5700-002-54-56
4	2	Rack Rail Weldment	5700-002-45-67
5	1	Plate, Shock Mounting	5700-002-45-64
6	1	Fill Tube Weldment	5700-002-45-61
7	1	Airgap Weldment	5700-002-45-60
8	1	Airgap Gasket	5700-002-52-24
9	1	Spring	5340-011-44-58
10	1	Plate, Door Pivot (Left Side) Assembly	5700-002-45-62



Tub Weldment
5700-002-45-50



Lower Manifold Weldment
5700-002-45-51

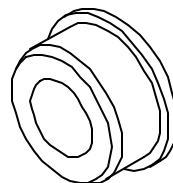
Secured with the following parts:
Bolt, 3/8"-16 x 1 1/4" S/S
5305-276-10-00

Washer, 3/8" Bevel-Square Iron
5311-011-35-36

Lockwasher, 3/8"
5311-276-01-00

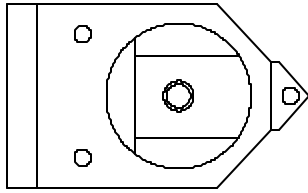
Nut, 3/8"-16 S/S Hex
5310-276-01-00

To order the O-ring or gasket, please refer to the items associated with the Modified Casting on the page entitled "Wash Arm Assembly".



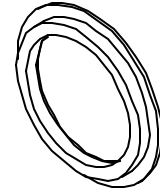
Wash Restrictor
(Goes inside the tube of the Lower Manifold Weldment)
5700-002-84-69

SPILLWAY WELDMENT ASSEMBLY/PUMP SUCTION HOSE

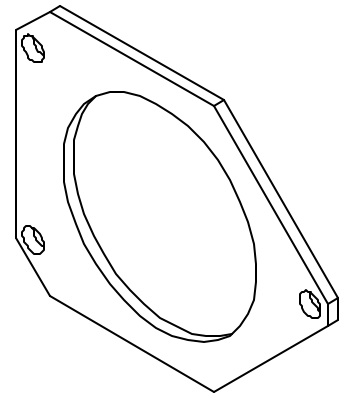
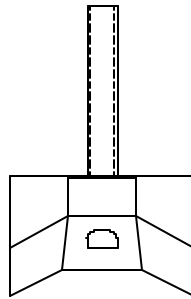
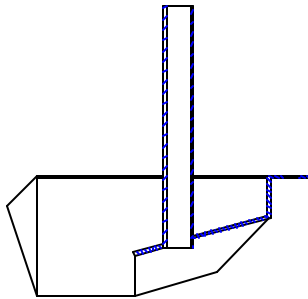


Spillway Weldment
1 per machine
5700-031-37-86

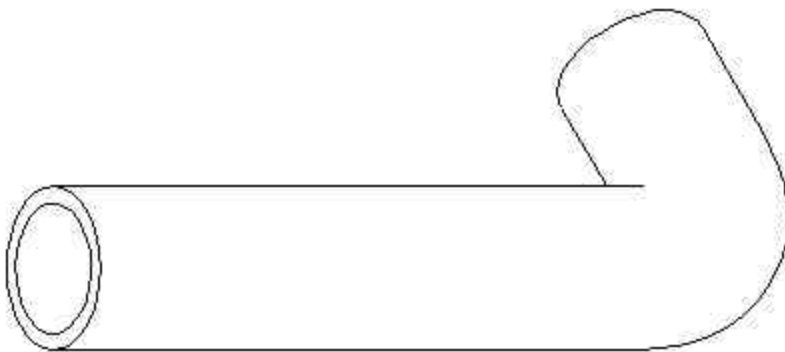
Associated Hardware:
Locknut, 1/4"-20 S/S Hex with Nylon
Insert
5310-374-01-00



Drain Seat Insert
1 per machine
5700-021-34-38



Spillway Gasket
2 per machine
5700-111-34-52



Pump Suction Hose
1 per machine
5700-002-40-82

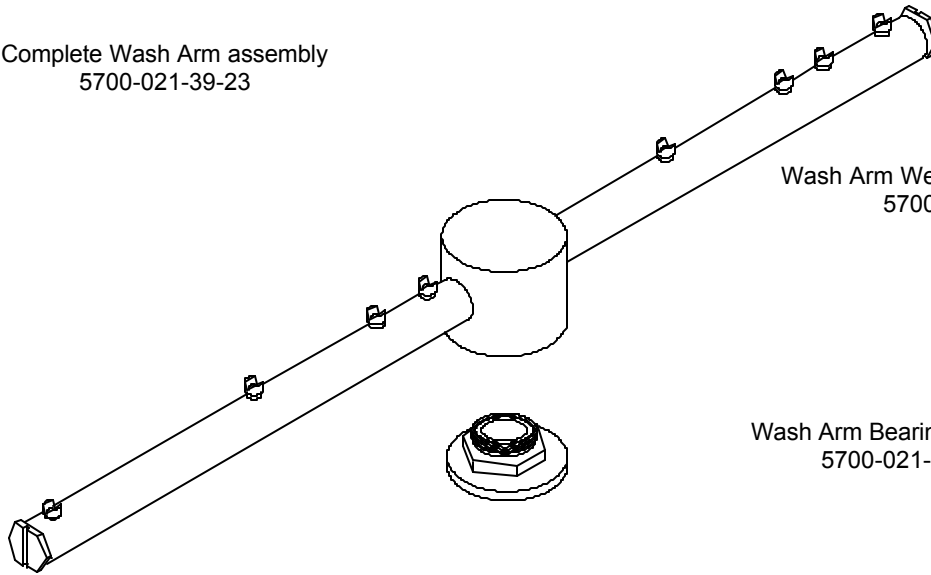
To order the hose clamps for the Pump Suction Hose:
Hose Clamp
4730-719-01-37

Hose Clamp 1 1/16" to 2 1/4"
4730-719-18-00

SECTION 5: PARTS SECTION

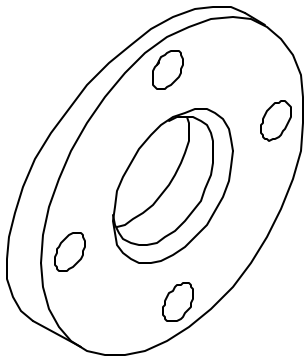
WASH ARM ASSEMBLY

Complete Wash Arm assembly
5700-021-39-23

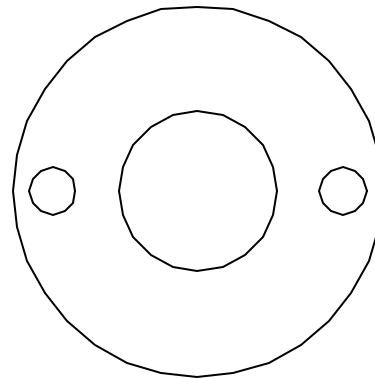


Wash Arm Weldment w/ End Plugs
5700-021-46-58

Wash Arm Bearing Assembly
5700-021-35-97



Modified Casting Wedge
5700-002-45-06

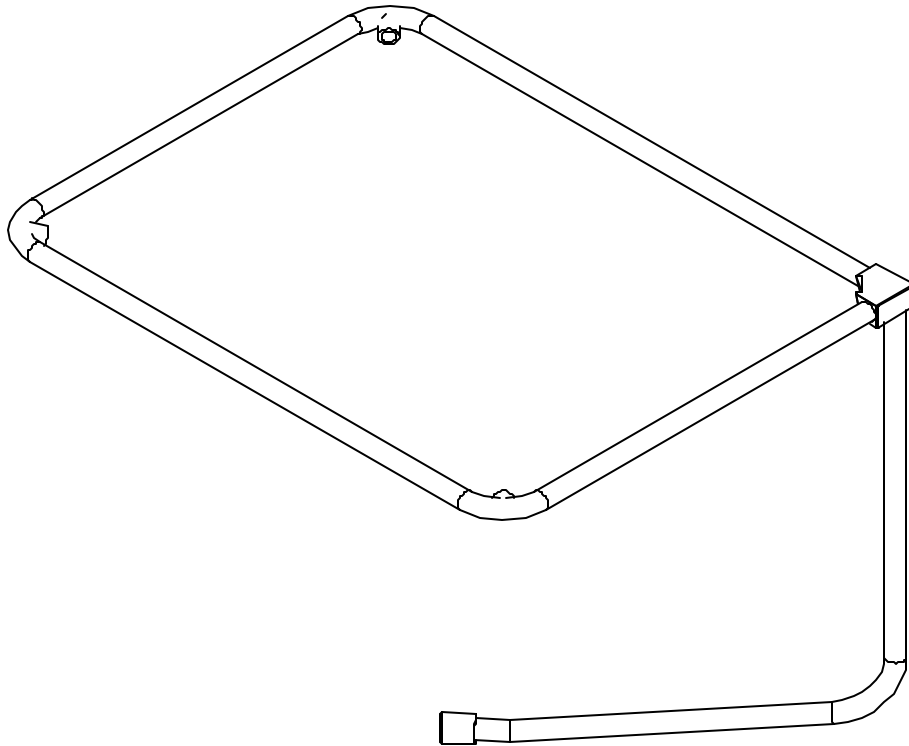


Manifold Gasket
5700-111-35-03



Manifold O-Ring
5330-111-35-15

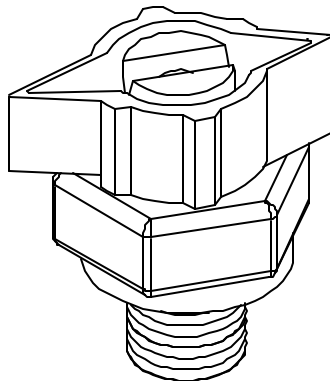
UPPER HALO ASSEMBLY



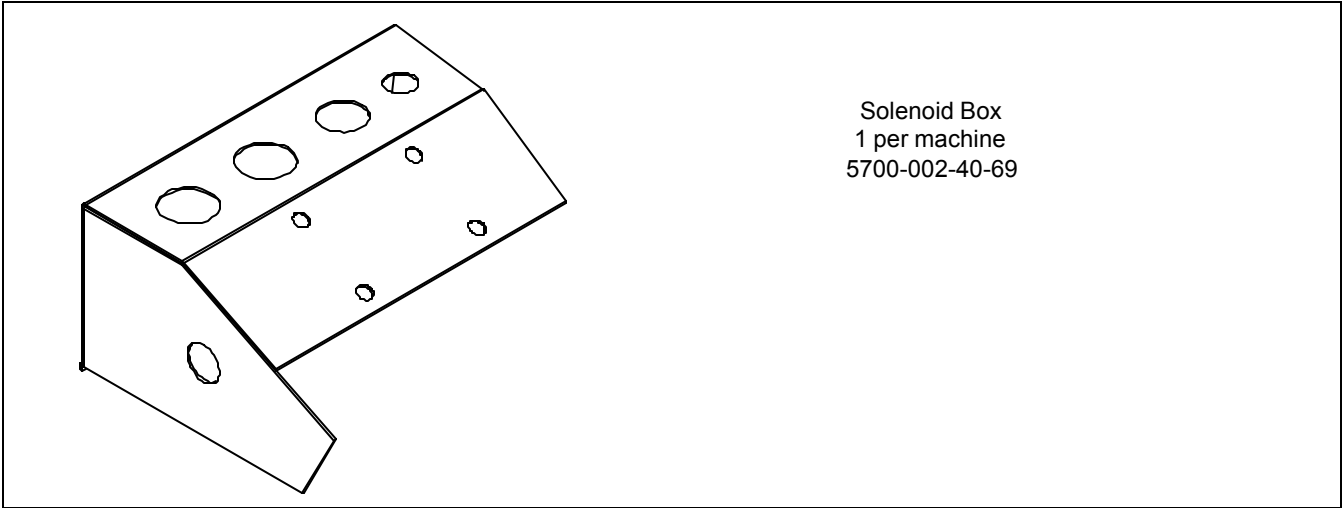
Upper Wash Halo Weldment
1 per machine
5700-002-45-66

Clamp, Pipe 5/8"
5700-000-35-06

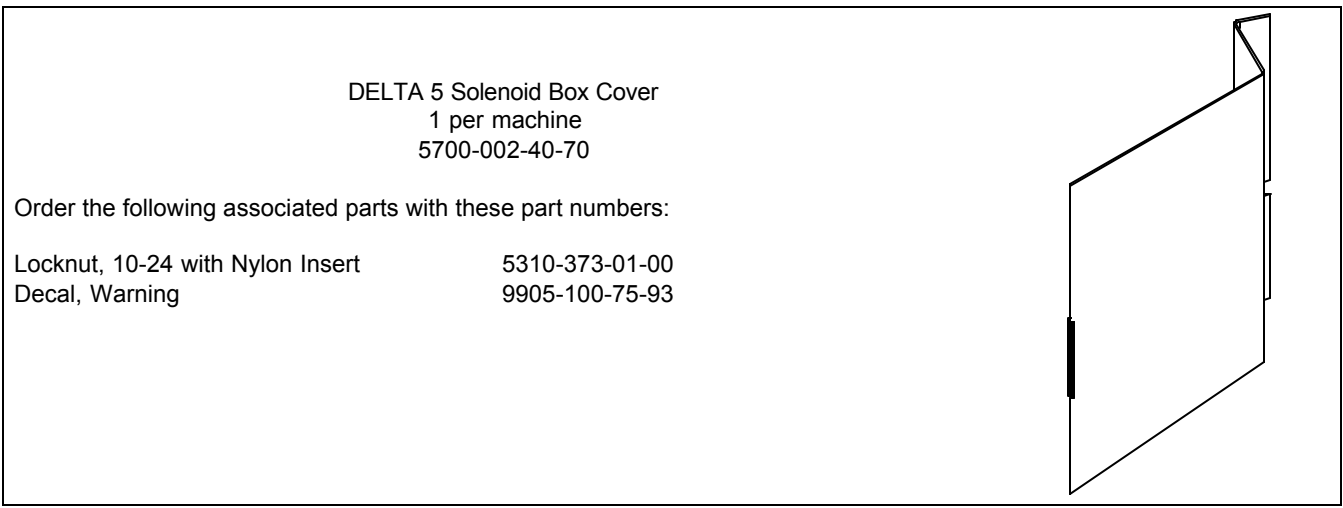
Locknut, 1/4"-20 Hex with Nylon Insert
5310-374-01-00



Spray Nozzle and Receptacle
3 per machine
4730-002-55-61



Solenoid Box
1 per machine
5700-002-40-69



DELTA 5 Solenoid Box Cover
1 per machine
5700-002-40-70

Order the following associated parts with these part numbers:

- | | |
|----------------------------------|----------------|
| Locknut, 10-24 with Nylon Insert | 5310-373-01-00 |
| Decal, Warning | 9905-100-75-93 |

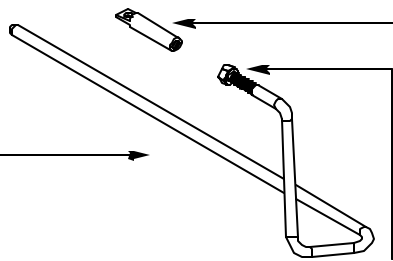
The DELTA 5 drain solenoid and related hardware may be ordered using the following part numbers:

- | | |
|----------------------------------|----------------|
| Drain Solenoid (115 Volt) | 4810-200-11-00 |
| Locknut, 10-24 with Nylon Insert | 5310-373-01-00 |

Drain Link Assembly

- Cotter Pin (Not Shown)
1 per assembly
5315-011-60-09

- Drain Link
1 per assembly
5700-002-40-83



- Drain Link Connector
1 per assembly
5700-002-38-10

- Nut, Hex, 5/16"-18
1 per assembly
5310-275-01-00

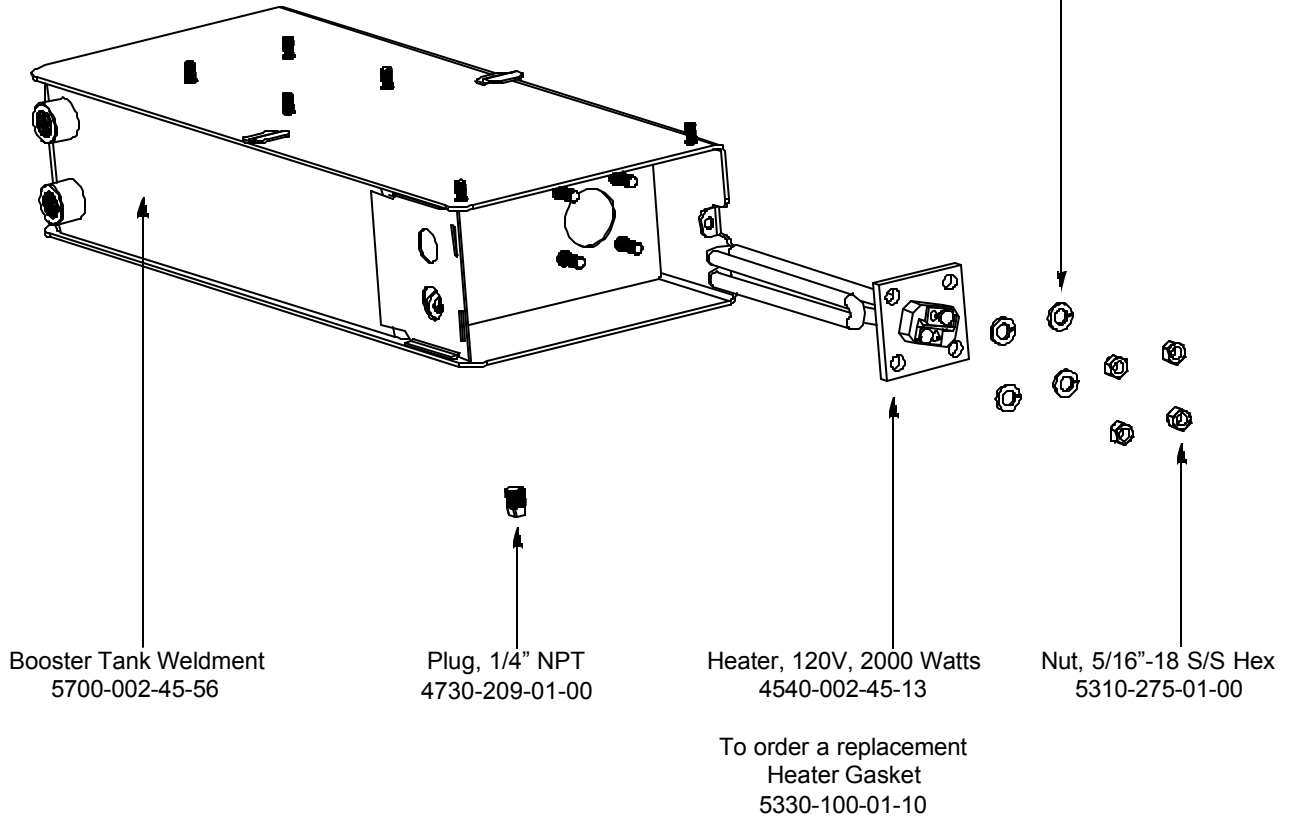
Order the entire Drain Link Assembly using 5700-002-45-52

BOOSTER TANK ASSEMBLY

Secured with Locknut, 1/4"-20 S/S Hex with Nylon Insert
5310-374-01-00

Washer, 1/4"-20 S/S
5311-174-01-00

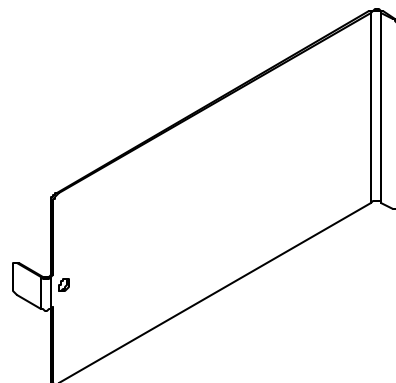
Lockwasher, 5/16"
5311-275-01-00



Booster Tank Cover
1 per machine
5700-002-39-07

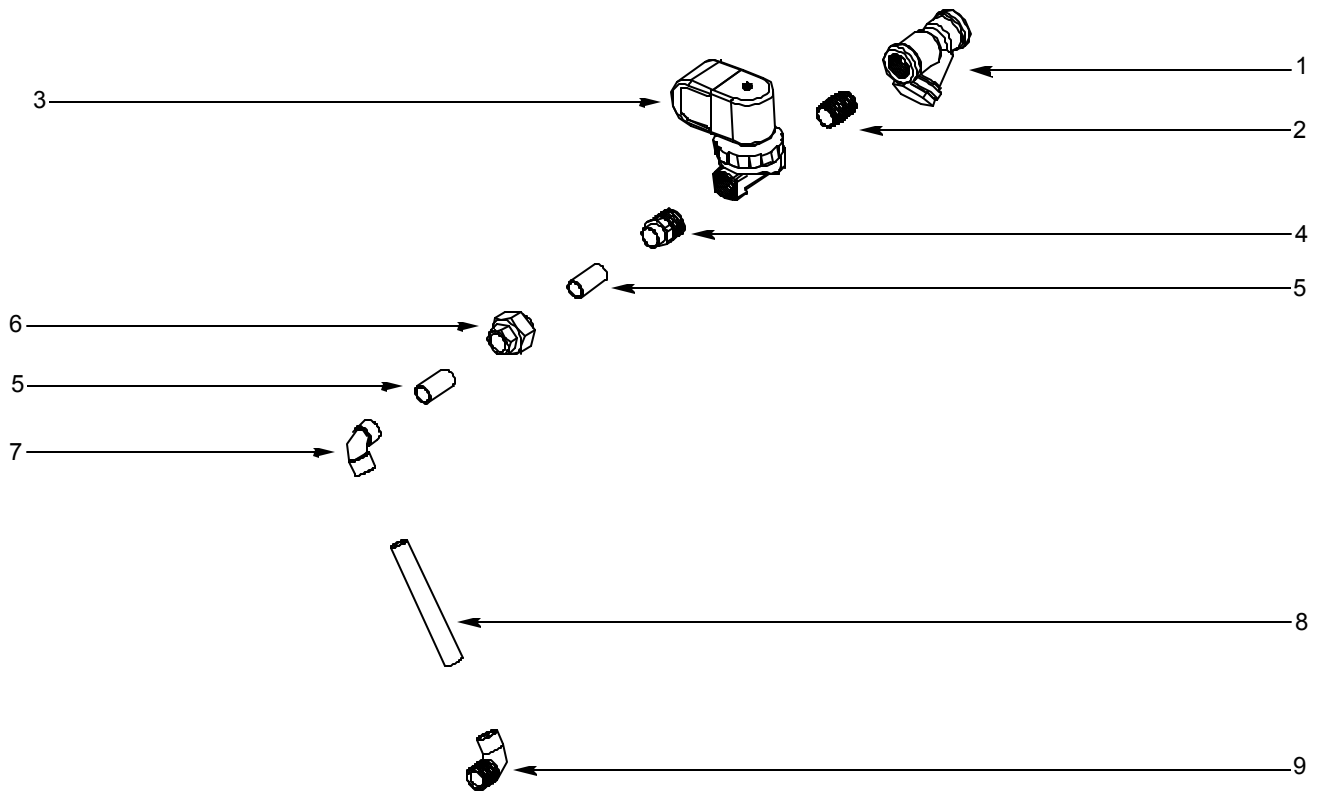
Secured with Screw 10-32 x 3/8" Long Phillips Truss Head
5305-173-12-00

Decal, Warning to Disconnect Power
9905-100-75-93



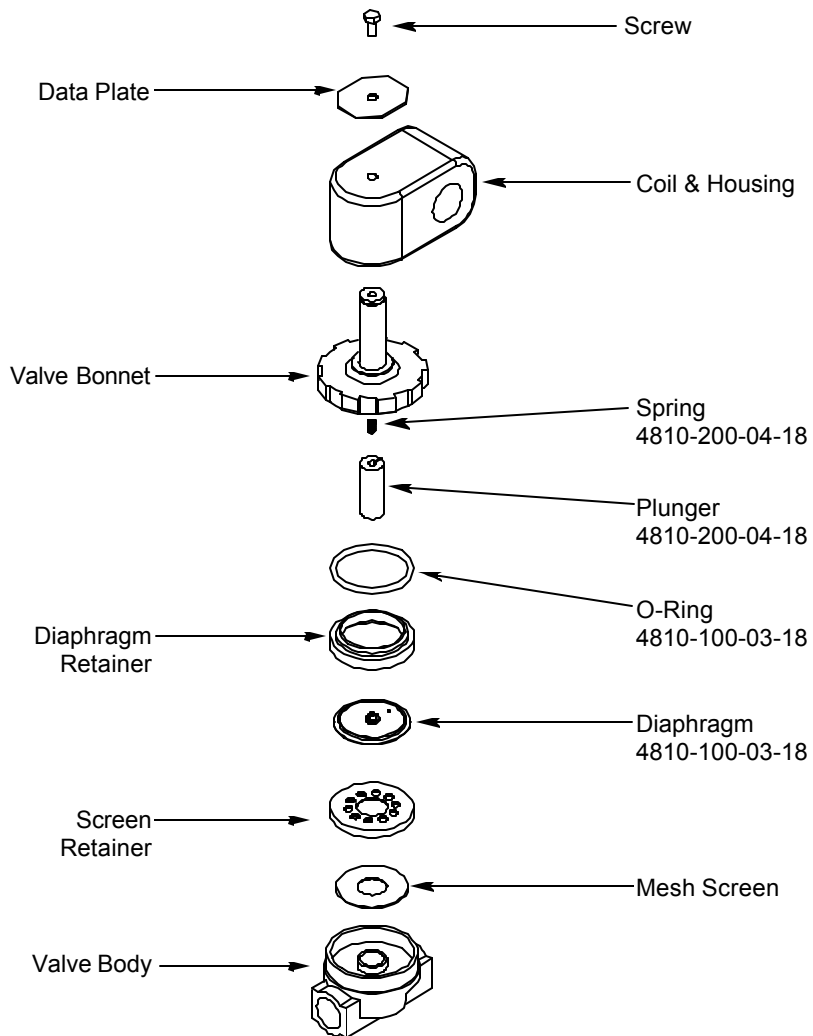
SECTION 5: PARTS SECTION

INCOMING PLUMBING ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Y-Strainer	4730-217-01-10
2	1	Nipple, Close, 1/2" NTP, Brass	4730-207-15-00
3	1	Valve, Solenoids, 1/2" (CU to MSPS)	4810-100-12-18
4	1	Adapter, 1/2" (CU to MSPS)	4730-401-08-01
5	2	Tube, Copper, 1/2" x 1 1/4" Long	5700-001-08-28
6	1	Union, 1/2", Copper to Copper	4730-412-05-01
7	1	Elbow, 607, 1/2" Copper to Copper	4730-406-01-01
8	1	Tube, Copper, 1/2" x 4 1/4" Long	5700-001-01-60
9	1	Elbow, 1/2" x 90° (CU to MSPS)	4730-406-32-01

1/2" SOLENOID VALVE REPAIR PARTS KIT

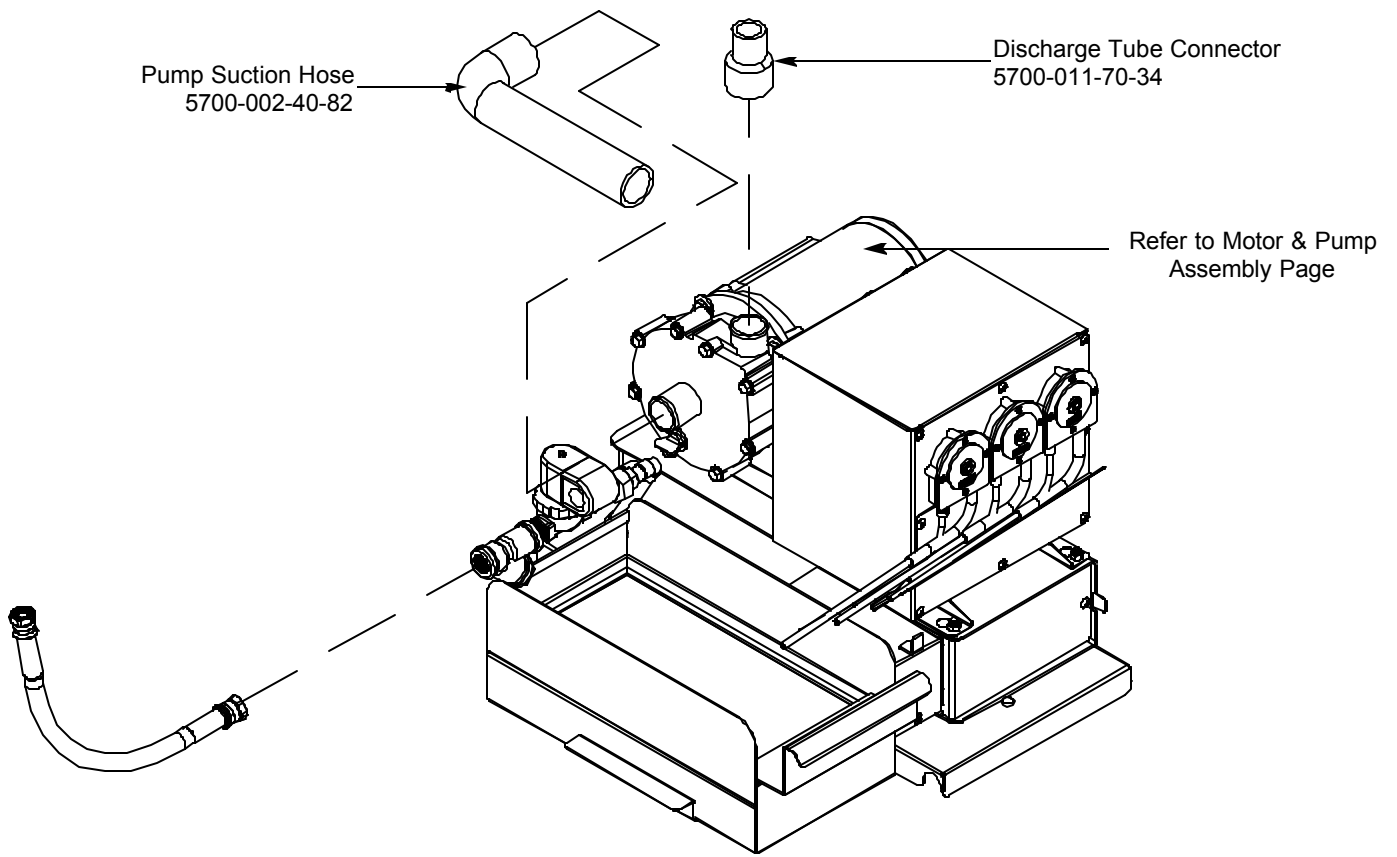


Complete 110 Volt Solenoid Valve Assembly

4810-100-12-18

Coil & Housing only

4810-200-01-18



Secured with Locknut, 1/4"-20 S/S Hex w/ Nylon Insert
5310-374-01-00

Washer, 1/4"-20 S/S
5311-174-01-00

MOTOR & PUMP ASSEMBLY

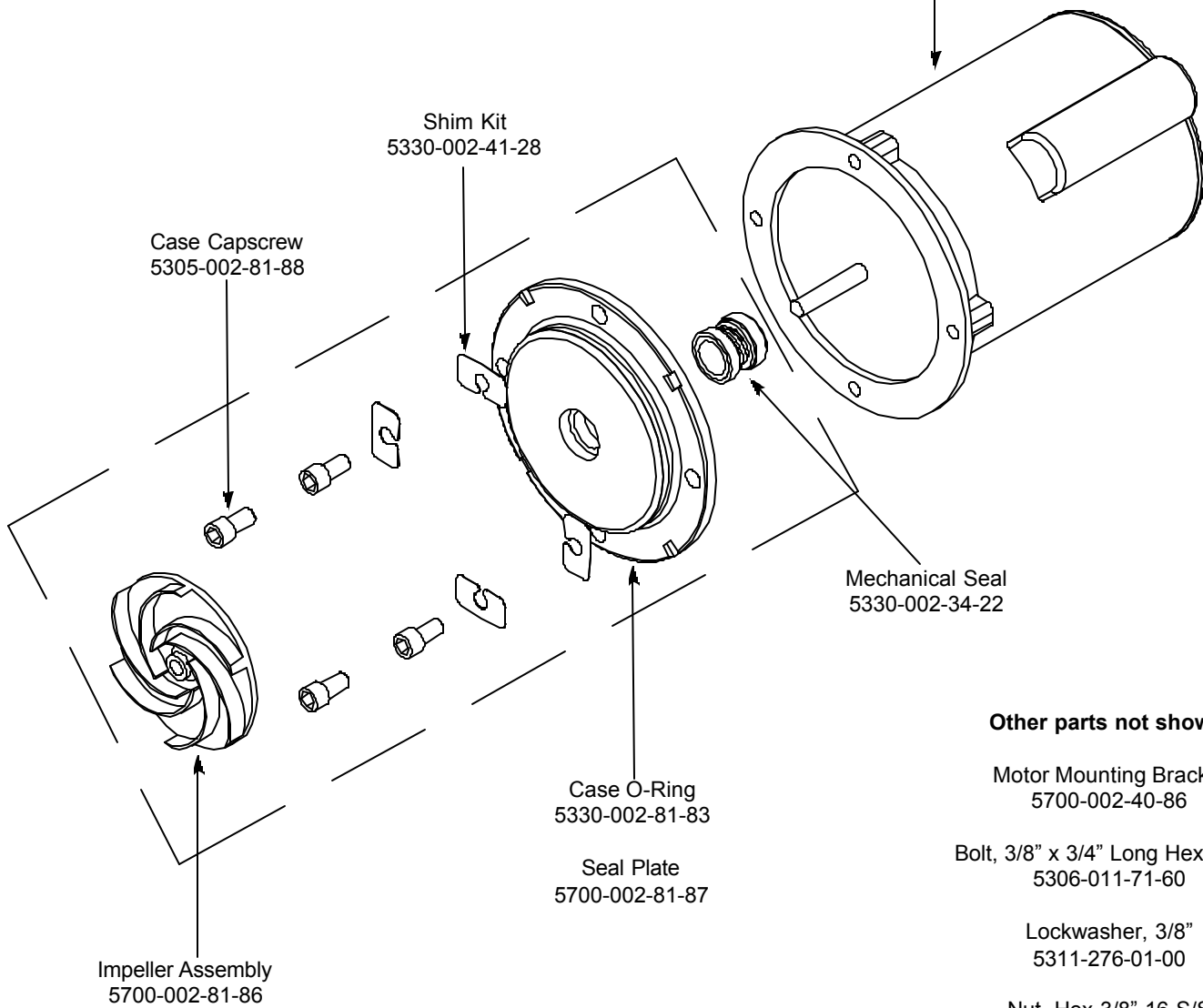
Complete Pump & Motor Assembly
6105-002-16-29

Pump Only Assembly
(Area indicated within box, Casing is included)
5700-002-79-49

Pump Casing (Not Shown)
5700-002-84-99

Complete Pump & Motor Assembly
(Including the Motor Mounting Bracket and Hardware)
6105-002-70-16

Motor Only
6105-002-79-61



Other parts not shown.

Motor Mounting Bracket
5700-002-40-86

Bolt, 3/8" x 3/4" Long Hex Head
5306-011-71-60

Lockwasher, 3/8"
5311-276-01-00

Nut, Hex 3/8"-16 S/S
5310-276-01-00

Drain Plug
4730-002-81-89

SECTION 5: PARTS SECTION

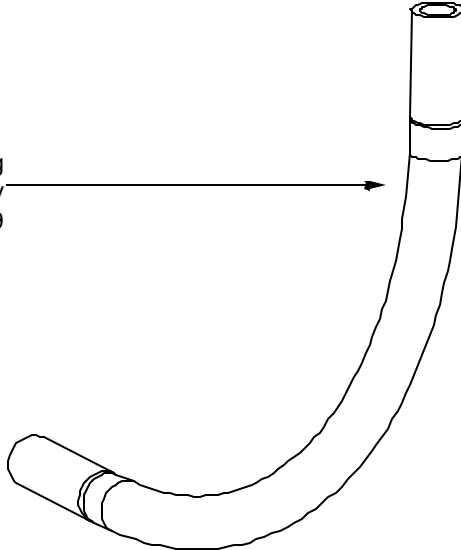
BOOSTER TANK DISCHARGE HOSE/FILL TUBE WELDMENT ASSEMBLY

Order the entire Booster Tank Discharge Hose Assembly with 5700-002-45-48.

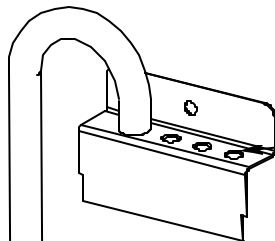
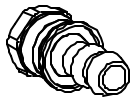


Fitting, 1/2" Pushlock, Female, Brass
2 per assembly
4730-011-93-99

Hose, 1/2" x 22 1/2" Long
1 per assembly
5700-002-45-59



Connects to the Incoming Plumbing Assembly with a 1/2" NPT Brass Close Nipple:
4730-207-15-00

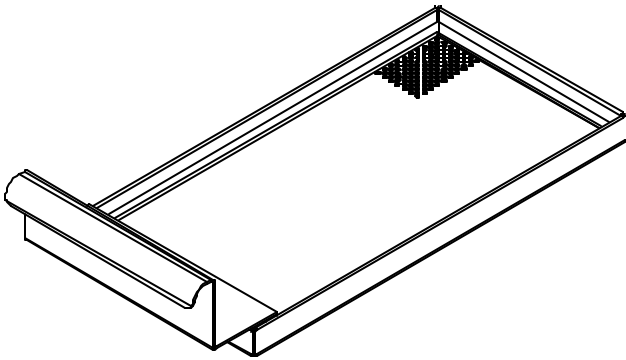


Chemical Tube Grommet
3 per assembly
5325-002-42-65

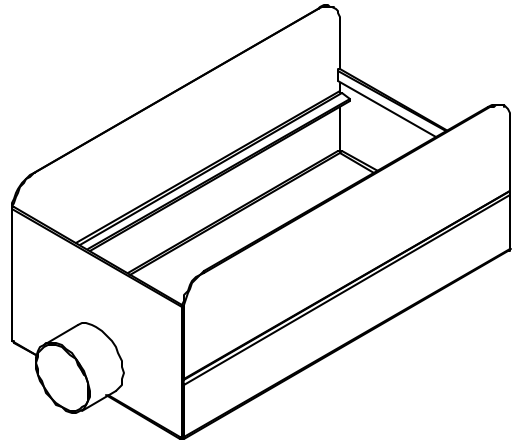
FILL TUBE WELDMENT ASSEMBLY

Fill Tube Weldment
1 per machine
5700-002-45-61

STRAINERS

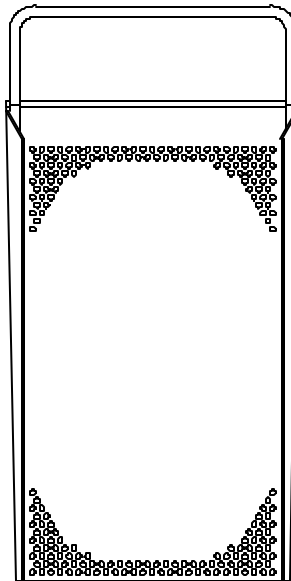


Accumulator Strainer Weldment
1 per machine
5700-002-45-54



Accumulator Shell Weldment
1 per machine
5700-002-51-95

Secured with Locknut, 1/4"-20 S/S Hex with Nylon Insert
5310-374-01-00



Pump Intake Strainer
1 per machine
5700-002-60-50

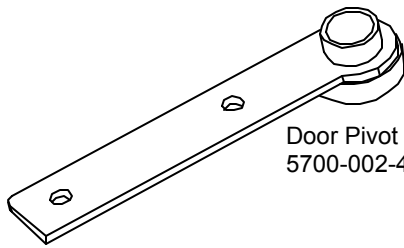
SECTION 5: PARTS SECTION

DOOR COMPONENTS

Door Pivot Plate Left Assembly

Complete Left Assembly
5700-002-45-62

Door Pivot Plate Bearing
5700-002-45-09

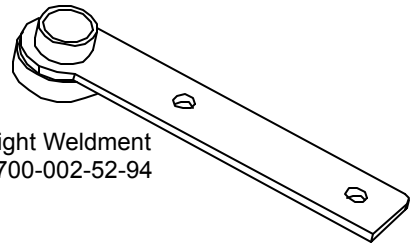


Door Pivot Plate Left Weldment
5700-002-45-63

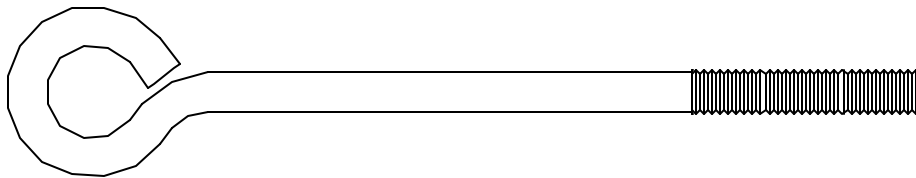
Door Pivot Plate Right Assembly

Complete Right Assembly
5700-002-52-95

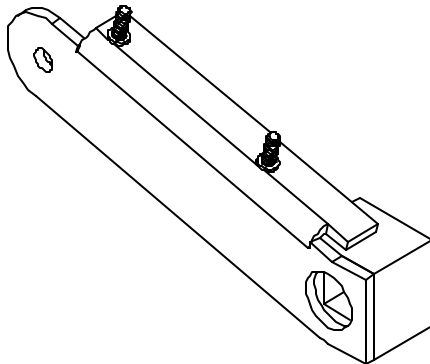
Door Pivot Plate Bearing
5700-002-45-09



Door Pivot Plate Right Weldment
5700-002-52-94



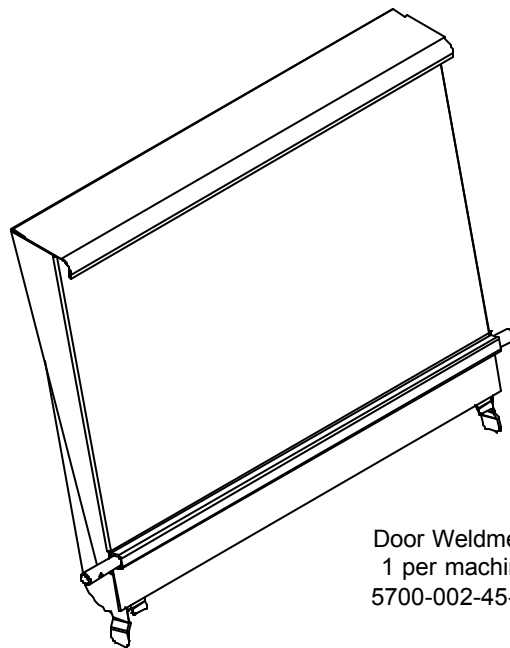
Bolt, 1/4"-20 Eye, S/S
5306-002-55-59



Shock Mounting Plate Weldment
1 per machine
5700-002-45-64

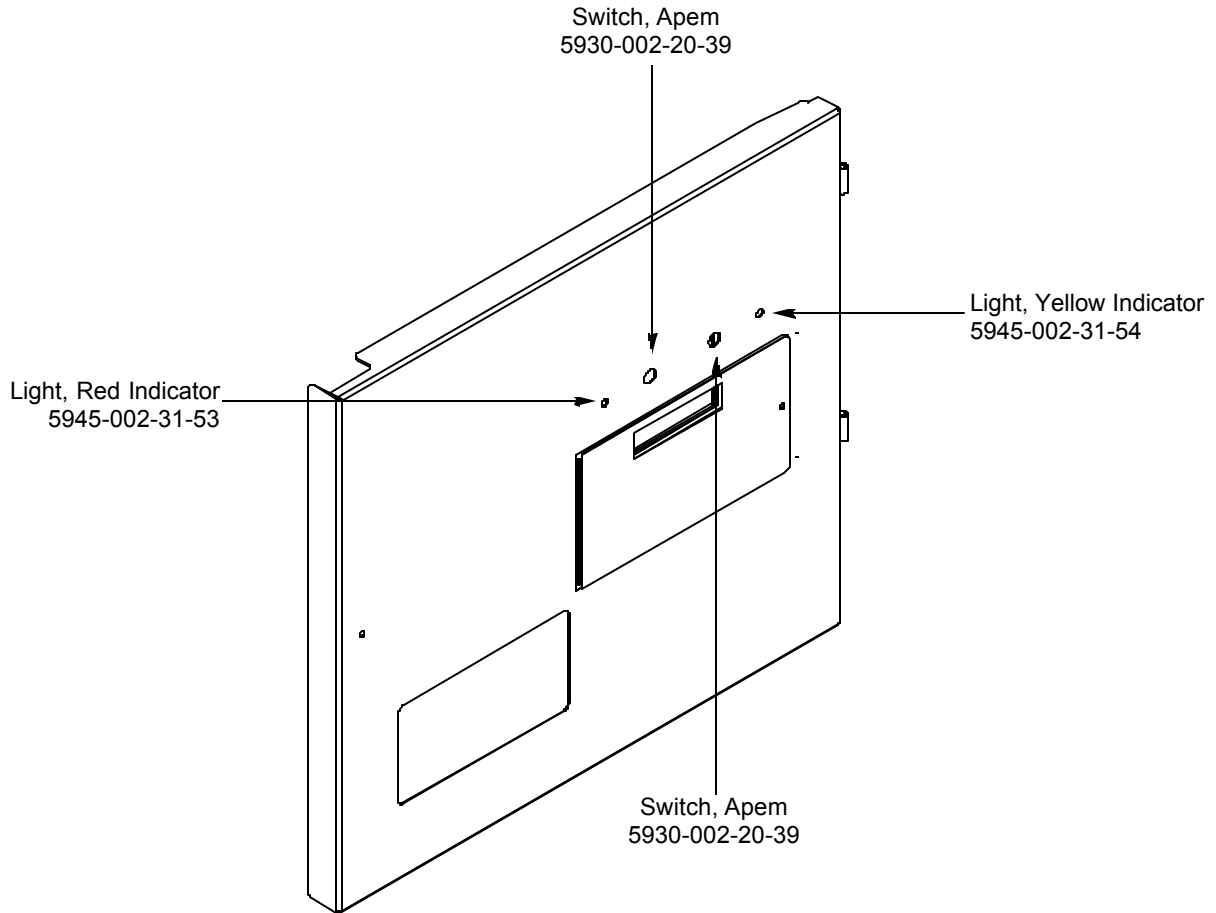
Secured with:
Bolt, 1/4"-20 x 3/8"
5305-274-20-00

Washer, 1/4"-20 S/S
5311-174-01-00



Door Weldment
1 per machine
5700-002-45-65

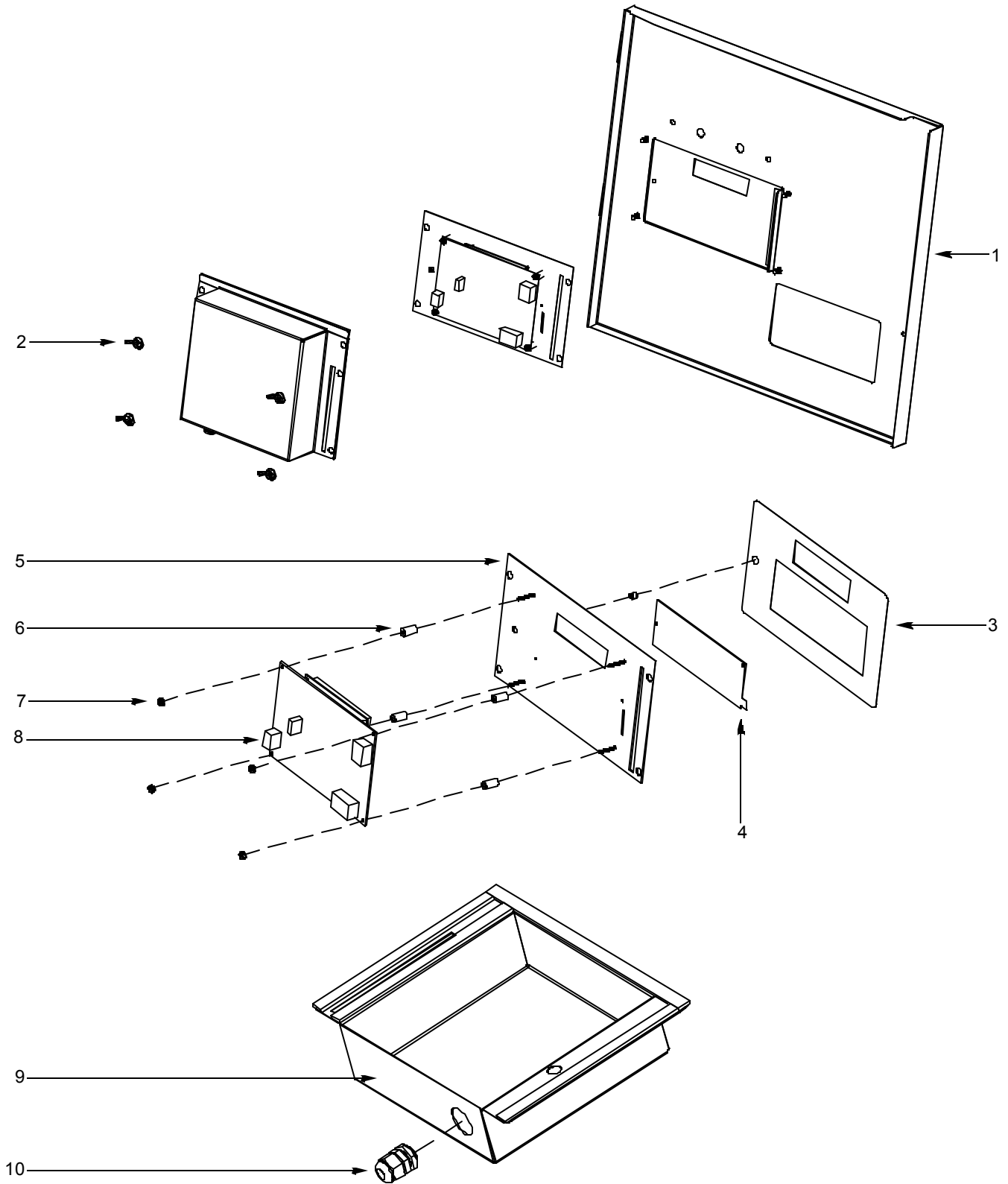
FRONT PANEL ASSEMBLY



Diecut, Front Panel Decal
5700-002-46-72

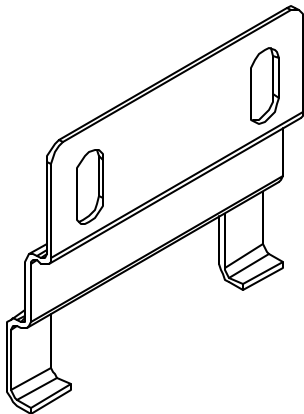
Front Panel Decal
9905-002-45-88

Secured with:
Screw, 10-32 x 3/8" Long, Phillips Truss Head
5305-173-12-00



FRONT PANEL ASSEMBLY (CONTINUED)/MAGNET SWITCHES

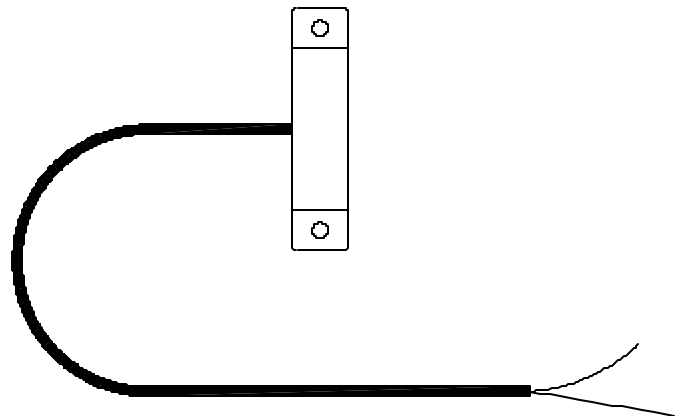
ITEM	QTY	DESCRIPTION	Mfg.No.
1	1	Front Panel Weldment	5700-002-45-83
2	4	Wingnut, 1/4"-20, Nylon Keypad Assembly	5310-994-01-00 5700-002-54-79
3	1	Decal, Delta 5 Keypad	9905-002-45-85
4	1	Keypad	5945-002-16-79
5	1	Panel, Keypad Weldment	5700-002-54-77
6	4	Nylon Spacer	5940-002-21-73
7	4	Nut, 6-32, Keps Stainless Steel	5310-002-24-29
8	1	Control Board	5945-002-45-84
9	1	Electrical Panel Back	5700-002-39-98
10	1	Fitting, Liquid Tight, .45 ID x .709 OD	5975-002-18-61
11*	1	Harness, Front Panel to Control Box	5700-002-45-89



Magnet Switch Bracket
1 per machine
5700-021-71-18

Locknut, 1/4"-20 Low Profile Hex with Nylon Insert
2 per Switch Bracket
5310-374-02-00

Washer, S/S, 1/4"-20 I.D.
2 per Switch Bracket
5311-174-01-00



Reed Switch
1 per machine
5930-111-51-22

Locknut, 6-32 Hex with Nylon Insert
2 per Reed Switch
5310-373-03-00

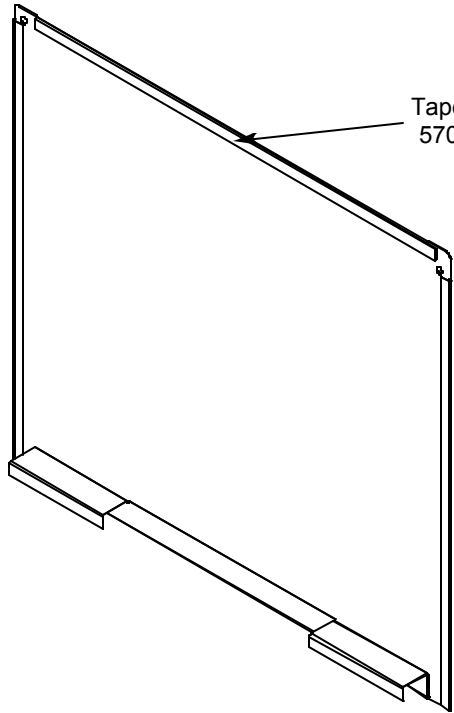
SECTION 5: PARTS SECTION

LEFT AND RIGHT SIDE PANEL ASSEMBLIES

Complete Right Side Panel Assembly
5700-002-60-26

Right Side Panel
5700-002-59-96

Tape, 21 5/8" VHB
5700-002-60-29



Complete Left Side Panel Assembly
5700-002-60-27

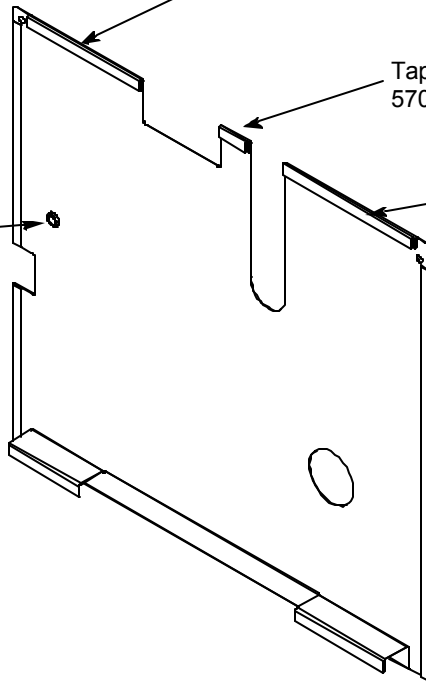
Left Side Panel
5700-002-59-97

Tape, 6 1/4" VHB
5700-002-60-32

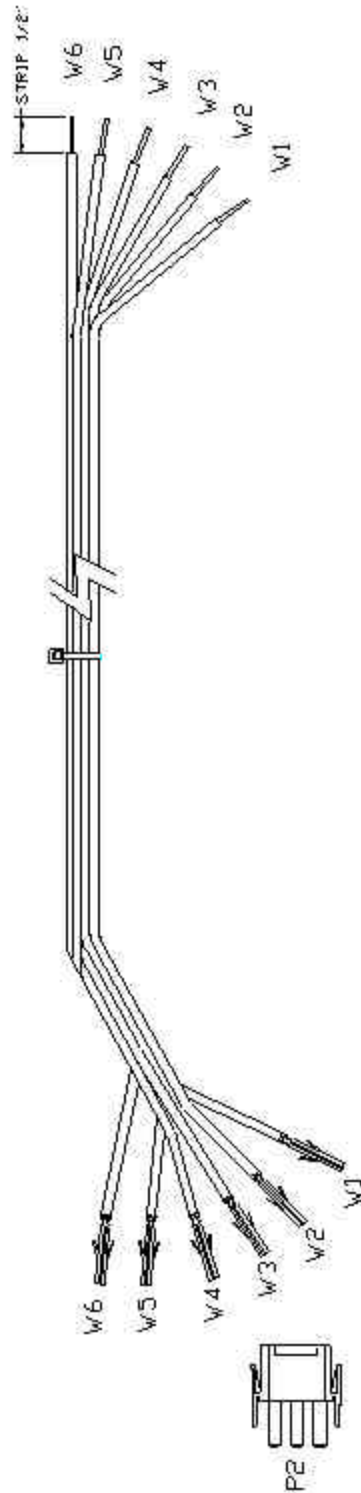
Tape, 1 1/2" VHB
5700-002-60-31

Tape, 7 1/4" VHB
5700-002-60-30

Grommet, Rubber 1/2" OD x .38 ID
5325-011-46-73



8 - PIN HARNESS



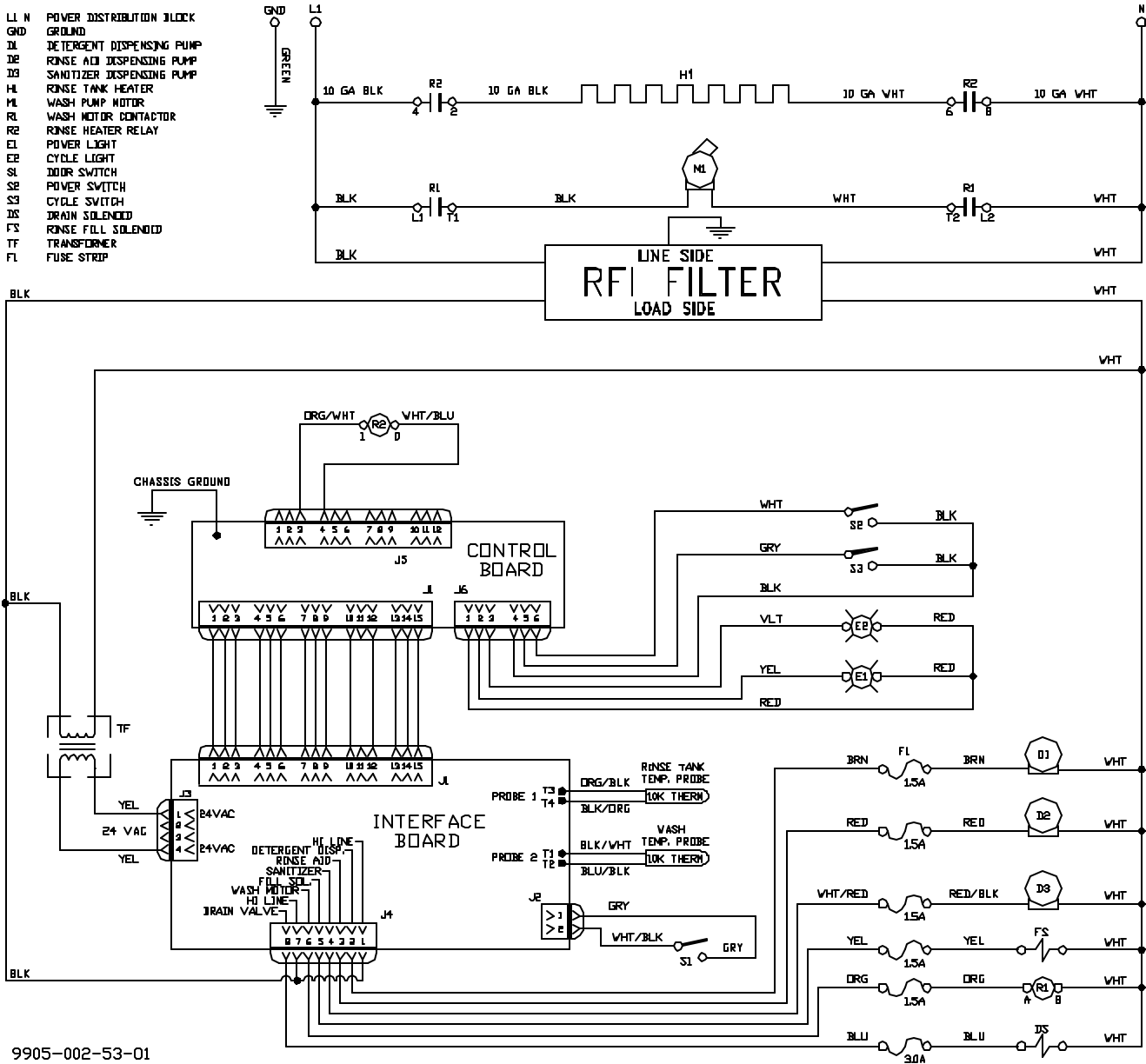
WIRE No.	WIRE COLOR	WIRE LENGTH	FROM CONNECTION	TO CONNECTION
W1	RED	12"	BARE	P2-1
W2	GRN	12"	BARE	P2-2
W3	DRG	12"	BARE	P2-3
W4	BLU	12"	BARE	P2-4
W5	GRY	12"	BARE	P2-5
W6	WHT	12"	BARE	P2-6

SECTION 6: ELECTRICAL SCHEMATICS

DELTA 5 115 VOLT - 50/60 HERTZ - SINGLE PHASE

LEGEND

- LI N POWER DISTRIBUTION BLOCK
- GND GROUND
- D1 DETERGENT DISPENSING PUMP
- D2 RINSE AID DISPENSING PUMP
- D3 SANITIZER DISPENSING PUMP
- H1 RINSE TANK HEATER
- M1 WASH PUMP MOTOR
- R1 WASH MOTOR CONTACTOR
- R2 RINSE HEATER RELAY
- E1 POWER LIGHT
- E2 CYCLE LIGHT
- S1 DOOR SWITCH
- S2 POWER SWITCH
- S3 CYCLE SWITCH
- DRAIN DRAIN SOLENOID
- TF RINSE FILL SOLENOID
- FL TRANSFORMER
- F1 FUSE STRIP



9905-002-53-01