

TECHNICAL MANUAL

**INSTALLATION MANUAL FOR EXPORT UNITS
SERVICE MANUAL FOR DOMESTIC UNITS**

FOR JACKSON MODELS:

JP-24

JP-24F

JP-24B

JP-24BF



March 6, 2006
P/N 7610-002-49-79 (Revision D)

Jackson MSC, Inc.
P.O. BOX 1060
HWY. 25E
BARBOURVILLE, KY. 40906
FAX (606) 523-9196
PHONE (606) 523-9795
www.jacksonmsc.com

| REVISION | REVISION DATE | MADE BY | APPLICABLE ECN | DETAILS |
|-----------------|----------------------|----------------|--------------------------|--|
| A | 07-15-2002 | MAW | 6527 | Release manual for service use. |
| B | 06-04-2003 | MAW | 6673, 6681 6637 | Updated per ecns. |
| C | 02-11-2004 | MAW | 6836 | Updated per ecns. |
| D | 03-06-2006 | MAW | 7421, 7231 6964, 7095 | Change thermostat from 05930-121-71-29 to 05930-510-03-79. Change thermostat from 05930-121-71-36 to 05930-011-49-43. Change Diverter Valve Assembly number from 05700-002-23-21 to 06410-012-23-21 & Diverter Valve Assembly 05700-002-23-22 to 06401-022-23-21. Replace 04820-300-07-00 vacuum breaker with 04820-003-06-13. |
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JP-24B

JP-24 = Undercounter, high temperature, hot water sanitizing, no booster tank.

JP-24F = Undercounter, high temperature, hot water sanitizing, no booster tank, with top and side panels.

JP-24B = Undercounter, high temperature, hot water sanitizing, with a booster tank.

JP-24BF = Undercounter, high temperature, hot water sanitizing, with a booster tank, with top and side panels.

Model: _____

Serial No.: _____

Installation Date: _____

Service Rep. Name: _____

Phone No.: _____

Jackson MSC Inc. 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

SPECIFICATIONS of the JP-24/JP-24F

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)

| | |
|------------------|-----|
| RACKS PER HOUR | 30 |
| DISHES PER HOUR | 600 |
| GLASSES PER HOUR | 600 |

OPERATING CYCLE (SECONDS)

| | |
|----------------------------|----|
| WASH TIME | 82 |
| DRAIN TIME | 28 |
| RINSE TIME | 10 |
| TOTAL CYCLE TIME (MINUTES) | 2 |

5 MINUTE TIMER OPERATING CYCLE (SECONDS)

| | |
|----------------------------|-----|
| WASH TIME | 262 |
| DRAIN TIME | 28 |
| RINSE TIME | 10 |
| TOTAL CYCLE TIME (MINUTES) | 5 |

TANK CAPACITY (LITERS) (GALLONS)

| | |
|-----------|-------------|
| WASH TANK | (21.5) 5.65 |
|-----------|-------------|

TEMPERATURES

| | |
|---------------------|----------------|
| WASH --- (MINIMUM) | (65.6°C) 150°F |
| RINSE --- (MINIMUM) | (82.2°C) 180°F |

WATER REQUIREMENTS

| | |
|----------------------------------|------------------|
| INLET TEMPERATURE | (82.2°C) 180°F |
| GALLONS PER HOUR | (198.7L) 52.3 |
| WATER LINE SIZE I.P.S. (Minimum) | (1.27 cm) 1/2" |
| DRAIN LINE SIZE I.P.S. (Minimum) | (3.81 cm) 1 1/2" |
| FLOW PRESSURE P.S.I. | 20±5 |
| FLOW, GALLONS PER MINUTE | (27L) 7.1 |

ELECTRICAL REQUIREMENTS

| | |
|---------------|-----|
| WASH MOTOR HP | 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.

JP-24/JP-24F:

| <u>VOLTS</u> | <u>PH</u> | <u>HZ</u> | <u>RINSE HEATER RATINGS</u> | <u>TOTAL AMPS</u> | <u>TYPICAL ELECTRICAL CIRCUIT</u> |
|--------------|-----------|-----------|-----------------------------|-------------------|-----------------------------------|
| 208 | 1 | 50 | 900KW | 12 | 15 AMP |
| 230 | 1 | 50 | 1100KW | 12 | 15 AMP |
| 208 | 1 | 60 | 900KW | 10 | 15 AMP |
| 230 | 1 | 60 | 1100KW | 10 | 15 AMP |

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

SPECIFICATIONS of the JP-24B/JP-24BF

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)

| | |
|------------------|-----|
| RACKS PER HOUR | 30 |
| DISHES PER HOUR | 600 |
| GLASSES PER HOUR | 600 |

OPERATING CYCLE (SECONDS)

| | |
|----------------------------|----|
| WASH TIME | 82 |
| DRAIN TIME | 28 |
| RINSE TIME | 10 |
| TOTAL CYCLE TIME (MINUTES) | 2 |

5 MINUTE TIMER OPERATING CYCLE (SECONDS)

| | |
|----------------------------|-----|
| WASH TIME | 262 |
| DRAIN TIME | 28 |
| RINSE TIME | 10 |
| TOTAL CYCLE TIME (MINUTES) | 5 |

TANK CAPACITY (LITERS) (GALLONS)

| | |
|------------|-------------|
| WASH TANK | (21.5) 5.65 |
| RINSE TANK | (11.4) 3 |

TEMPERATURES

| | |
|---------------------|----------------|
| WASH --- (MINIMUM) | (65.6°C) 150°F |
| RINSE --- (MINIMUM) | (82.2°C) 180°F |

WATER REQUIREMENTS

| | |
|--|------------------|
| INLET TEMPERATURE (40° Booster Heater) | (82.2°C) 140°F |
| INLET TEMPERATURE (70° Booster Heater) | (43.3°C) 110°F |
| GALLONS PER HOUR | (198.7L) 52.3 |
| WATER LINE SIZE I.P.S. (Minimum) | (1.27 cm) 1/2" |
| DRAIN LINE SIZE I.P.S. (Minimum) | (3.81 cm) 1 1/2" |
| FLOW PRESSURE P.S.I. | 20 ± 5 |
| FLOW, GALLONS PER MINUTE | (27L) 7.1 |

ELECTRICAL REQUIREMENTS

WASH MOTOR HP 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.

| VOLTS | PH | HZ | RINSE HEATER RATINGS | TOTAL AMPS | TYPICAL ELECTRICAL CIRCUIT |
|-------|----|----|----------------------|------------|----------------------------|
| 208 | 1 | 50 | 6.7KW | 40 | 50 AMP |
| 230 | 1 | 50 | 8.2KW | 43 | 60 AMP |
| 208 | 1 | 50 | 8.2KW | 47 | 60 AMP |
| 230 | 1 | 50 | 10KW | 51 | 70 AMP |
| 220 | 1 | 50 | 9.15KW | 48 | 60 AMP |
| 208 | 1 | 60 | 6.7KW | 39 | 50 AMP |
| 230 | 1 | 60 | 8.2KW | 46 | 60 AMP |
| 208 | 1 | 60 | 8.2KW | 42 | 60 AMP |
| 230 | 1 | 60 | 10KW | 50 | 70 AMP |
| 460 | 1 | 60 | 480/8.2KW | 11 | 15 AMP |
| 460 | 1 | 60 | 480/9.6KW | 14 | 20 AMP |

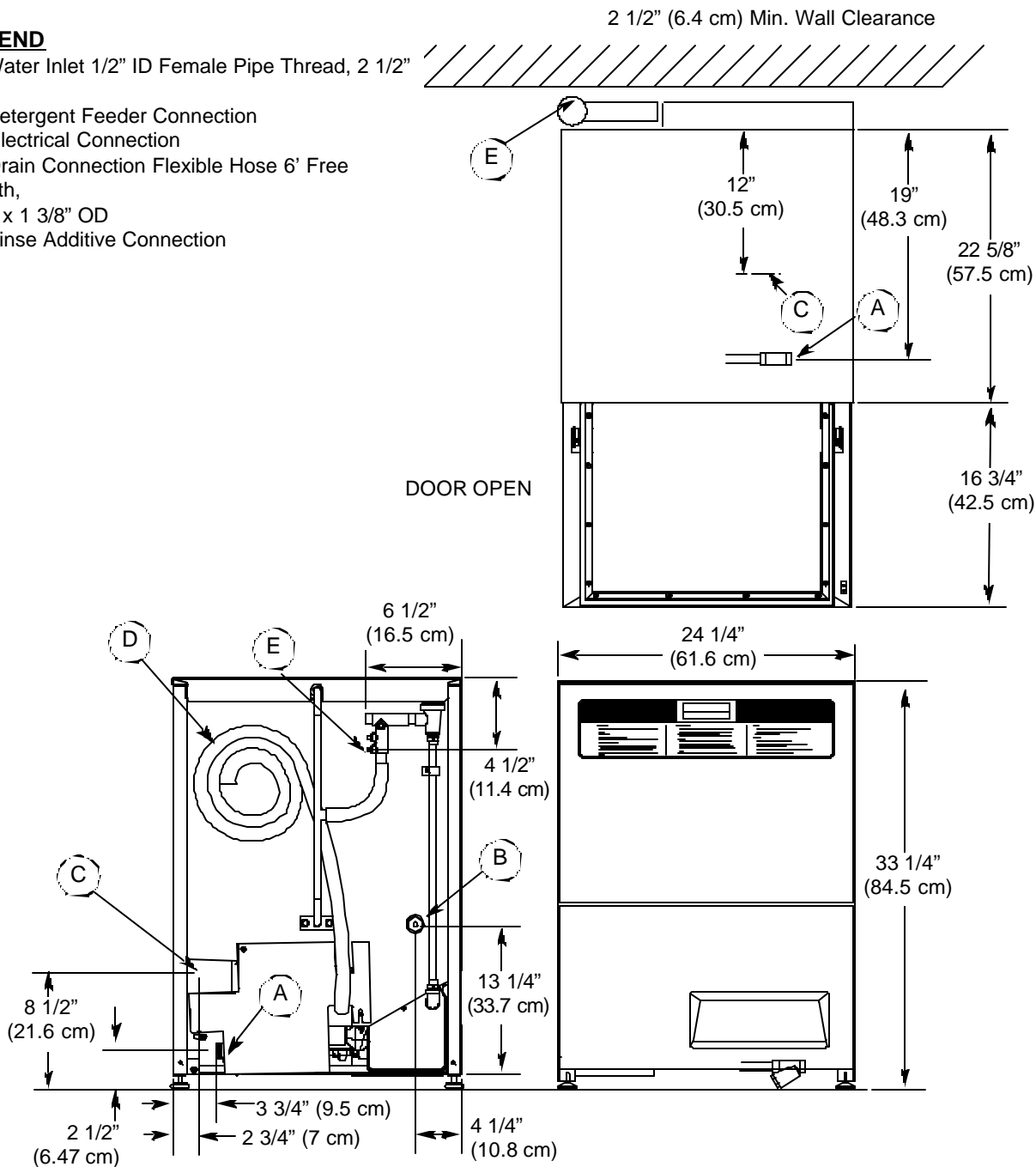
NOTE: Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and may be subject to change without notice.

SECTION 1: SPECIFICATION INFORMATION

JP-24 DIMENSIONS

LEGEND

- A - Water Inlet 1/2" ID Female Pipe Thread, 2 1/2" AFF
- B - Detergent Feeder Connection
- C - Electrical Connection
- D - Drain Connection Flexible Hose 6' Free Length, 1" ID x 1 3/8" OD
- E - Rinse Additive Connection



| | | | |
|---------------------------|-------------------|--------------------------|--------------------|
| Height (minimum): | 33 1/4" (84.5 cm) | Inside Clearance Height: | 14 1/2" (36.8 cm) |
| Height (maximum): | 34 1/4" (87 cm) | Inside Clearance Width: | 20 1/4" (51.4 cm) |
| Width: | 24" (60.9 cm) | Inside Clearance Depth: | 21 1/4" (54 cm) |
| Depth: | 22 5/8" (57.5 cm) | Door Open Depth: | 39 1/2" (100.3 cm) |
| Wall Clearance (minimum): | 2 1/2" (6.4 cm) | | |

*All dimensions are for reference only and are subject to change without notice.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

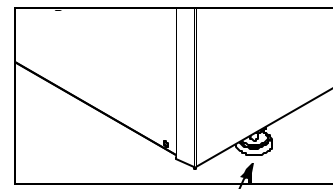
SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

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.

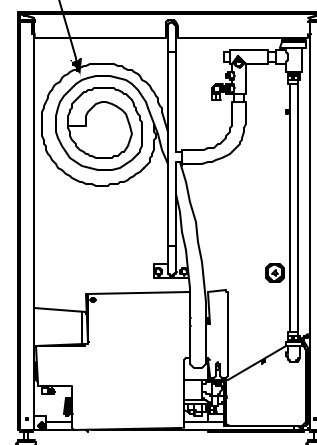


Adjustable Bullet Foot

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 JP-24 series machines are a pumped (pressure) drain capable of pumping waste water to a height of 24 inches from the floor to the kitchen's drain system. The dishmachines are supplied with a 10 foot long hose that extends from the rear side of the machine. 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 12 gallons (45.6 Liters) per minute.

Drain Hose

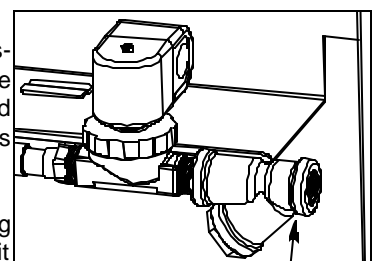


Back of Machine Showing Drain Hose

WATER SUPPLY CONNECTION: Ensure that you have read the section entitled "PLUMBING THE DISHMACHINE" above before proceeding. Install the water supply line (1/2" ID pipe size minimum) to the dishmachine line y-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.

Do to areas where the water pressure fluctuates or is greater than the recommended pressure, it is recommended installing a water pressure regulator. 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) 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.



Incoming Plumbing Y-Strainer

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 INSTALLATION 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.

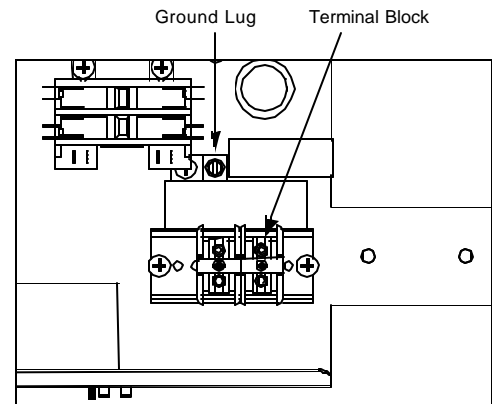
Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

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

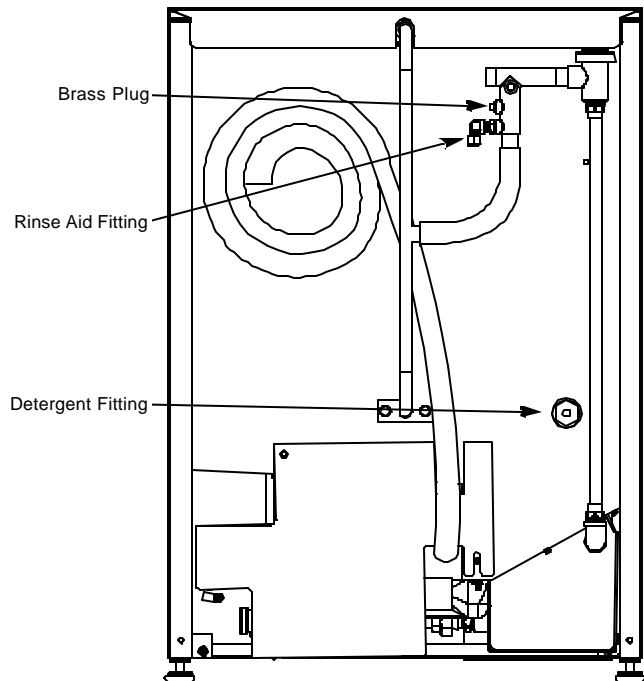
To install the incoming power lines, remove the kick panel. This will require taking a phillips head screwdriver and removing the two screws at the bottom of the kick panel; open the door slightly while carefully lifting the kick panel up and out of the way. Install 3/4" conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1 and L2) 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.

CHEMICAL CONNECTIONS: All chemical hookup locations are located on the back of the dishmachine. Please refer to the drawing at the right for the correct connection point.



Control Box Electrical Connection



Back of Unit Showing Chemical Connection Points

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

OPERATION INSTRUCTIONS

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

1. The strainer is in place and is clean.
2. 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 the door and depress the ON/FILL-OFF/DRAIN rocker switch in the ON position. The machine will run a partial cycle and fill to the factory preset level. Open the door 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 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.

NOTE: This applies to units with integral booster heaters. Make sure the orange wires at the heater contactor are connected properly. They have been purposely disconnected at the factory to avoid damage to the heater element when there is no water in the booster heater.

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. Open the door and the cycle light will illuminate.

When the light goes out, close the door, the unit will start, run through the cycle, and shut off automatically. Repeat this two more times. The unit should now be ready to proceed with the washing of ware.

WASHING A RACK OF WARE: To wash a rack, open the door completely and slide the rack into the unit. Close the door and the unit will start automatically. Once the cycle is completed, open the door and remove the rack of clean ware. Replace with a rack of soiled ware and close the door. 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 door. Start a cycle, then place the ON/FILL - OFF/DRAIN SWITCH to the "OFF/DRAIN" position. The unit will automatically drain and turn off. Once the wash tub is drained, remove the pan 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 strainer and close the door.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

DETERGENT CONTROL

Detergent usage and water hardness are two factors that contribute greatly to how efficiently your dishmachine will operate. Using detergent in the proper amount can become, in time, a source of substantial savings. A qualified water treatment specialist can tell you what is needed for maximum efficiency from your detergent, but you should still know some basics so you'll understand what they are talking about.

First, you must understand that hard water greatly effects the performance of the dishmachine. Water hardness is the amount of dissolved calcium and magnesium in the water supply. The more dissolved solids in the water, the greater the water hardness. Hard water works against detergent, thereby causing the amount of detergent required for washing to increase. As you use more detergent, your costs for operating the dishmachine will increase and the results will decrease. The solids in hard water also may build-up as a scale on wash and rinse heaters, decreasing their ability to heat water. Water temperature is important in removing soil and sanitizing dishes. If the water cannot get hot enough, your results may not be satisfactory. This is why Jackson recommends that if you have installed the machine in an area with hard water, that you also install some type of water treatment equipment to help remove the dissolved solids from the water before it gets to the dishmachine.

Second, hard water may have you adding drying agents to your operating cycle to prevent spotting, when the real problem is deposited solids on your ware. As the water evaporates off of the ware, the solids will be left behind to form the spotting and no amount of drying agent will prevent this. Again, using treated water will undoubtedly reduce the occurrences of this problem.

Third, treated water may not be suitable for use in other areas of your operation. For instance, coffee made with soft water may have an acid or bitter flavor. It may only be feasible to install a small treatment unit for the water going into the dishmachine itself. Discuss this option with your qualified water treatment specialist.

Even after the water hardness problems have been solved, there still must be proper training of dishmachine operators in how much detergent is to be used per cycle. Talk with your water treatment specialist and detergent vendor and come up with a complete training program for operators. Using too much detergent has as detrimental effects as using too little. The proper amount of detergent must be used for job. It is important to remember that certain menu items may require extra detergent by their nature and personnel need to be made aware of this. Experience in using the dishmachine under a variety of conditions, along with good training in the operation of the machine, can go a long way in ensuring your dishmachine operates as efficiently as possible.

Certain dishmachine models require that chemicals be provided for proper operation and sanitization. Some models even require the installation of third-party chemical feeders to introduce those chemicals to the machine. Jackson does not recommend or endorse any brand name of chemicals or chemical dispensing equipment. Contact your local chemical distributor for questions concerning these subjects.

Some dishmachines come equipped with integral solid detergent dispensers. These dispensers are designed to accommodate detergents in a certain sized container. If you have such a unit, remember to explain this to your chemical distributor upon first contacting them.

As explained before, water temperature is an important factor in ensuring that your dishmachine functions properly. The data plate located on each unit details what the minimum temperatures must be for either the incoming water supply, the wash tank and the rinse tank, depending on what model of dishmachine you have installed. These temperatures may also be followed by temperatures that Jackson recommends to ensure the highest performance from you dishmachine. However, if the minimum requirements are not met, the chances are your dishes will not be clean or sanitized. Remember, a dish can look clean, but it may not be sanitized. Instruct your dishmachine operators to observe the required temperatures and to report when they fall below the minimum allowed. A loss of temperature can indicate a much larger problem such as a failed heater or it could also indicate that the hot water heater for your operation is not up to capacity and a larger one may need to be installed.

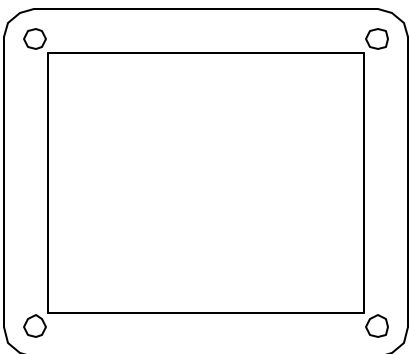
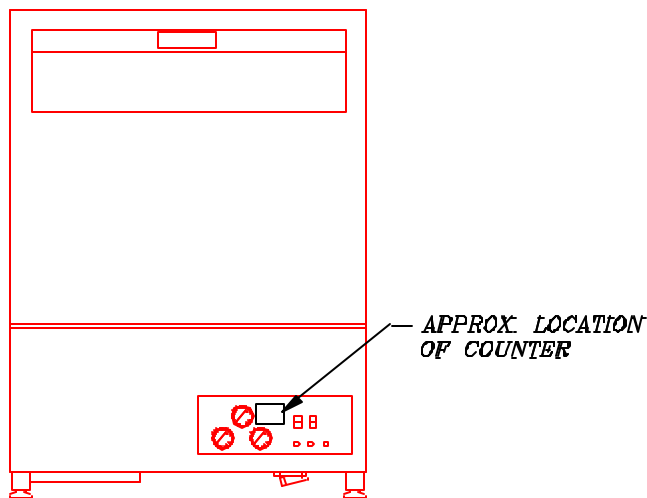
There are several factors to consider when installing your dishmachine to ensure that you get the best possible results from it and that it operates at peak efficiency for many years. Discuss your concerns with your local chemical distributor and water treatment specialist before there is a problem.

SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

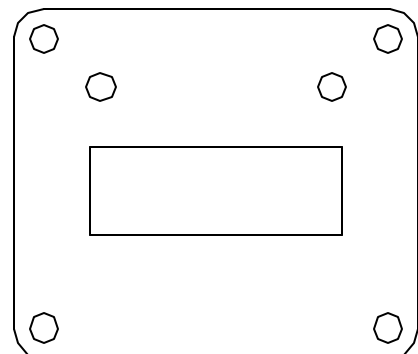
CYCLE COUNTER RETROFIT KIT INSTRUCTIONS

1. Locate the template on the front of the plastic control panel in the approximate location as shown in the diagram below.
2. Use a 3/32" diameter drill bit to drill the four mounting holes through the plastic control panel.
3. Mount the template to the front of the control panel using the screws and locknuts provided.
4. Using the template as a guide, cut the 1-3/8" x 1-1/8" cutout (the inside of the template) from the plastic control panel. Use a Dremel tool (or similar) or drill multiple holes along the edge of the template in order to cut away the cutout.
5. Remove the template from the control panel.
6. Assemble the counter (with mounting plate) to the control panel using the four screws and locknuts provided.
7. One lead wire from the counter is connected together with the blue wires from the fill solenoid valve and the rinse/fill light (using the existing wire nut that connects these two wires together).
8. The other lead wire from the counter is connected together with the red wires from the fill solenoid valve and the rinse/fill light (using the existing wire nut that connects these two wires together).
9. The counter should increment each time the fill solenoid valve is turned on.

JP-24



Template, Cycle Counter Mount



Cycle Counter Mount

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.

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 also refer to the page entitled "Detergent Control" in order 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 4: TROUBLESHOOTING SECTION

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: Water overflow from bottom of door.

1. Clogged drain. Remove obstruction.
2. Machine not level. Level machine, or increase height to the front.
3. Excessive inlet pressure. Install pressure reducing valve, or adjust if one is present. Ensure flow is 20 ± 5 PSI.
4. Detergent foaming. Reduce detergent quantity.

Problem: Wash motor doesn't operate on manual wash.

1. Loose or broken wires. Reconnect or replace wires in motor.
2. Defective manual wash switch. Replace.
3. Defective motor starting relay. Replace.

Problem: Motor operates on manual wash but not on automatic.

1. Defective timer. Replace timer.
2. Defective circuit in manual wash switch. Replace switch.

Problem: No water comes through the rinse arms when the "ON/FILL" switch is depressed.

1. Water not turned on. Turn water on.
2. Defective solenoid valve. Replace solenoid valve.
3. Probes are dirty or coated. Clean probes.
4. Defective water level control. Replace.

Problem: Little or no water coming through the rinse assemblies.

1. Limed up rinse heads or piping. Delime rinse heads.
2. Low water pressure. Increase pipe size to machine. Adjust pressure regulator.

Problem: Rinse water runs continuously with breaker turned off.

1. Defective plunger in solenoid valve. Replace.
2. Defective diaphragm in solenoid valve. Replace diaphragm.

Problem: Rinse doesn't operate on automatic during timed cycle (but does operate in auto/fill operation).

1. Timer defective. Replace timer.

Problem: Rinse water runs continuously with power applied to machine, but when circuit breaker to machine is turned off, water stops.

1. Defective water level control. Replace.
2. Probes are dirty or coated. Clean probes.

Problem: Wash temperature not at required reading on thermometer.

1. Defective thermometer. Replace.
2. Defective thermostat. Adjust thermostat. Replace thermostat.
3. Rinse heater defective. Replace heater element.
4. Water level protection control device. Replace.

SECTION 4: TROUBLESHOOTING SECTION

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: Rinse water not at required temperature range.

1. Thermometer is defective. Replace.
2. Thermostat is defective. Adjust the thermostat. Replace if necessary.

Problem: Machine doesn't drain when "OFF/DRAIN" switch is pressed.

1. Drain solenoid clogged. Remove obstruction.
2. Defective "OFF/DRAIN" switch. Replace.
3. Defective motor or motor start relay. Replace.
4. Defective drain solenoid. Replace.
5. Defective timer. Replace.

Problem: No indication of pressure.

1. Water turned off. Turn water on.
2. 1/4" test cock ball valve is closed. Open the ball valve.

SECTION 5: SERVICE PROCEDURES

SECTION 5: SERVICE PROCEDURES

RINSE SOLENOID VALVE REPAIR PARTS KIT

These dishmachines are equipped with electrical solenoid valves to allow for automatic fill and rinse. These valves are designed to specific tolerances and design aspects that must be met in order to function properly.

Jackson offers repair kits for replacing some of the wear items associated with solenoid valves which will allow you to save money in that replacement of these parts can take place *without* removing the solenoid valve from the plumbing assembly.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. Small flathead screwdriver
2. Medium flathead screwdriver
2. Needle nose pliers
3. 5/16" nutdriver
4. Channel locks
5. 12" pipe wrench

TIME REQUIRED

It is estimated that it will take (1) person twenty minutes to perform this task, not including all of the items indicated in the section entitled "PREPARATION".

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance evolution. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

2. The procedures demonstrated in this manual are shown being performed on an AJ-44C rack conveyor dishmachine. The actual maintenance steps, however, apply to any Parker style solenoid valve found on a Jackson dishmachine.

STEPS

1. Remove the top screw with the 5/16" nutdriver. Remove the screw and the data plate and set to the side.



Removing the top screw

2. With the top screw and data plate removed, grasp the solenoid coil and gently pull up. The coil should slide up, allowing you to remove it from the valve bonnet. If you are wanting to replace the coil, continue on with Step 3. If you are wanting to replace some of the internal components of the valve, proceed to step 12.

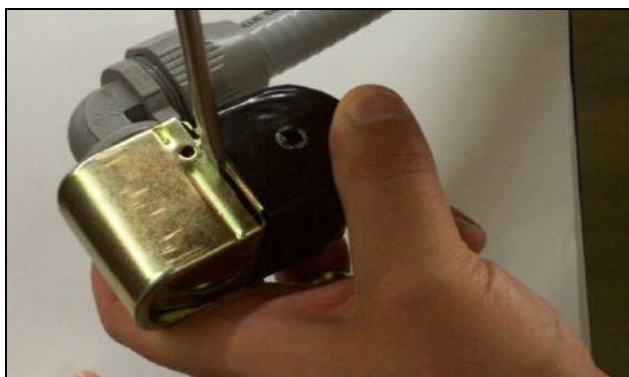


Removing the coil

3. **NOTE:** Replacing the solenoid coil requires working with the wiring of your machine. It is important that all wiring maintenance be performed by qualified personnel. Always verify the wiring steps presented in this instruction with the schematic that shipped with the unit. A current schematic can also be found in the unit's installation manual. Before beginning any step that involves working with wiring, ensure that the steps located in the section entitled "Preparation" have been performed. Power must be secured to the machine at the service breaker. Failure to do so could result in severe injury to maintenance personnel.

SECTION 5: SERVICE PROCEDURES

RINSE SOLENOID VALVE REPAIR PARTS KIT (CONTINUED)



Prying open the coil wire cover

4. When replacing the coil, ensure that when removing the coil wire cover that care is taken not to damage the wires inside. Using the medium flathead screwdriver, gently use it to open the cover enough to where it could be pulled off.



Straightening the wires

5. Once the coil wire cover has been removed and set to the side, take the internal wires and pull them out straight.



Removing the wire nuts

6. Remove the wire nuts from the wires and separate them.



Loosening the conduit nut

7. Using a pair of channel locks, gently loosen the conduit retaining ring for the conduit nut. Once it is loosened, use your fingers to unscrew and remove it.

8. Pull the conduit away and discard the bad coil. Take the new coil and attach the conduit, reinstall & tighten the conduit nut, and pull the wires through so that you will be able to wire the valve back up.

9. Reconnect the wires from the conduit to the wires from the solenoid as they had been connected previously. Ensure that the wire nuts are on tight.

10. Slide the coil wire cover back on, taking care not to damage the wires.

11. If you are done performing maintenance on the valve, continue on to step 22. Otherwise, please go on to step 12.



Loosening the valve bonnet

12. To remove the valve bonnet, grasp it with the jaws of the pipe wrench and turn to the left. **Note:** on some models you may have to remove the valve in order to perform this and any further steps. Be careful not to damage the plumbing assembly. Only use the pipe wrench enough to where you can spin the valve bonnet off with your hand.

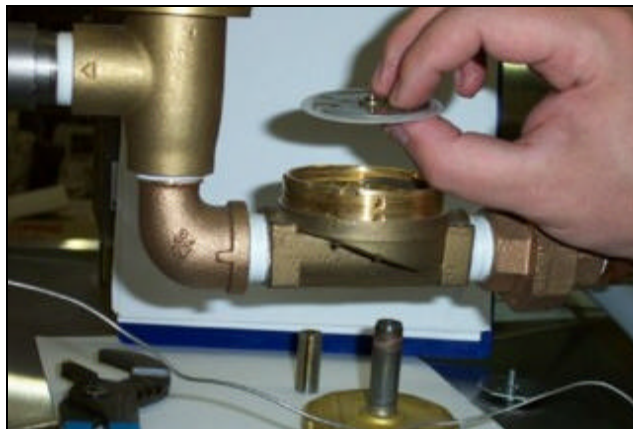
SECTION 5: SERVICE PROCEDURES

RINSE SOLENOID VALVE REPAIR PARTS KIT (CONTINUED)



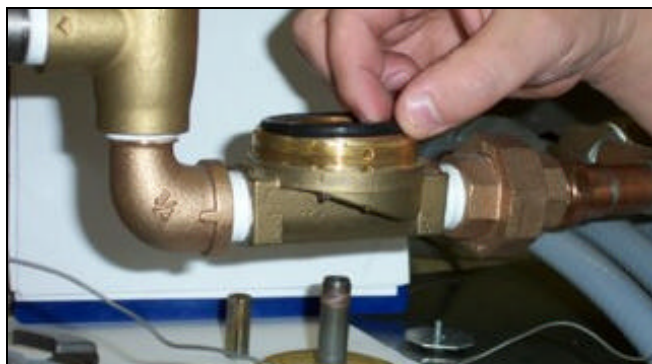
Removing the valve bonnet

13. Slowly remove the valve bonnet. **Note:** The spring for the plunger is located directly under the bonnet and may come free if you are not careful. Remove the plunger, spring and valve bonnet and place to the side.



Removing the diaphragm

17. Remove the diaphragm retainer and then the diaphragm itself. Many problems associated with a solenoid valve can be traced to a clogged pilot port in the diaphragm.



Removing the O-ring

14. Remove the O-ring and inspect it. If it has any tears or cuts or excessive flat spaces, it should be replaced.

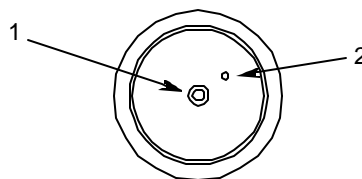
15. Examine the threads for the valve bonnet. Check them for scoring or signs of damage. Take a cloth and clean them out to remove any foreign particles that might get lodged in the threads and cause a leak. Severely damaged threads should not be repaired; instead it is recommended that the entire valve should be replaced. These instructions do not provide information on replacing the solenoid valve.

16. **Note:** Even though an O-ring may not appear damaged, it is a good idea to go ahead and replace it if you have a new one. This will help ensure that your valve remains leak-free in the future!



Pointing out the extension hole

18. As indicated in the photo above, the extension hole can become clogged. If it is difficult to clean out, you can use a heated straight pin to push through the hole. The center hole, the pilot port, must also be clear. If the diaphragm is torn or bent in any way, it must be replaced.



Diaphragm showing (1) pilot port and (2) extension hole

SECTION 5: SERVICE PROCEDURES

RINSE SOLENOID VALVE REPAIR PARTS KIT (CONTINUED)



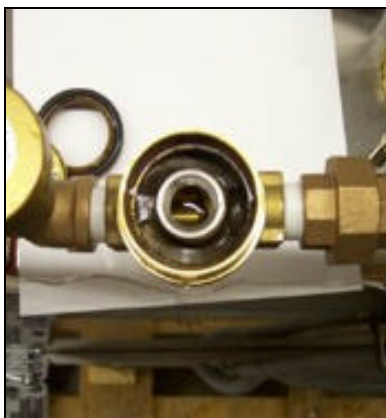
Removing the screen retainer

19. Using the small flathead screwdriver, lift out the screen retainer. Verify that the holes in it are free of clogs and debris.



Removing the mesh strainer screen

20. Again using the small flathead screwdriver, carefully remove the mesh screen from inside the valve body. The screen should be taken and rinsed out to remove any debris fouling it.



View inside the solenoid valve body

21. With the mesh screen removed, look down into the valve and verify it is not clogged. Remove any foreign objects from the valve body that would obstruct flow.

22. Reassemble the valve, reversing the steps needed to take it apart. Replace defective replacement parts with new parts from ordered kits. Ensure that components are sufficiently tightened to prevent leakage.

AFTER MAINTENANCE ACTIONS

Reconnect the incoming water (if disconnected) and turn on. Then restore power to the unit. Run the unit for at least 10 minutes to ensure there are no leaks. If any problems arise please contact Jackson.

SPECIAL PARTS

Solenoid Valve Plunger Kit

Includes plunger and spring
Part number 06401-003-07-40

Solenoid Valve Diaphragm Kit

Includes diaphragm and o-ring
Part number 06401-003-07-41 (1/2" NPT)

Solenoid Valve 110 Volt Coil and Housing Kit

Part number 06401-003-07-43

Solenoid Valve 220 Volt Coil and Housing Kit

Part number 06401-003-07-44

Complete Solenoid Valve

Part number 04810-100-12-18 (1/2", 110 Volt)

Part number 04810-100-09-18 (1/2", 220 Volt)

SECTION 5: SERVICE PROCEDURES

VACUUM BREAKER REPAIR PARTS KIT

These dishmachines are equipped with vacuum breakers to serve as back-flow prevention devices. ASSE requirements specify what type of back-flow prevention is necessary on dishmachines. Vacuum breakers, unlike air gaps, have certain parts that have specific tolerances and design aspects that must be met in order to function properly.

Jackson offers repair kits for replacing some of the wear items associated with vacuum breakers which will allow you to save money in that replacement of these parts can take place *without* removing the vacuum breaker from the plumbing assembly.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. Small flathead screwdriver
2. Needle nose pliers

TIME REQUIRED

It is estimated that it will take (1) person twenty minutes to perform this task, not including all of the items indicated in the section entitled "PREPARATION".

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance evolution. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

STEPS

1. **Note:** These instructions only apply to vacuum breakers (1/2" NPT and 3/4" NPT) as pictured below. The repair kits indicated in these instructions will only work on those style of back-flow preventers. If you have a machine with a different style of vacuum breaker, contact Jackson about replacement components.



Vacuum breaker

2. **Note:** Even though the photos in these instructions show a vacuum breaker that has been removed from the plumbing assembly, these maintenance steps could be performed with it installed so long as the requirements in the section entitled "PREPARATION" have been met.

3. Remove the top cap by gripping firmly and turning to the left. The cap should come off after a few turns.



Removing the cap

4. Set the cap to the side.

5. Using the needle nose pliers, gently lift out the plunger and set to the side. Examine the brass seating surface inside the vacuum breaker. The plunger is required to sit flat on this surface so it must be free of defects, imperfections and the like. If there is debris, remove it. If it is chipped or cracked then the vacuum breaker must be replaced. Failure to do so may result in the vacuum breaker not working according to its design and could result in damage to the dishmachine.

SECTION 5: SERVICE PROCEDURES

VACUUM BREAKER REPAIR PARTS KIT (CONTINUED)



Removing the plunger

6. Your repair kit comes with a new plunger. Examine the old one and ensure that the mating surface is not damaged or cut. Also inspect the rubber seal on the top of the plunger to ensure it is in good condition and not torn.



Examining the seal ring on the plunger

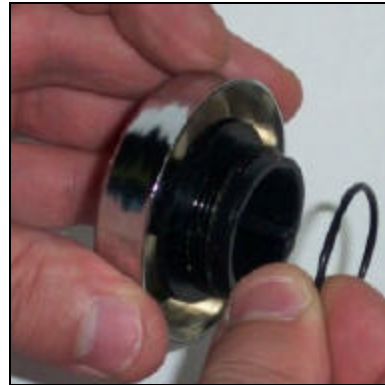


Examining the plunger seating surface

7. If any of these conditions are present, replace the old plunger with the new one from your kit. Verify that the new plunger is also free from defects. If it is not, contact Jackson immediately.

8. The plunger should drop into the vacuum breaker and seat. Ensure it is not flipped upside down (the orange seal ring should be up towards the top of the vacuum breaker).

9. Pick up the cap and examine it. With a soft towel, remove any grit, grime or debris that may have gotten caught in the threads of both the cap retainer or the vacuum breaker body. There is an O-ring that should be present on the cap retainer as well. Regardless of the condition of the plunger, this O-ring should be replaced once the cap is removed. Using a small flathead screwdriver, remove the old O-ring.



Replacing the O-ring

10. With the new O-ring in place, screw the cap back on the vacuum breaker body. The cap needs to only be hand tight (snug).

AFTER MAINTENANCE ACTIONS

1. Reconnect the incoming water (if disconnected) and turn on. Then restore power to the unit. Run the unit for at least 10 minutes to ensure there are no leaks. If any problems arise please contact Jackson.

SPECIAL PARTS

Vacuum breaker repair kit:
For 1/2" NPT order 06401-003-06-23

Complete Vacuum Breaker Assembly
Part number 04820-003-06-13 (1/2")

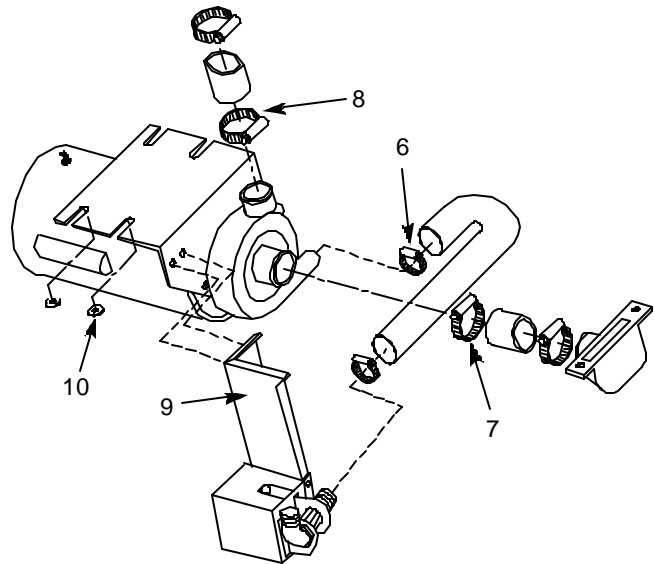
SECTION 5: SERVICE PROCEDURES

REPLACING THE PUMP MOTOR/REPLACING THE HEATER

REPLACING THE PUMP MOTOR

The following list of tools will be needed to complete this procedure. 5/16" nutdriver, phillips screwdriver, 7/16" socket and ratchet, and 7/16" wrench.

1. Disconnect the electrical power to the dishwasher at the main circuit breaker box when servicing. Place a tag on the circuit box indicating the circuit is being repaired.
2. Disconnect power and conduit from dishmachine terminal block.
3. Turn off the water supply and disconnect the water supply line.
4. Disconnect the dishmachine drain hose from the kitchen's drain. Drain the machine of any water at this time.
5. Move the machine out and lay machine onto its back.
6. Use a 5/16" nutdriver to loosen the hose clamp and remove the pump hose to the drain valve.
7. Use a 5/16" nutdriver to loosen the hose clamp and remove the pump hose from the suction casting.
8. Use a 5/16" nutdriver to loosen the hose clamp and remove the pump hose from the discharge hub casting.
9. Use a 7/16" socket and ratchet, and a 7/16" wrench to remove the drain valve mounting bracket from the motor bracket.
10. Use a 7/16" socket and ratchet to remove the pump motor assembly by loosening the (4) locknuts securing the motor mounting bracket. NOTE: The motor mounting bracket is slotted to allow for easy removal and installation. Remove (2) of the locknuts on one side and slide the assembly toward that side and remove. Once the assembly is removed, disconnect the wire leads from the motor wiring box.
11. Install replacement motor in reverse order of above.

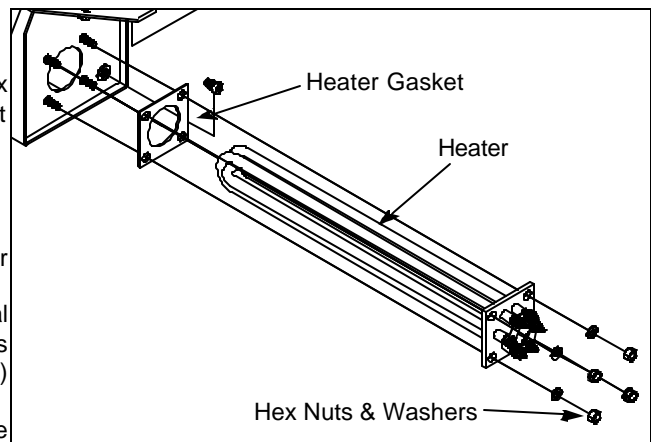


Replacing the Pump Motor

REPLACING THE BOOSTER TANK HEATER

The following list of tools will be needed to complete this procedure: phillips screwdriver and 1/2" socket and ratchet.

1. Disconnect the electrical power to the dishwasher at the main circuit breaker box when servicing. Place a tag on the circuit box indicating the circuit is being repaired.
2. Use the phillips screwdriver to remove the two screws from the bottom of the kick panel.
3. Disconnect power and conduit from dishmachine terminal block.
4. Turn off the water supply to the dishmachine.
5. **VERY IMPORTANT:** Disconnect wire lead (orange/white) from heater contactor coil. Note: Wire is tagged in electrical panel.
6. Drain water from booster tank.
7. Remove the wires from the heater.
8. Use a 1/2" socket and ratchet to remove the (4) 5/16-18 hex nuts and lock washers. Remove the heater and heater gasket from booster tank.
8. Install the replacement heater and gasket, the tighten firmly.
9. Connect wire leads to heater and tighten firmly.
10. Turn on water supply and power to dishmachine.
11. Place cycle switch in AUTO position and depress power switch to ON/FILL position.
12. **VERY IMPORTANT:** Run the dishwasher through several complete cycles and check water level in wash sump. If there is water in the wash sump, reconnect the wire lead (orange/white) previously removed from the heater contactor coil.
13. Run the dishwasher through several cycles and check to see that rinse and wash temperatures are correct.



Replacing the Heater

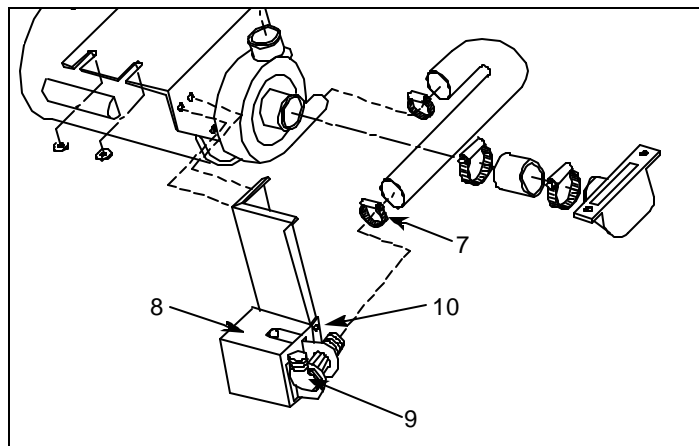
SECTION 5: SERVICE PROCEDURES

REPLACING THE DRAIN VALVE

REPLACING THE DRAIN VALVE

The following list of tools will be needed to complete this procedure. 5/16" nutdriver, flat screwdriver, phillips screwdriver, and 7/16" socket and ratchet.

1. Disconnect the electrical power to the dishwasher at the main circuit breaker box when servicing. Place a tag on the circuit box indicating the circuit is being repaired.
2. Disconnect the power and conduit from dishmachine terminal block.
3. Turn off the water supply to the dishmachine.
4. Move the dishmachine away from the wall for servicing.
5. Use a 7/16" socket and ratchet to remove the lower enclosure panel at rear of machine.
6. Drain the dishmachine. Siphon out the water or remove inlet hose to drain valve and drain into pan. The dishmachine may be drained by opening the petcock on the pump housing or by removing the wash thermometer bulb from the lower wash tank.
7. Use a 5/16" nutdriver to loosen the hose clamp and remove the inlet hose to the drain valve from the pump motor.
8. Use a phillips screwdriver to remove the cover from the valve. Use a flat screwdriver to disconnect the lead wires and ground to the drain valve.
9. Use a 5/16" nutdriver to loosen the hose clamp and remove the discharge hose from the drain valve.
10. Use a phillips screwdriver to remove the screws attaching the drain valve to the mounting plate.
11. Reverse the procedures to install the new valve. **INSURE GROUND WIRE LEAD IS CONNECTED PROPERLY TO TERMINAL ON THE MOTOR.**



Replacing the Drain Valve

SECTION 5: SERVICE PROCEDURES

RINSE REGULATING THERMOSTAT REPLACEMENT

Many dishmachines come with integral booster tanks to ensure proper temperature of the final rinse. Jackson has predominantly used two manufacturers of thermostats, EGO and Stemco. These instructions are for use with kit 06401-003-13-94, which is to replace an EGO rinse regulating thermostat with a Stemco brand.

Jackson offers all of the repair parts necessary for performing this task.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.

3. The unit must be drained completely with the drain stopper removed (if applicable).

4. Remove any and all access covers.

TOOLS REQUIRED

The following tools may be needed to perform this maintenance evolution:

1. 3/8" Nutdriver
2. 7/16" Combination Wrench
3. Needlenose Pliers
4. Phillipshead Screwdriver
5. Flathead Screwdriver
6. Ratchet with 1/2" Socket

TIME REQUIRED

It is estimated that it will take (1) person sixty minutes to perform this task, not including all of the items indicated in the section entitled "PREPARATION".

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance task. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

2. These instructions are shown using a Tempstar model dishmachine. However the steps provided should work for models such as the JP-24 as well.

STEPS

1. Some models, such as the Tempstar pictured below, will require that the thermostat bracket removed from the heater. Using a ratchet, extension and 1/2" socket, remove the nuts and lock washer holding the bracket on.



Removing the thermostat bracket/heater nuts.



Removing the thermostat bracket.

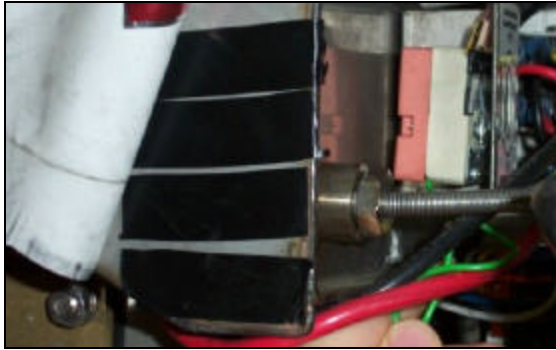
2. With the thermostat and thermostat bracket safely out of the way, use a 7/16" combination wrench to loosen and then remove the imperial brass fitting holding the probe in.

3. Remove the wires from the old thermostat. It may be necessary to use the needlenose pliers to accomplish this.

4. Remove the thermostat bracket mounting nuts with the 7/16" nutdriver.

SECTION 5: SERVICE PROCEDURES

RINSE REGULATING THERMOSTAT REPLACEMENT

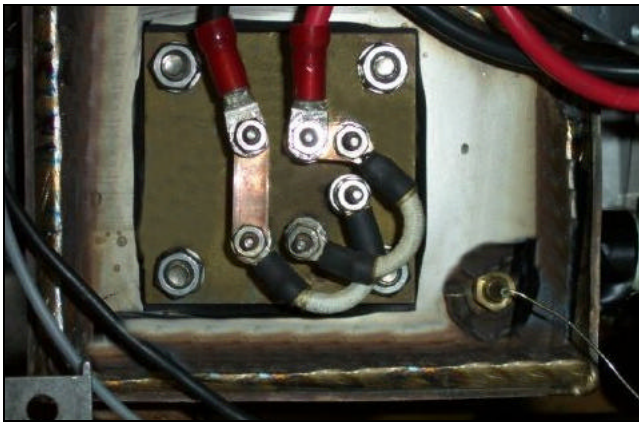


Location of the thermostat bracket (JP-24).

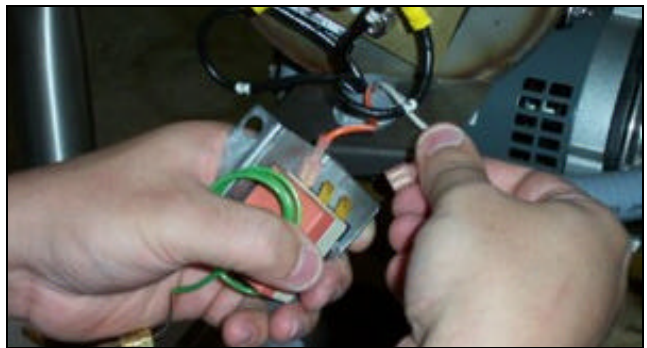


Pulling the thermostat probe and fitting from the well (Tempstar).

Remove the thermostat bracket mounting nuts with the 3/8" nutdriver.



Location of the imperial brass fitting (JP-24).

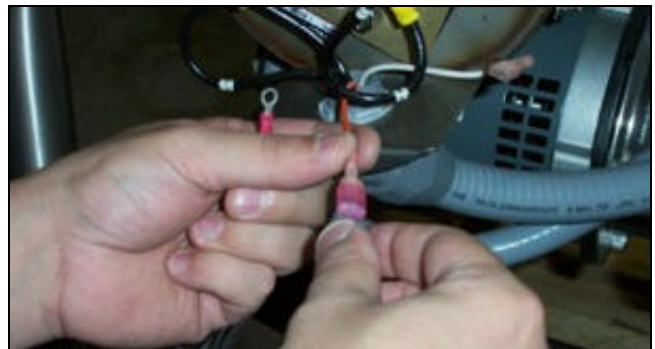


Removing the wires from the thermostat.

5. Attach the jumper wires to the wires that you removed from the old thermostat.



Removing the imperial brass fitting (Tempstar).



Attaching the jumper wires.

SECTION 5: SERVICE PROCEDURES

RINSE REGULATING THERMOSTAT REPLACEMENT



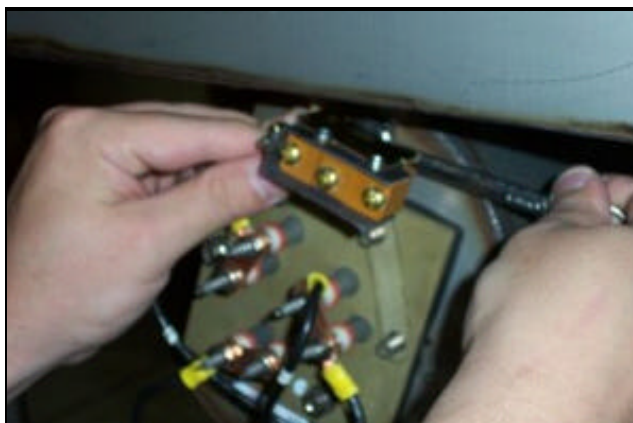
Sliding imperial fitting onto new thermostat.

6. Slide the new imperial brass fitting from your kit onto the new thermostat.



Putting the new thermostat in the well (Tempstar).

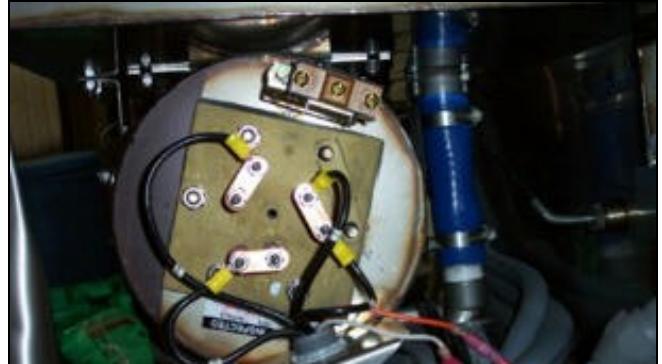
7. Insert the new thermostat/brass fitting combination into the well and tighten down the brass fitting by hand.



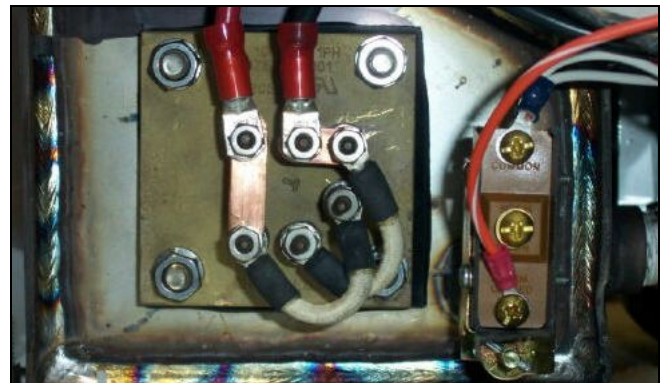
Tightening the brass fitting (Tempstar).

8. Use the 7/16" combination wrench to tighten down the brass fitting, while also positioning the new thermostat so that it does not hang over the heater.

9. Note: regardless of the unit this is being done to, the concept is to ensure that the thermostat cannot come into contact with the heater leads or interfere with the placement of any covers.



What the installed thermostat should look like (Tempstar).



What the installed thermostat should look like (JP-24B).



Removing the thermostat screws.

10. Use the phillipshead screwdriver to remove the attachment screws on the thermostat for the NORMALLY CLOSED and COMMON points.

SECTION 5: SERVICE PROCEDURES

RINSE REGULATING THERMOSTAT REPLACEMENT



Fitting the jumper into the mounting cup.

11. Attach the ring ends of the jumpers to the cups/screws removed from the thermostat and attach them. The white jumper is to be connected to COMMON. The orange and white jumper is to be connected to NORMALLY CLOSED. Refer to your machine schematic if you have any questions regarding this.



Securing jumpers to the thermostat.

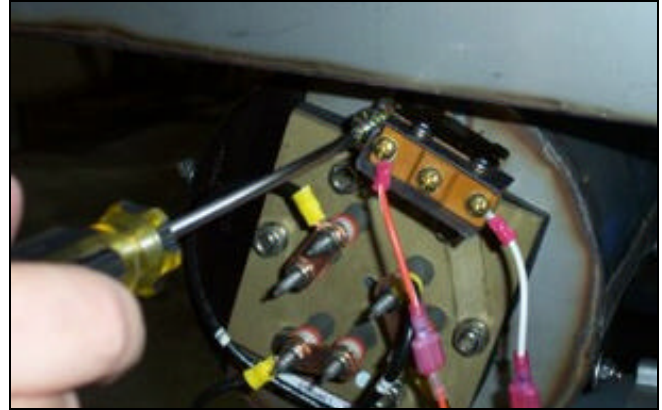
12. Once both wires are attached, ensure that there is no excess hanging out where it could become pinched by any cover or such.

13. Replace the heater nuts (if removed) and torque down as required per the technical manual. Different models may have different torque specifications. Contact Jackson Technical Service if there are any questions regarding this.

AFTER MAINTENANCE ACTIONS

Once the new thermostat is installed, it will be necessary to ensure that it operates at the required and appropriate ranges. The new thermostat has an adjustment that can be turned using a small flathead screwdriver. Several cycles will

need to be run on the unit while observing the final rinse temperature. The thermostat needs to cycle so that the final rinse water meets the indicated minimums on the machine data plate for every cycle.



Calibrating the new thermostat.

SPECIAL NOTES

Work performed on Jackson dishmachines by unauthorized or unqualified personnel may void the warranty. Before beginning this or any other maintenance evolution on a unit under warranty, you should contact a certified Jackson technician or Jackson Technical Service. You can find a list of qualified service agencies in the back of your unit's installation manual.

SPECIAL PARTS

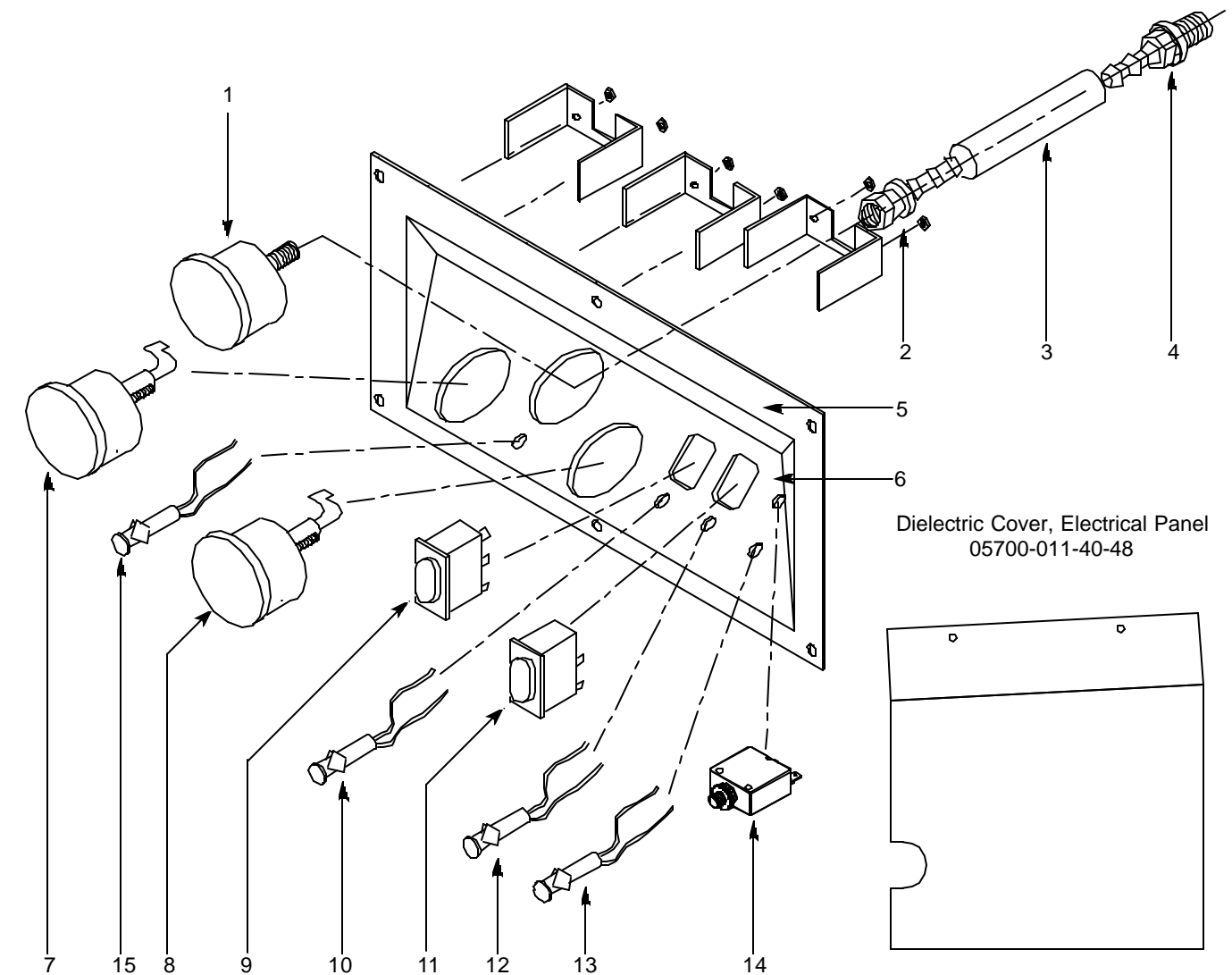
Thermostat Replacement Kit: 06401-003-13-94*

*The kit contains a thermostat, imperial brass fitting, jumper wires and instructions.

SECTION 6: PARTS SECTION

SECTION 6: PARTS SECTION

GAUGE PANEL ASSEMBLY

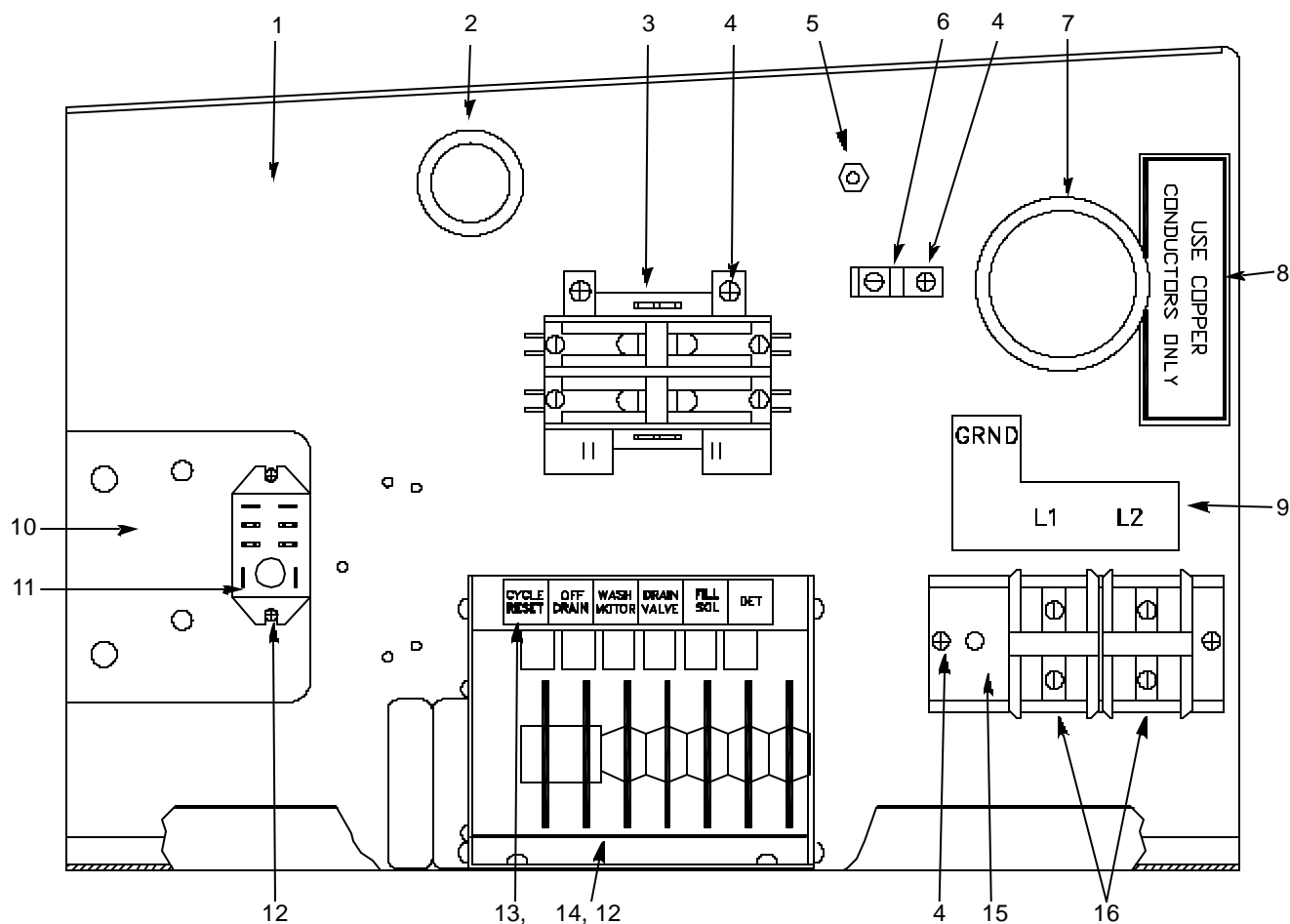


Dielectric Cover, Electrical Panel
05700-011-40-48

| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|--|-----------------|
| 1 | 1 | Gauge, 0-100 PSI w/Green Zone | 06680-011-86-42 |
| 2 | 1 | Fitting, 1/4" BARB x 1/4" FNPT Swivel | 04730-011-95-42 |
| 3 | 1 | Hose, 5/16" x 12" | 05700-011-86-45 |
| 4 | 1 | Fitting, 1/4" BARB x 1/4" MNPT Swivel | 04730-011-95-41 |
| 5 | 1 | Control Panel (208-240 Volt) | 09330-041-41-94 |
| 5 | 1 | Control Panel (460 Volt) | 09330-041-85-00 |
| 6 | 1 | Decal, Control Panel | 09905-031-40-55 |
| 7 | 1 | Thermometer, 96" Wash | 06685-111-68-49 |
| 8 | 1 | Thermometer, 48" Rinse | 06685-111-68-48 |
| 9 | 1 | Switch, ON/FILL & OFF/DRAIN | 05930-301-49-55 |
| 10 | 1 | Light, Red | 05945-111-44-45 |
| 11 | 1 | Switch, Delime | 05930-011-49-00 |
| 12 | 1 | Light, Amber | 05945-111-44-44 |
| 13 | 1 | Light, Green | 05945-111-44-43 |
| 14 | 1 | Breaker, 2A Circuit (460 Volt unit only) | 05925-111-64-18 |
| 15 | 1 | Light, Red (460 Volt unit only) | 05945-111-44-45 |

SECTION 6: PARTS SECTION

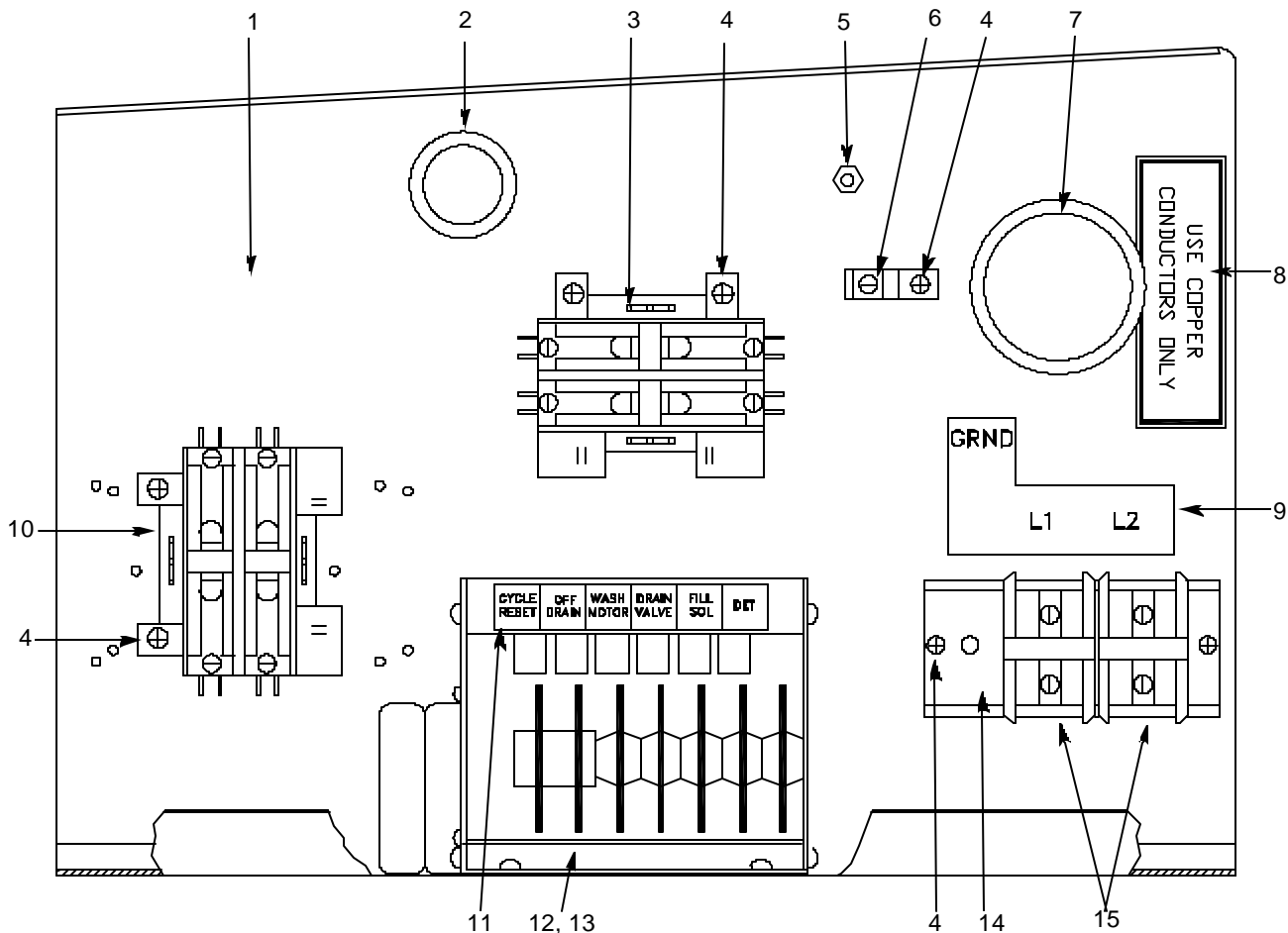
ELECTRICAL PANEL ASSEMBLY (JP-24/F 208-240 VOLT)



| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|--|-----------------|
| 1 | 1 | Electrical Control Panel Weldment | 05700-011-41-79 |
| 2 | 1 | Bushing, Snap | 05975-210-03-00 |
| 3 | 1 | Contactor, Motor | 05945-002-74-20 |
| 4 | 8 | Screw, 10-32 x 3/8" Phillips Truss Round Head | 05305-173-12-00 |
| 5 | 1 | Locknut, 10-24 S/S Hex with Nylon Insert | 05310-373-01-00 |
| 6 | 1 | Wire Lug | 05940-200-76-00 |
| 7 | 1 | Grommet, 1 1/8" Heyco | 05975-210-08-00 |
| 8 | 1 | Decal, Copper Conductors | 09905-011-47-35 |
| 9 | 1 | Decal, Ground, L1, L2 | 09905-101-40-82 |
| 10 | 1 | Bracket, Relay Mounting | 05700-002-37-85 |
| 11 | 1 | Relay, 220-240 Volt | 05945-111-89-75 |
| 12 | 4 | Screw, 6-32 x 3/8" Sems with External Tooth Lockwasher | 05305-002-25-91 |
| 13 | 1 | Decal, Timer | 09905-011-40-70 |
| 14 | 1 | Timer, 60 HZ | 05945-121-41-60 |
| 14 | 1 | Timer, 50 HZ | 05945-002-13-34 |
| 14 | 1 | Timer, 5 Minute | 05945-121-44-89 |
| 15 | 1 | Track, Terminal 3 5/16" | 05700-000-43-60 |
| 16 | 2 | Block, Snap-in Terminal | 05940-500-02-19 |
| 17 | 4 | Locknut, 1/4"-20 S/S Hex with Nylon Insert (not shown) | 05310-374-01-00 |

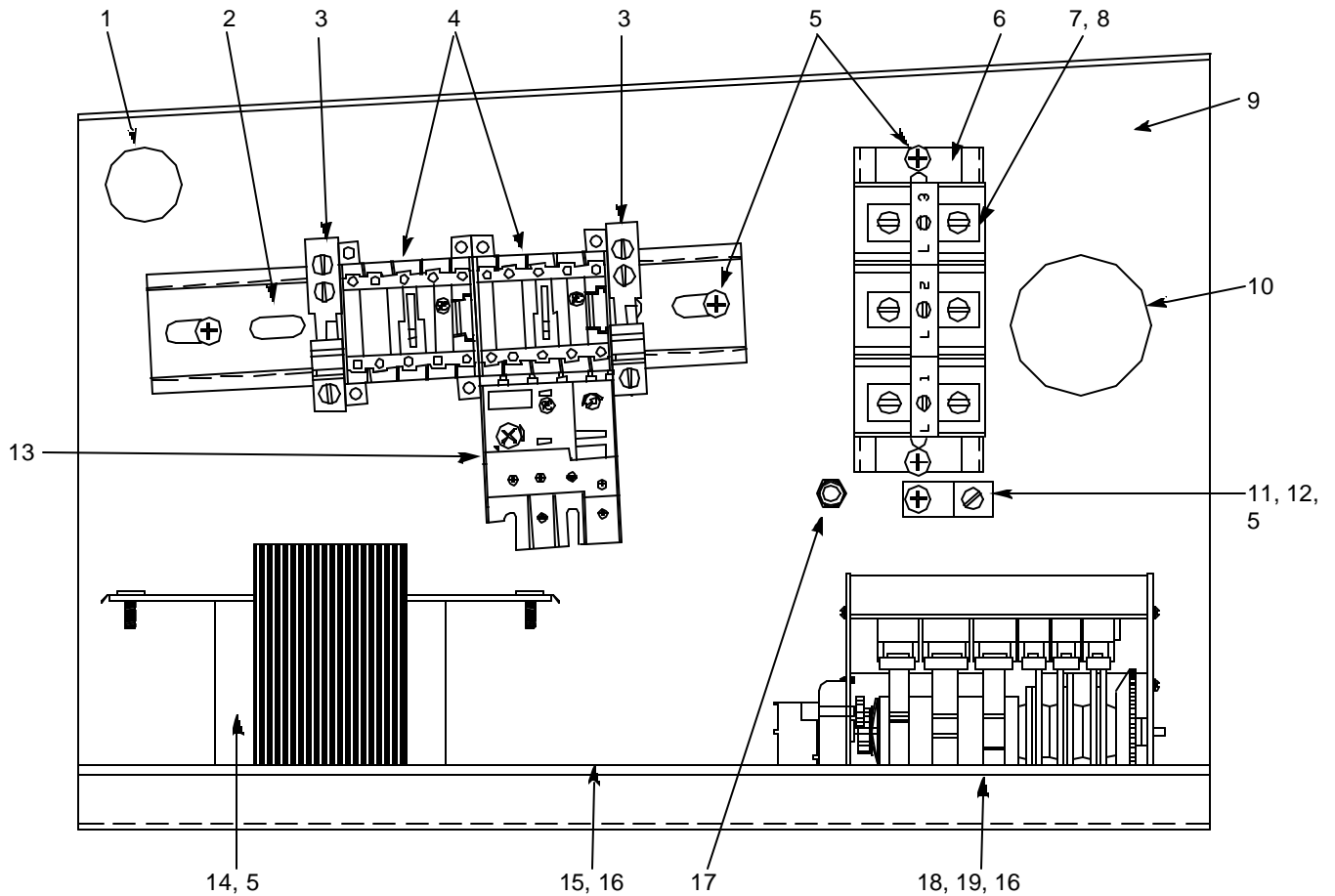
SECTION 6: PARTS SECTION

ELECTRICAL PANEL ASSEMBLY (JP-24B/BF 208-240 VOLT)



| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|--|-----------------|
| 1 | 1 | Electrical Control Panel Weldment | 05700-011-41-79 |
| 2 | 1 | Bushing, Snap | 05975-210-03-00 |
| 3 | 1 | Contactora, Motor | 05945-002-74-20 |
| 4 | 9 | Screw, 10-32 x 3/8" Phillips Truss Round Head | 05305-173-12-00 |
| 5 | 1 | Locknut, 10-24 S/S Hex with Nylon Insert | 05310-373-01-00 |
| 6 | 1 | Wire Lug | 05940-200-76-00 |
| 7 | 1 | Grommet, 1 1/8" Heyco | 05975-210-08-00 |
| 8 | 1 | Decal, Copper Conductors | 09905-011-47-35 |
| 9 | 1 | Decal, Ground, L1, L2 | 09905-101-40-82 |
| 10 | 1 | Contactora, Heater | 05945-002-74-20 |
| 11 | 1 | Decal, Timer | 09905-011-40-70 |
| 12 | 1 | Timer, 60 HZ | 05945-121-41-60 |
| 12 | 1 | Timer, 50 HZ | 05945-002-13-34 |
| 12 | 1 | Timer, 5 Minute | 05945-121-44-89 |
| 13 | 2 | Screw, 6-32 x 3/8" Sems with External Tooth Lockwasher | 05305-002-25-91 |
| 14 | 1 | Track, Terminal 3 5/16" | 05700-000-43-60 |
| 15 | 2 | Block, Snap-in Terminal | 05940-500-02-19 |
| 16 | 4 | Locknut, 1/4"-20 S/S Hex with Nylon Insert (not shown) | 05310-374-01-00 |

SECTION 6: PARTS SECTION
ELECTRICAL PANEL ASSEMBLY (JP-24B/BF 460 VOLT)

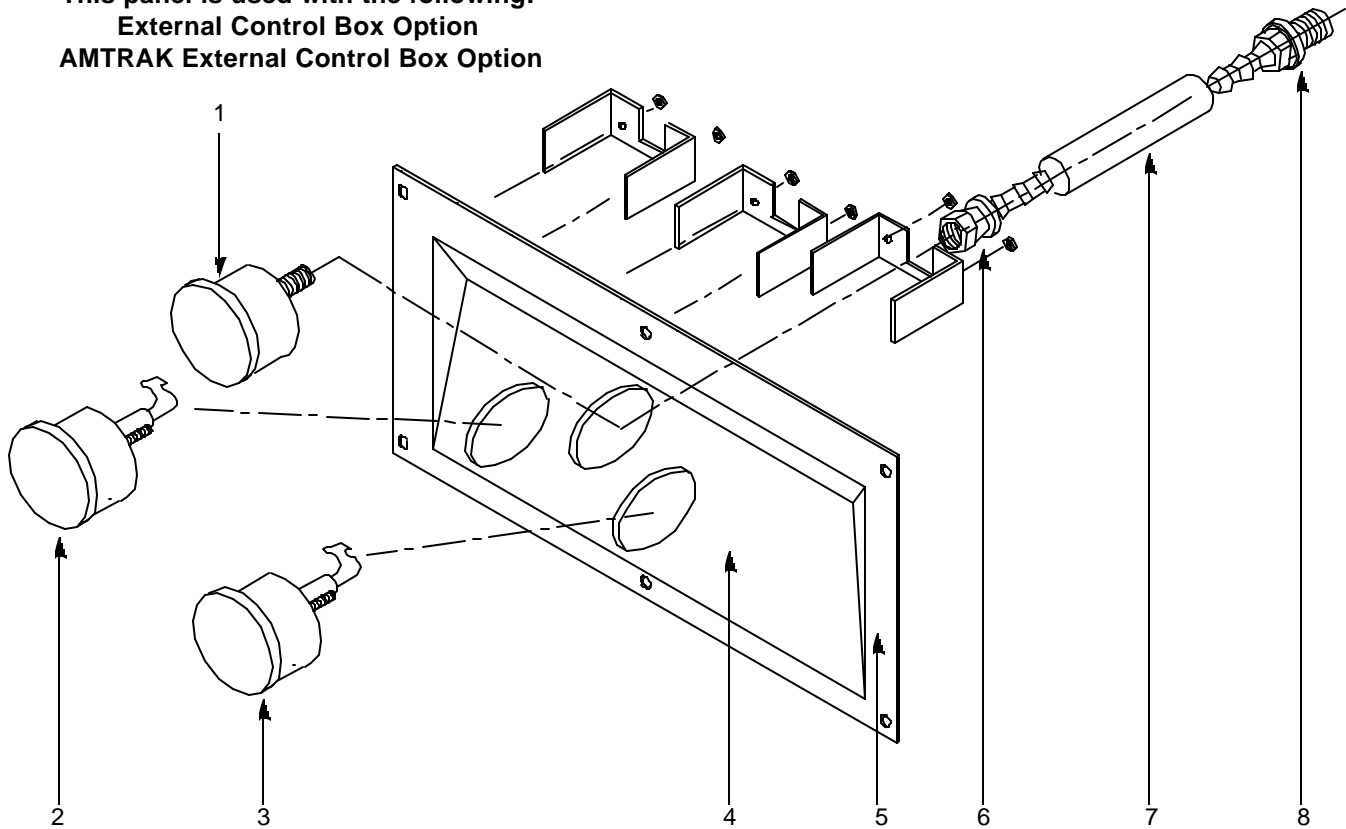


| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|--|-----------------|
| 1 | 1 | Bushing, Snap | 05975-210-03-00 |
| 2 | 1 | Track, Terminal 6 7/8" | 05700-021-62-91 |
| 3 | 2 | End Clamp | 05940-111-60-30 |
| 4 | 2 | Contactors, Mini | 05945-111-60-07 |
| 5 | 9 | Screw, 10-32 x 3/8" Phillips Truss Round Head | 05305-173-12-00 |
| 6 | 1 | Track, Terminal 3 3/4" | 05700-011-62-89 |
| 7 | 1 | Decal, L1, L2, L3 | 09905-101-12-66 |
| 8 | 3 | Block, Snap-in Terminal | 05940-500-02-19 |
| 9 | 1 | Electrical Control Panel Weldment | 05700-031-62-94 |
| 10 | 1 | Grommet, 1 1/8" Heyco | 05975-210-08-00 |
| 11 | 1 | Wire Lug | 05940-200-76-00 |
| 12 | 1 | Ground Decal | 09905-011-41-82 |
| 13 | 1 | Overload, Contactor | 05945-111-60-08 |
| 14 | 1 | ACME Transformer, 480 to 120 Volt | 05950-011-50-70 |
| 15 | 1 | Terminal Board, 1/4 QC | 05940-021-94-85 |
| 16 | 2 | Screw, 6-32 x 3/8" Sems with External Tooth Lockwasher | 05305-002-25-91 |
| 17 | 1 | Locknut, 10-24 S/S Hex with Nylon Insert | 05310-373-01-00 |
| 18 | 1 | Timer, 6 Cam | 05945-121-44-69 |
| 19 | 1 | Decal, Timer | 09905-011-40-70 |
| 20 | 4 | Locknut, 1/4"-20 S/S Hex with Nylon Insert (not shown) | 05310-374-01-00 |

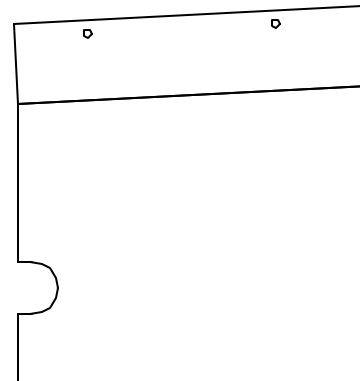
SECTION 6: PARTS SECTION

GAUGE PANEL ASSEMBLY

This panel is used with the following:
External Control Box Option
AMTRAK External Control Box Option



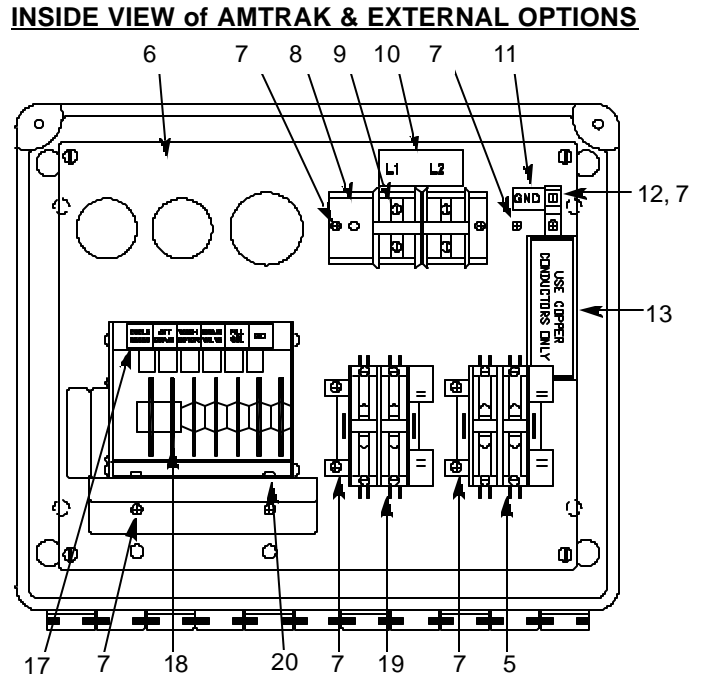
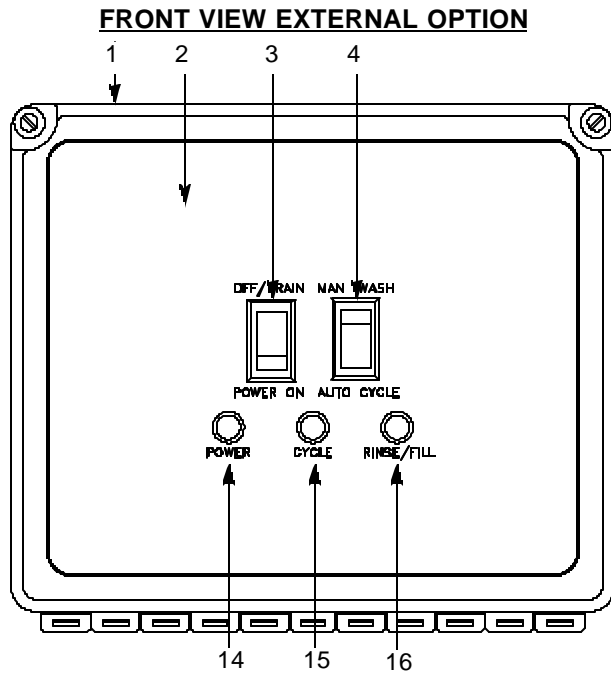
Dielectric Cover, Electrical Panel
 05700-011-40-48



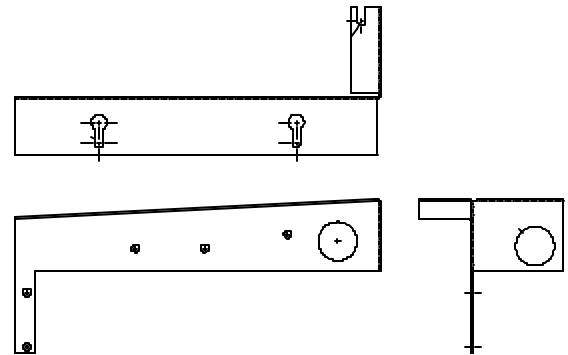
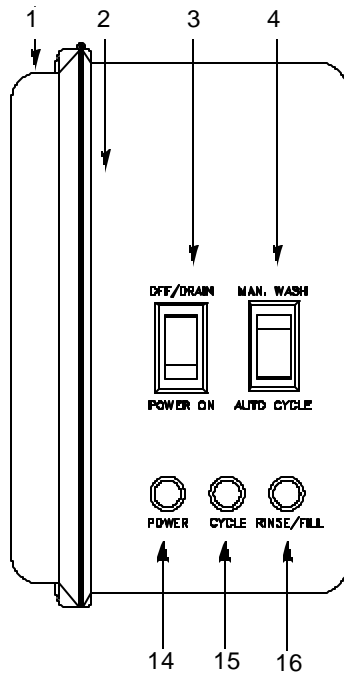
| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|---------------------------------------|-----------------|
| 1 | 1 | Gauge, 0-100 PSI with Green Zone | 06680-011-86-42 |
| 2 | 1 | Thermometer, 96" Wash | 06685-111-68-49 |
| 3 | 1 | Thermometer, 48" Rinse | 06685-111-68-48 |
| 4 | 1 | Control Panel, Remote JP-24 | 09330-041-73-91 |
| 5 | 1 | Decal, JP-24 External Control Panel | 09905-031-73-94 |
| 6 | 1 | Fitting, 1/4" BARB x 1/4" FNPT Swivel | 04730-011-95-42 |
| 7 | 1 | Hose, 5/16" x 12" | 05700-011-86-45 |
| 8 | 1 | Fitting, 1/4" BARB x 1/4" MNPT Swivel | 04730-011-95-41 |

SECTION 6: PARTS SECTION

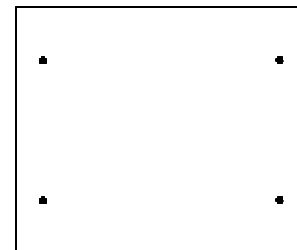
ELECTRICAL PANEL ASSEMBLY (EXTERNAL OPTION & AMTRAK OPTION)



RIGHT SIDE VIEW AMTRAK OPTION



Electrical Component Mounting Bracket
05700-031-84-85



Control Box Mounting Panel
(Amtrak Option Only)
05700-001-99-38

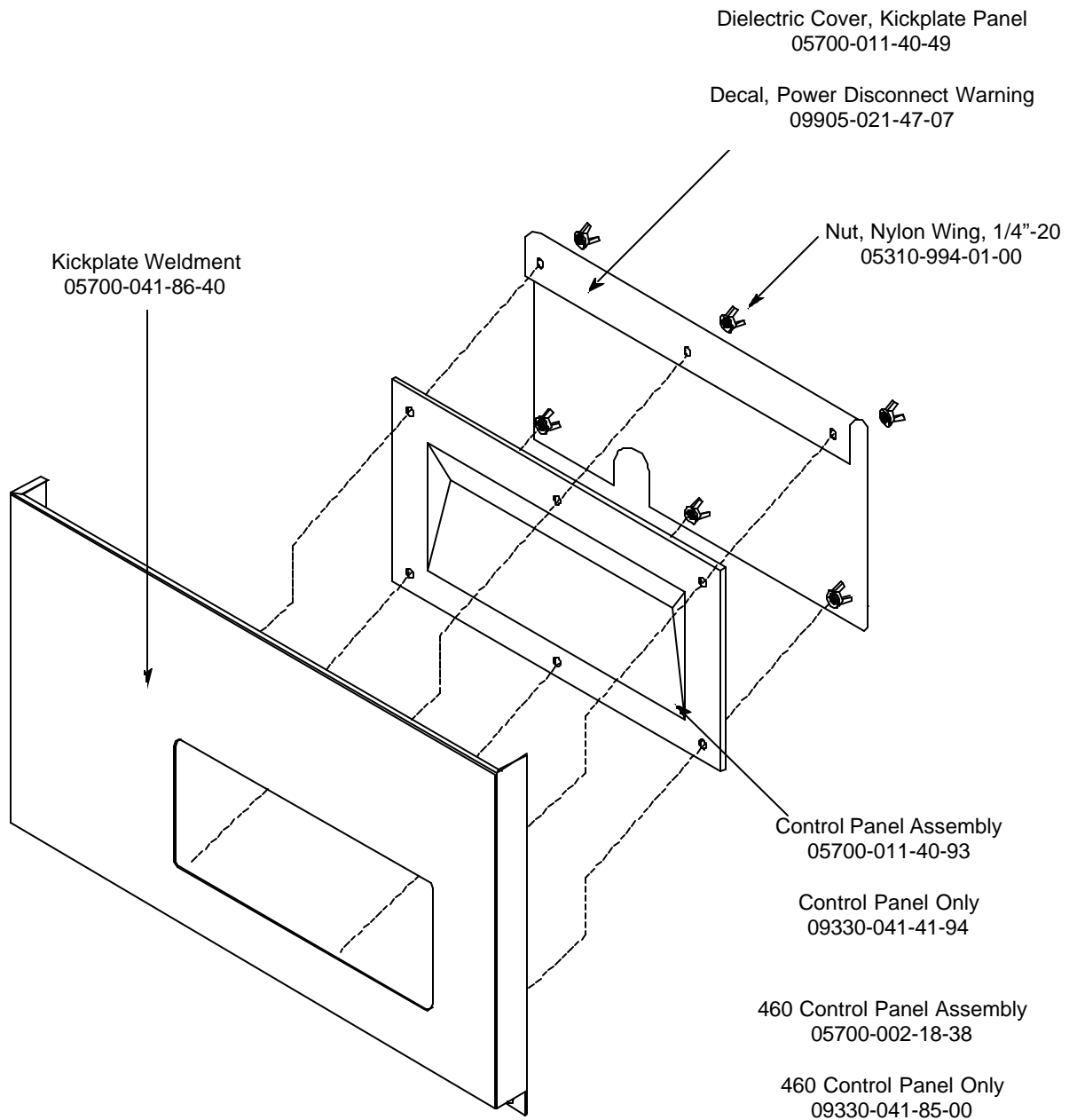
SECTION 6: PARTS SECTION

ELECTRICAL PANEL ASSEMBLY (EXTERNAL OPTION & AMTRAK OPTION) (CONTINUED)

| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|---|-----------------|
| 1 | 1 | Control Box, JP-24 External Machined | 05700-031-73-01 |
| 1 | 1 | Control Box, Amtrak 24 Remote | 05700-031-93-17 |
| 2 | 1 | Decal, External Control Box | 09905-031-84-87 |
| 2 | 1 | Decal, Amtrak Control Box | 09905-031-84-87 |
| 3 | 1 | Switch, ON/FILL & OFF/DRAIN | 05930-301-49-55 |
| 4 | 1 | Switch, Delime | 05930-011-49-00 |
| 5 | 1 | Contactora, Motor | 05945-002-74-20 |
| 6 | 1 | Panel, Inner Control Box | 05700-031-91-51 |
| 7 | 9 | Screw, 10-32 x 3/8" Phillips Truss Round Head | 05305-173-12-00 |
| 8 | 1 | Track, Terminal 3 5/16" | 05700-000-43-60 |
| 9 | 2 | Block, Snap-in Terminal | 05940-500-02-19 |
| 10 | 1 | Decal, Ground, L1, L2 | 09905-101-40-82 |
| 11 | 1 | Decal, Ground | 09905-011-86-86 |
| 12 | 1 | Wire Lug | 05940-200-76-00 |
| 13 | 1 | Decal, Copper Conductors | 09905-011-47-35 |
| 14 | 1 | Light, Red | 05945-111-44-45 |
| 15 | 1 | Light, Amber | 05945-111-44-44 |
| 16 | 1 | Light, Green | 05945-111-44-43 |
| 17 | 1 | Decal, Timer | 09905-011-40-70 |
| 18 | 1 | Timer, 60 HZ | 05945-121-41-60 |
| | 1 | Timer, 50 HZ | 05945-002-13-34 |
| | 1 | Timer, 5 Minute | 05945-121-44-89 |
| 19 | 1 | Contactora, Heater | 05945-002-74-20 |
| 20 | 2 | Screw, 6-32 x 3/8" Phillips Round Head | 05305-171-02-00 |

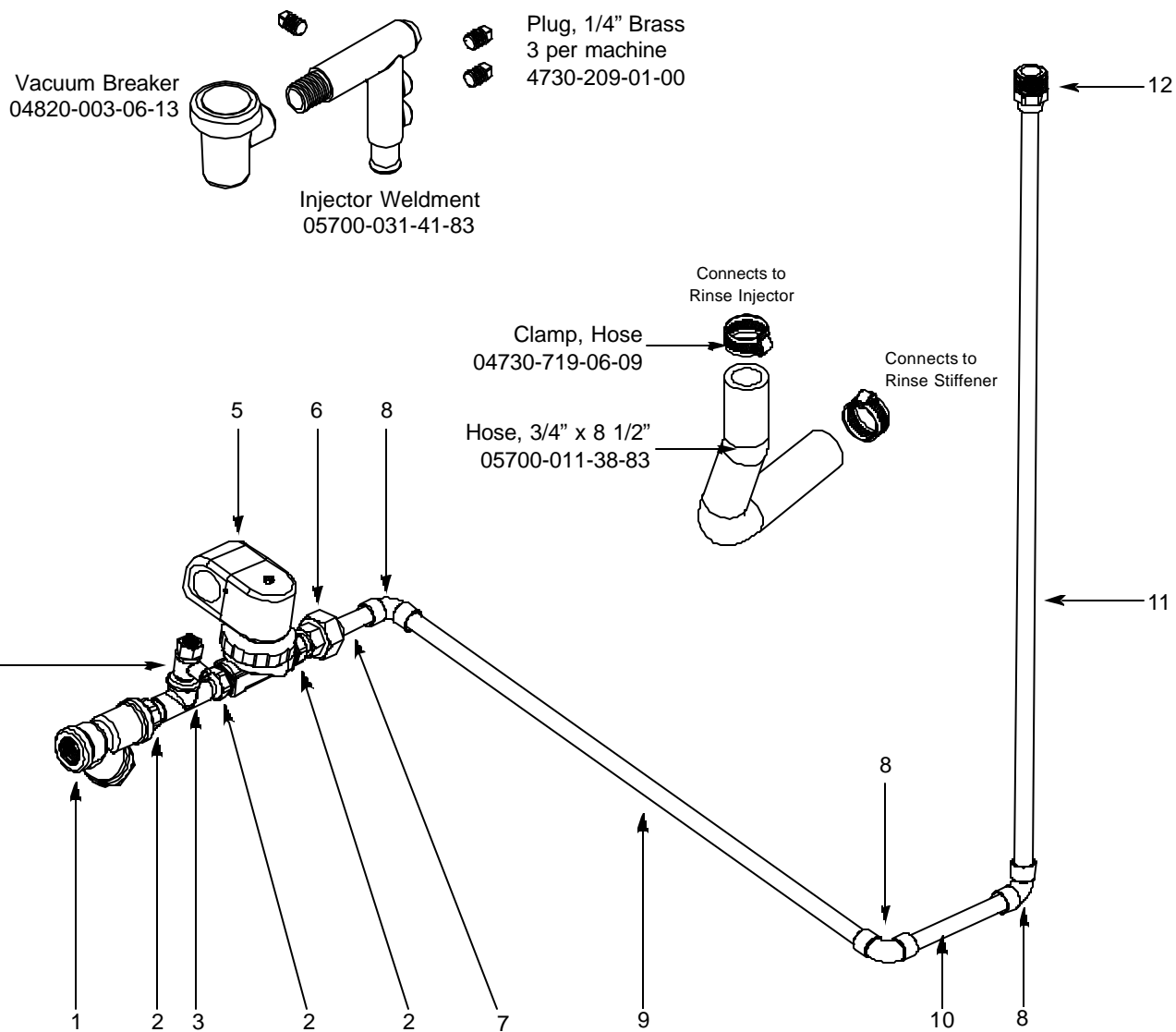
SECTION 6: PARTS SECTION

KICK PLATE ASSEMBLY



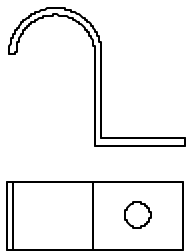
SECTION 6: PARTS SECTION
INCOMING PLUMBING ASSEMBLY (JP-24/JP-24F)

Vacuum Breaker Assembly



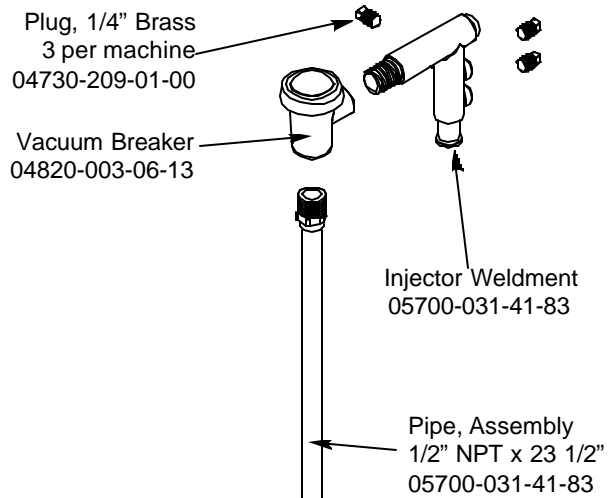
| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|------------------------------------|-----------------|
| 1 | 1 | Y-Strainer, 1/2" | 04730-217-01-10 |
| 2 | 3 | Adapter, 1/2" Ftg. x Male | 04730-011-59-53 |
| 3 | 1 | Tee, 1/2" C x 1/2" C x 1/4" Female | 04730-411-25-01 |
| 4 | 1 | Ball Valve, Test Cock 1/4" | 04810-011-72-67 |
| 5 | 1 | Valve, Solenoid 1/2", 115 volt | 04810-100-12-18 |
| 6 | 1 | Union, 1/2" C to C | 04730-412-05-01 |
| 7 | 1 | Copper Tube, 1/2" x 2" | 05700-001-04-66 |
| 8 | 3 | Elbow, 1/2", 90° C to C | 04730-406-01-01 |
| 9 | 1 | Copper Tube, 1/2" x 19 1/2" | 05700-011-59-84 |
| 10 | 1 | Copper Tube, 1/2" x 4 1/2" | 05700-011-59-83 |
| 11 | 1 | Copper Tube, 1/2" x 25 1/2" | 05700-011-59-85 |
| 12 | 1 | Adapter, 1/2" Ftg. x Male | 04730-401-03-01 |

SECTION 6: PARTS SECTION
INCOMING PLUMBING ASSEMBLIES (JP-24B/JP-24BF)



Pipe Clamp
05700-011-38-62

Secured with:
 Locknut, 1/4"-20 S/S
 Hex with Nylon Insert
 05310-374-01-00

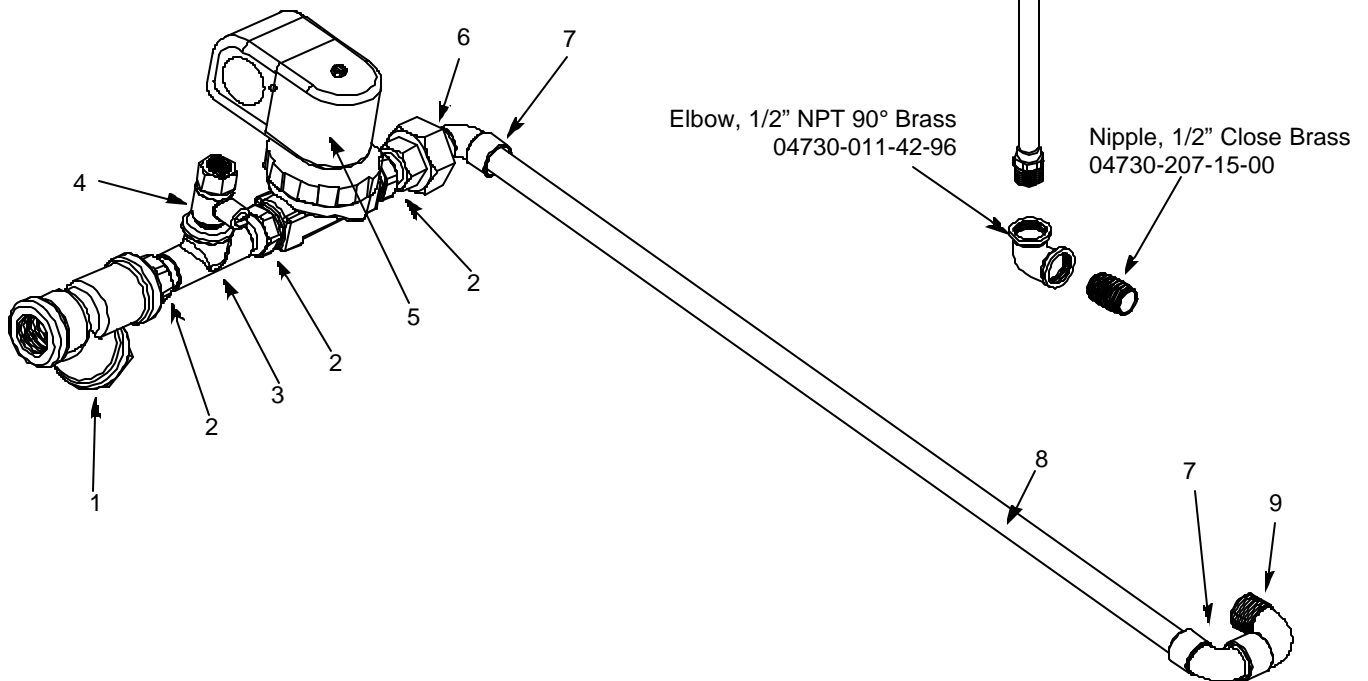


Plug, 1/4" Brass
3 per machine
04730-209-01-00

Vacuum Breaker
04820-003-06-13

Injector Weldment
05700-031-41-83

Pipe, Assembly
1/2" NPT x 23 1/2"
05700-031-41-83

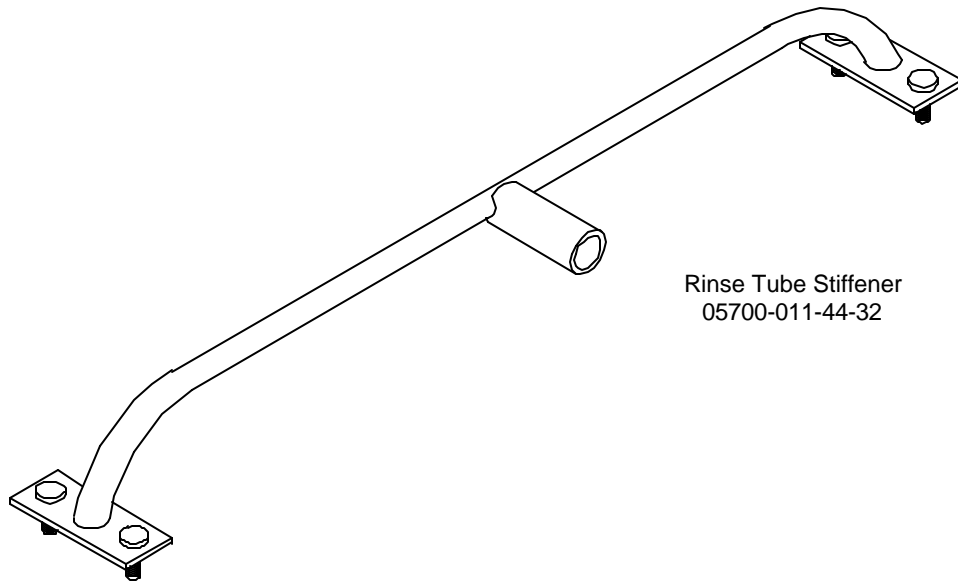


Elbow, 1/2" NPT 90° Brass
04730-011-42-96

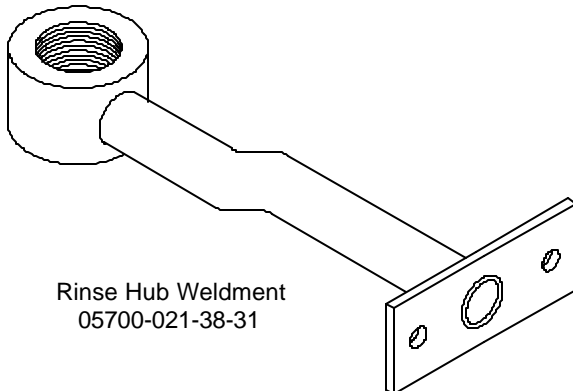
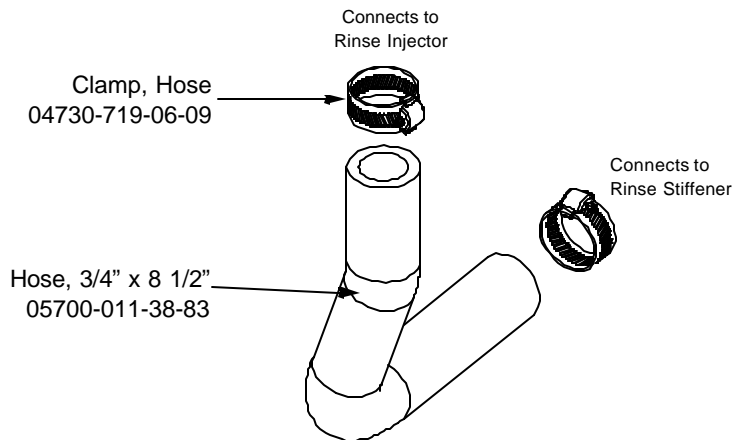
Nipple, 1/2" Close Brass
04730-207-15-00

| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|-------------------------------|-----------------|
| 1 | 1 | Y-Strainer, 1/2" | 04730-217-01-10 |
| 2 | 3 | Adapter, 1/2" Ftg. x Male | 04730-011-59-53 |
| 3 | 1 | Tee, 1/2 x 1/2 x 1/4 | 04730-411-25-01 |
| 4 | 1 | Ball Valve, Test Cock 1/4" | 04810-011-72-67 |
| 5 | 1 | Valve, Solenoid 1/2" 220 volt | 04810-100-09-18 |
| 6 | 1 | Union, 1/2" C to C | 04730-412-05-01 |
| 7 | 2 | Elbow, 1/2" C to Ftg. | 04730-406-31-01 |
| 8 | 1 | Copper Tube, 1/2" x 18 1/2" | 05700-011-44-34 |
| 9 | 1 | Elbow, 1/2", 90° C to MSPS | 04730-406-32-01 |

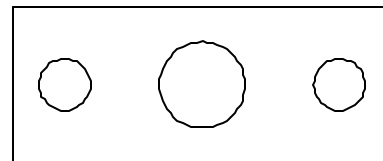
SECTION 6: PARTS SECTION
RINSE STIFFENER/RINSE HUB WELDMENT



Rinse Tube Stiffener
05700-011-44-32



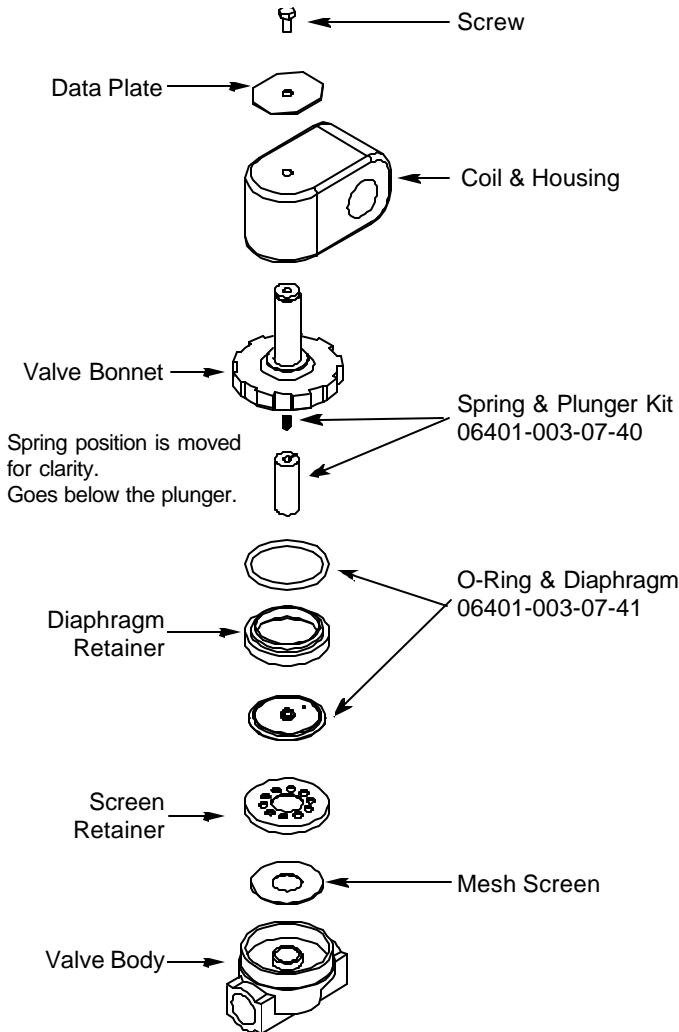
Rinse Hub Weldment
05700-021-38-31



Vellumoid Rinse Gasket
05330-111-42-81

SECTION 6: PARTS SECTION

RINSE SOLENOID VALVE & VACUUM BREAKER REPAIR PARTS KITS/WATER PRESSURE REGULATOR KIT OPTION

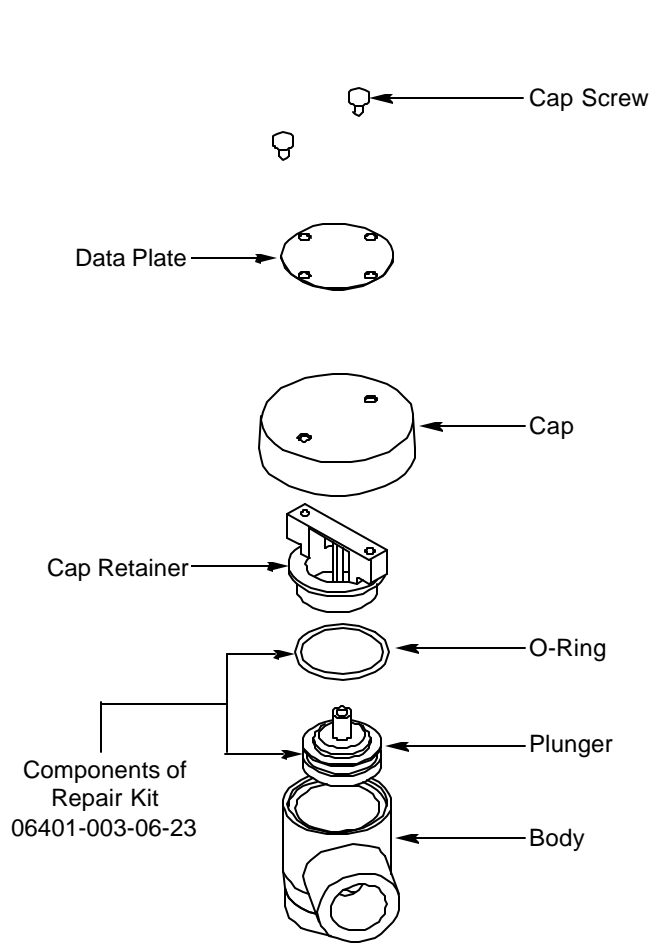


Complete 110 Volt Solenoid Valve Assembly, 1/2"
04810-100-12-18

Coil & Housing only, 1/2"
06401-003-07-43

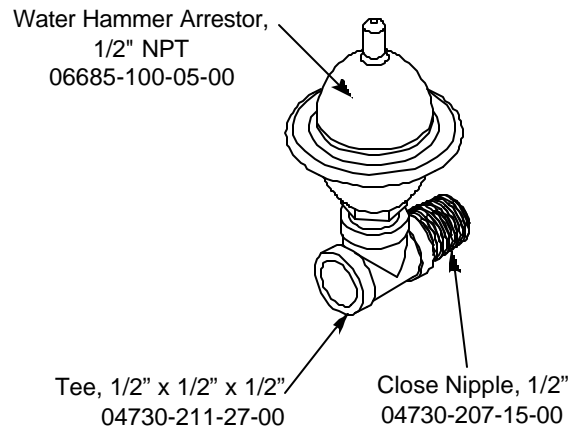
Complete 220 Volt Solenoid Valve Assembly, 1/2"
04810-100-09-18

Coil & Housing only, 1/2"
06401-003-07-44



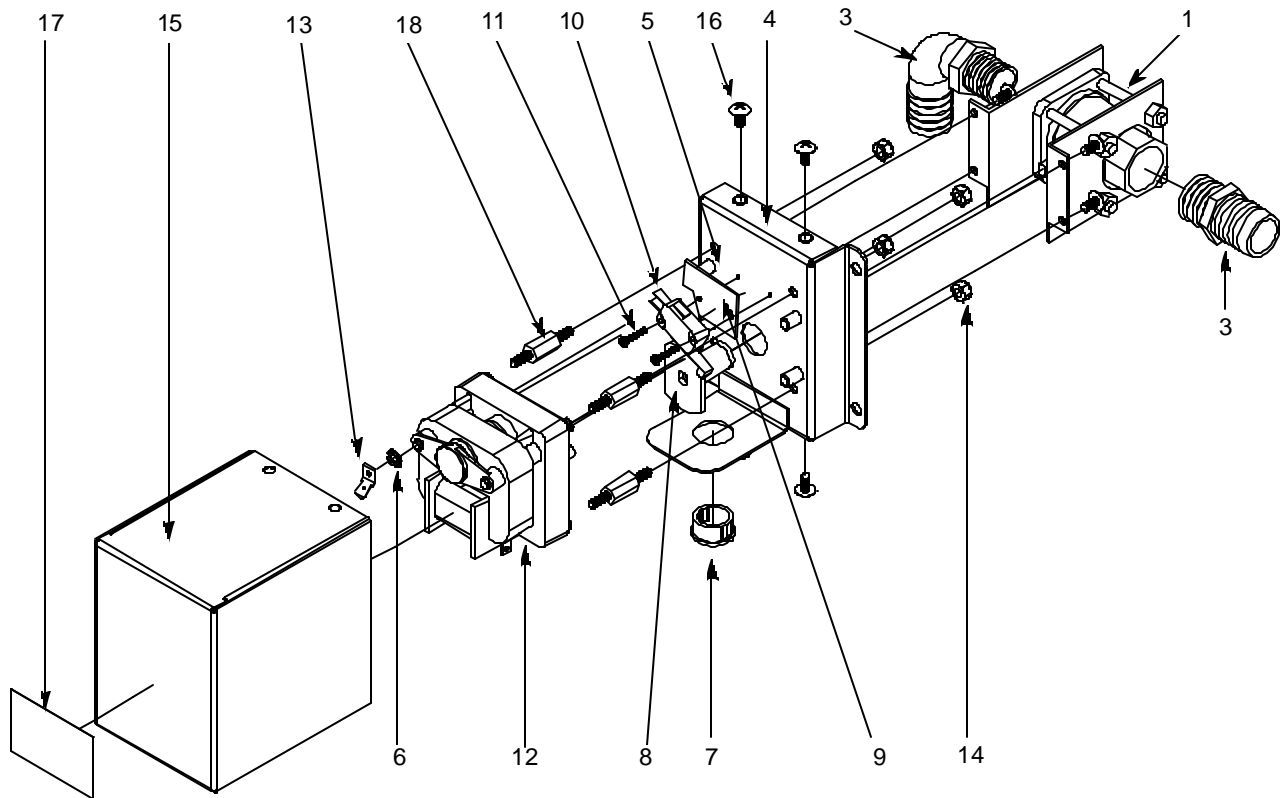
Complete Vacuum Breaker Assembly, 1/2" NPT
04820-003-06-13

Complete WPRK Assembly
05700-002-64-67



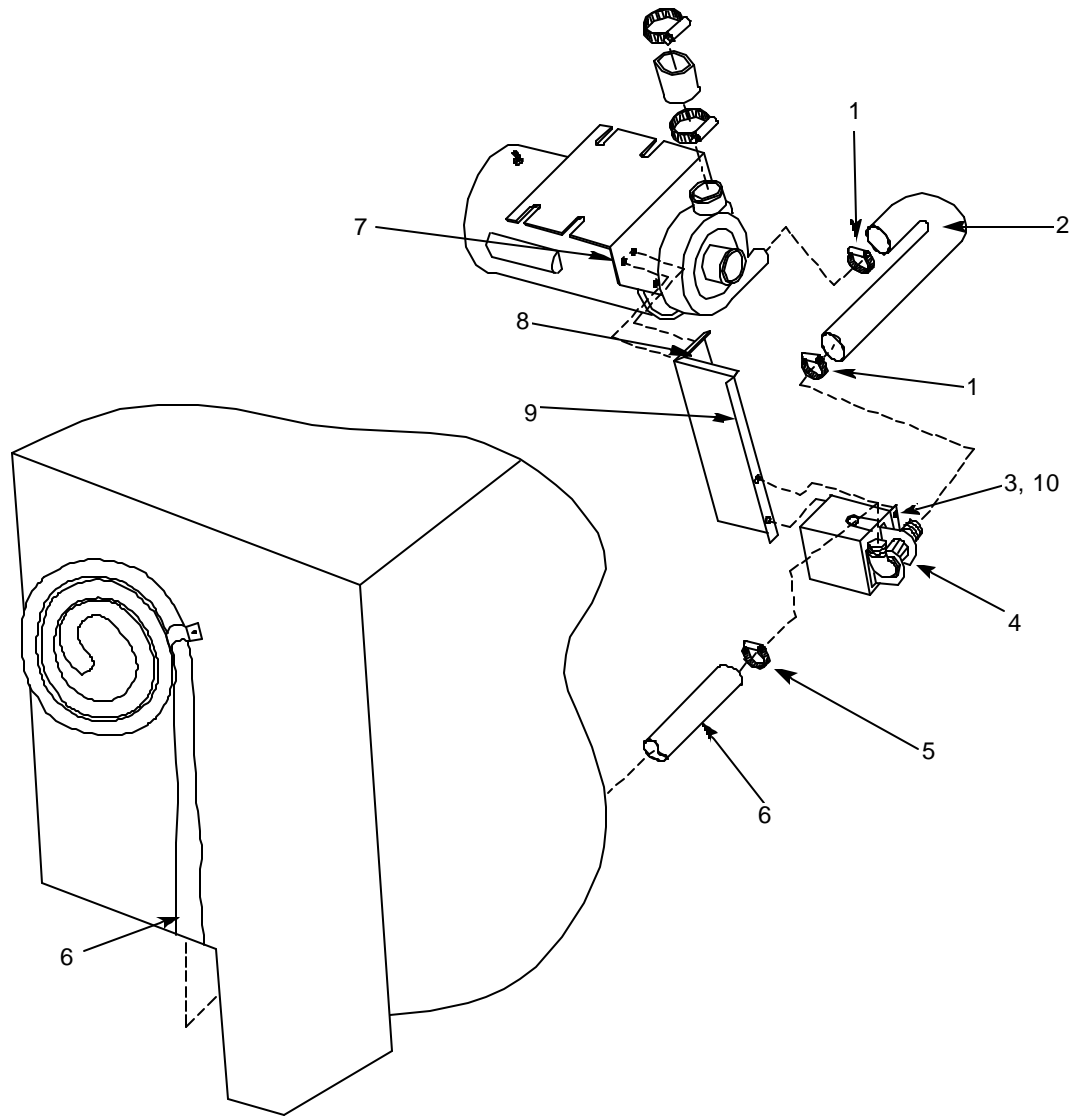
SECTION 6: PARTS SECTION

DRAIN VALVE ASSEMBLY



| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|---|-----------------|
| | 1 | Diverter Valve Assembly, 115 Volt | 06401-012-23-21 |
| | 1 | Diverter Valve Assembly, 220 Volt | 06401-022-23-21 |
| 1 | 1 | Valve, With Brackets | 05700-002-23-28 |
| 2 | 1 | Hosebarb, 1" x 3/4" NPT Polypropylene | 04730-011-65-86 |
| 3 | 1 | Hosebarb, 90° 1" x 3/4" NPT | 04730-011-65-87 |
| 4 | 1 | Plate, Motor Mounting Weldment | 05700-031-96-02 |
| 5 | 4 | Tricnut, 10-32 AK Fastener, S/S | 05340-111-58-10 |
| 6 | 1 | Lockwasher, #10 External Tooth | 05311-273-02-00 |
| 7 | 1 | Grommet, Heyco | 05975-210-03-00 |
| 8 | 1 | Cam Weldment | 05700-011-65-78 |
| 9 | 1 | Plate, Dielectric | 05700-011-65-80 |
| 10 | 1 | Switch, Micro | 05930-011-65-81 |
| 11 | 2 | Screw, 4-40 x 5/8" | 05305-011-49-70 |
| 12 | 1 | Motor, Chemical Feeder Pump 14 RPM 115 Volt | 04320-111-35-13 |
| 12 | 1 | Motor, Chemical Feeder Pump 14 RPM 220 Volt | 04320-011-79-34 |
| 13 | 1 | Terminal, Ground Spade | 05940-011-75-70 |
| 14 | 4 | Locknut, 10-32 S/S Hex with Nylon Insert | 05310-373-02-00 |
| 15 | 1 | FW-Valve, Cover | 05700-031-65-70 |
| 16 | 4 | Screw, 10-32 x 3/8" Truss Head | 05305-173-12-00 |
| 17 | 1 | Decal, Warning-Disconnect Power | 09905-100-75-93 |
| 18 | 4 | Screw, Mounting | 05305-011-93-30 |

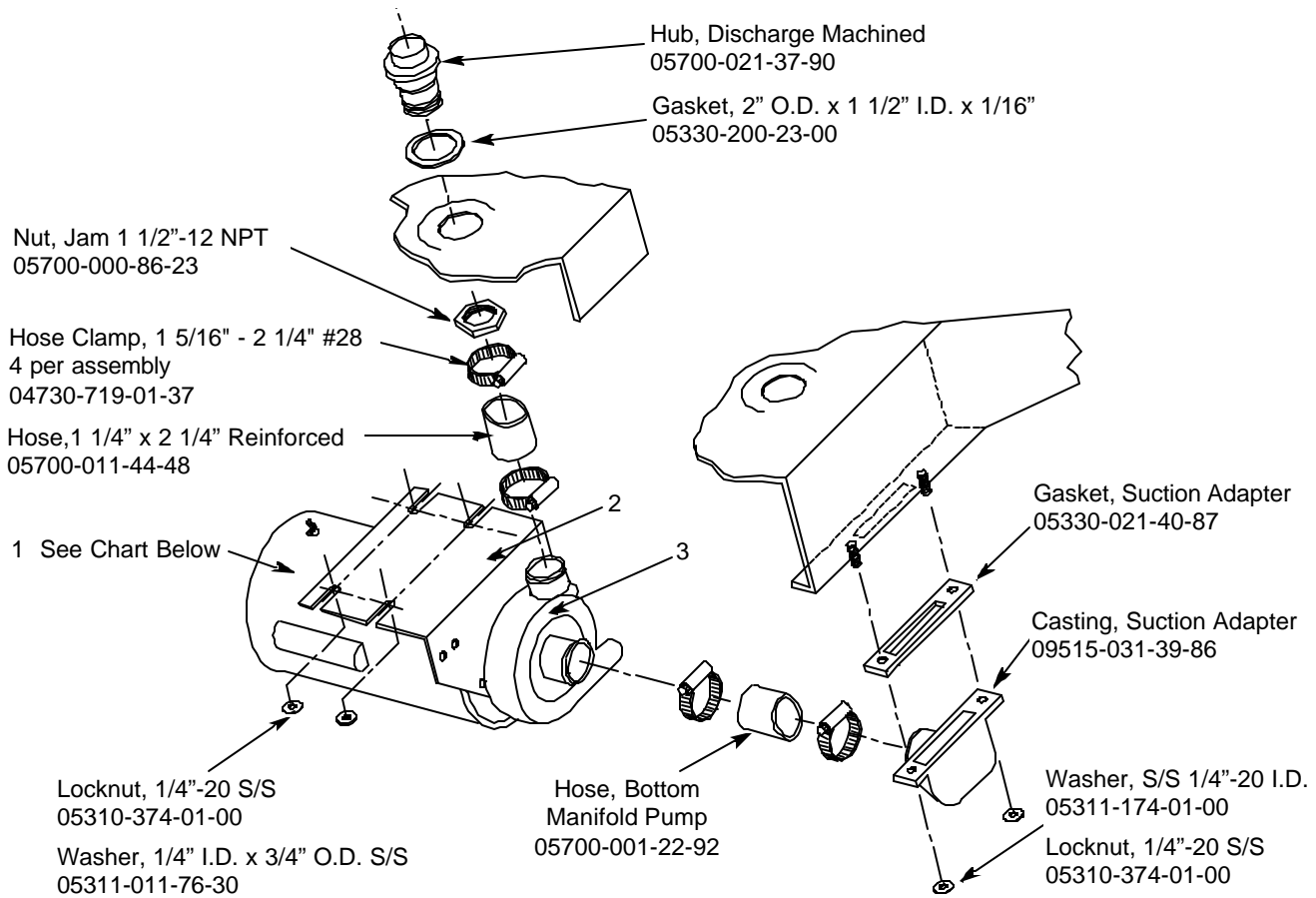
SECTION 6: PARTS SECTION
DRAIN PLUMBING ASSEMBLY



| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|--|-----------------|
| 1 | 3 | Clamp, 3/16" to 1 1/2" | 04730-719-06-09 |
| 2 | 1 | Hose, Formed Drain | 04720-121-40-36 |
| 3 | 2 | Bolt, 10-32 x 1/2" Slotted Truss Head | 05305-173-04-00 |
| 4 | 1 | Diverter Valve Assembly, 115 Volt | 06401-012-23-21 |
| 4 | 1 | Diverter Valve Assembly, 220 Volt | 06401-022-23-21 |
| 5 | 1 | Clamp, 11/16" to 1 1/4" | 04730-002-18-40 |
| 6 | 1 | Hose, 1" I.D. x 10 Feet Long | 05700-011-39-72 |
| 7 | 2 | Locknut, 1/4"-20 S/S Hex with Nylon Insert | 05310-374-01-00 |
| 8 | 2 | Bolt, 1/4"-20 x 1/2" Long | 05305-274-02-00 |
| 9 | 1 | Bracket, Valve Mounting with Tricnuts | 05700-021-66-37 |
| 10 | 2 | Washer, #10 External Tooth Star | 05311-273-02-00 |

SECTION 6: PARTS SECTION

WASH MOTOR TO WASH TUB ASSEMBLY



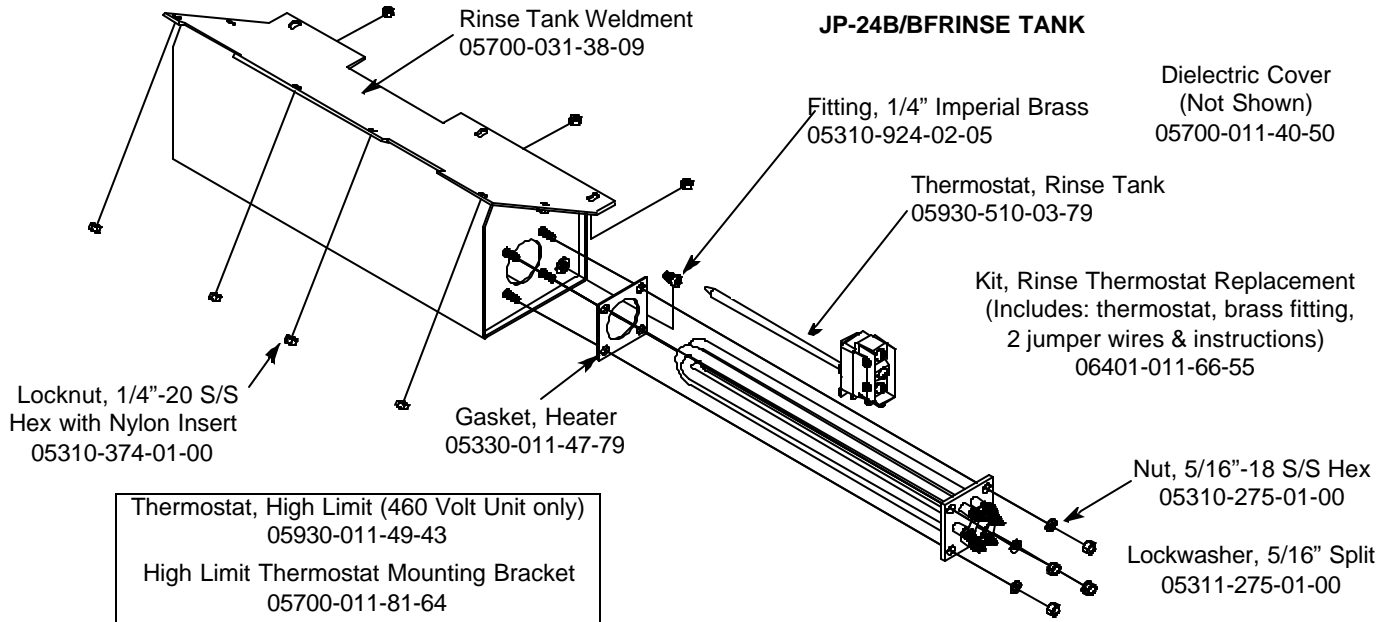
| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|--|------------------------------------|
| 1 | 1 | Motor, Wash, 115/230 V, 60 HZ, Complete Motor, Only | 06105-131-50-93 06105-021-44-03 |
| 1 | 1 | Motor, Wash, 115/230 V, 50 HZ, Complete Motor, Only | 06105-002-14-93 06105-003-19-78 |
| 1 | 1 | Motor, Wash, 460 V, 60 HZ, Complete Motor, Only | 06105-121-60-06 06105-002-64-03 |
| 2 | 1 | Pump Mounting Bracket | 05700-002-42-85 |
| 3 | 1 | Pump Casing, Iron | 05930-021-44-07 |

The following items are not shown and are the same for each motor assembly.

| | |
|-------------------------------|-----------------|
| Iron Adapter | 04730-002-42-84 |
| Impeller | 04320-021-44-02 |
| Drain Cock | 04730-002-43-21 |
| Mechanical Seal | 05330-011-44-06 |
| Gasket, 4.75" x 4.09" x 1/16" | 05330-111-59-90 |
| Gasket, 4.75" x 4.09" x 1/64" | 05330-002-42-86 |

SECTION 6: PARTS SECTION

RINSE TANK & COMPONENTS/STRIP HEATER KIT

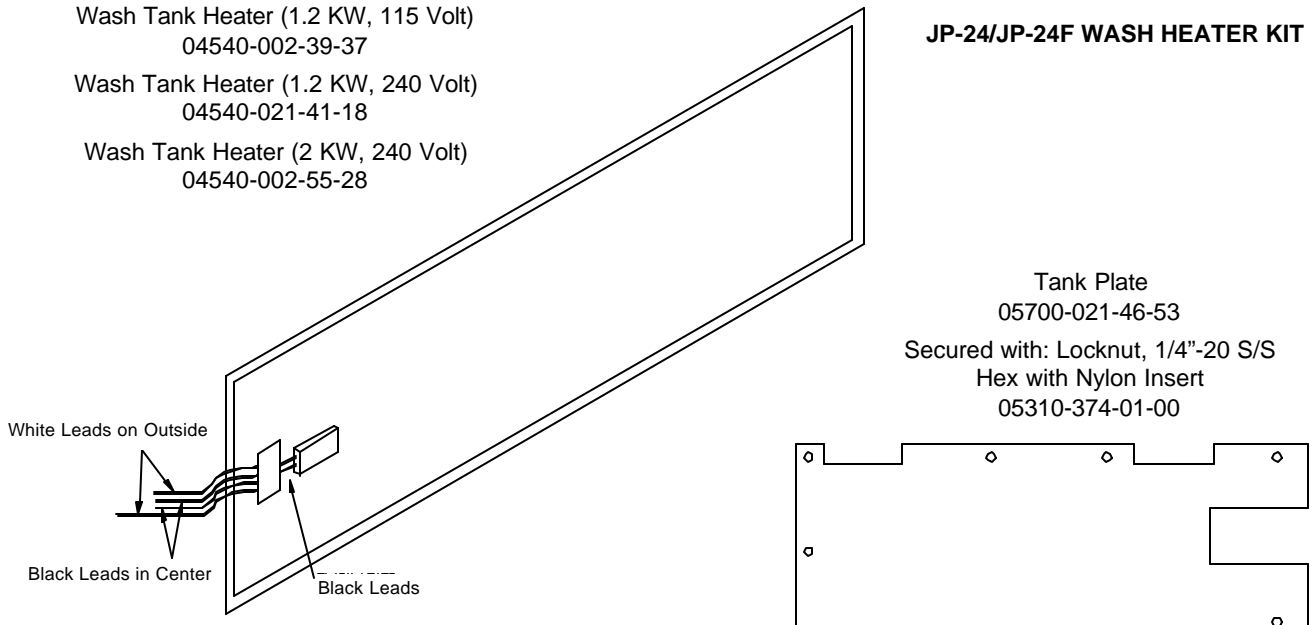


The JPX-300H/HC/HN models covered in this manual come supplied with various heaters, depending on the characteristics of the machine. To ensure that you order the correct heater for the model you are servicing, please refer to the following table:

| Model | Volts | Hz | Phase | 40°F Rise | 70°F Rise |
|----------|-------|----|-------|-----------------------|----------------------|
| | | | | Rinse Heater (8.2 KW) | Rinse Heater (10 KW) |
| JPX-300H | 208 | 50 | 1 | 04540-111-43-21 | 04540-021-62-57 |
| JPX-300H | 230 | 50 | 1 | 04540-111-43-21 | 04540-021-62-57 |
| JPX-300H | 208 | 60 | 1 | 04540-111-43-21 | 04540-021-62-57 |
| JPX-300H | 230 | 60 | 1 | 04540-111-43-21 | 04540-021-62-57 |
| JPX-300H | 460 | 60 | 3 | 04540-111-51-46 | 04540-002-29-82 |

- Wash Tank Heater (1.2 KW, 115 Volt)
04540-002-39-37
- Wash Tank Heater (1.2 KW, 240 Volt)
04540-021-41-18
- Wash Tank Heater (2 KW, 240 Volt)
04540-002-55-28

JP-24/JP-24F WASH HEATER KIT

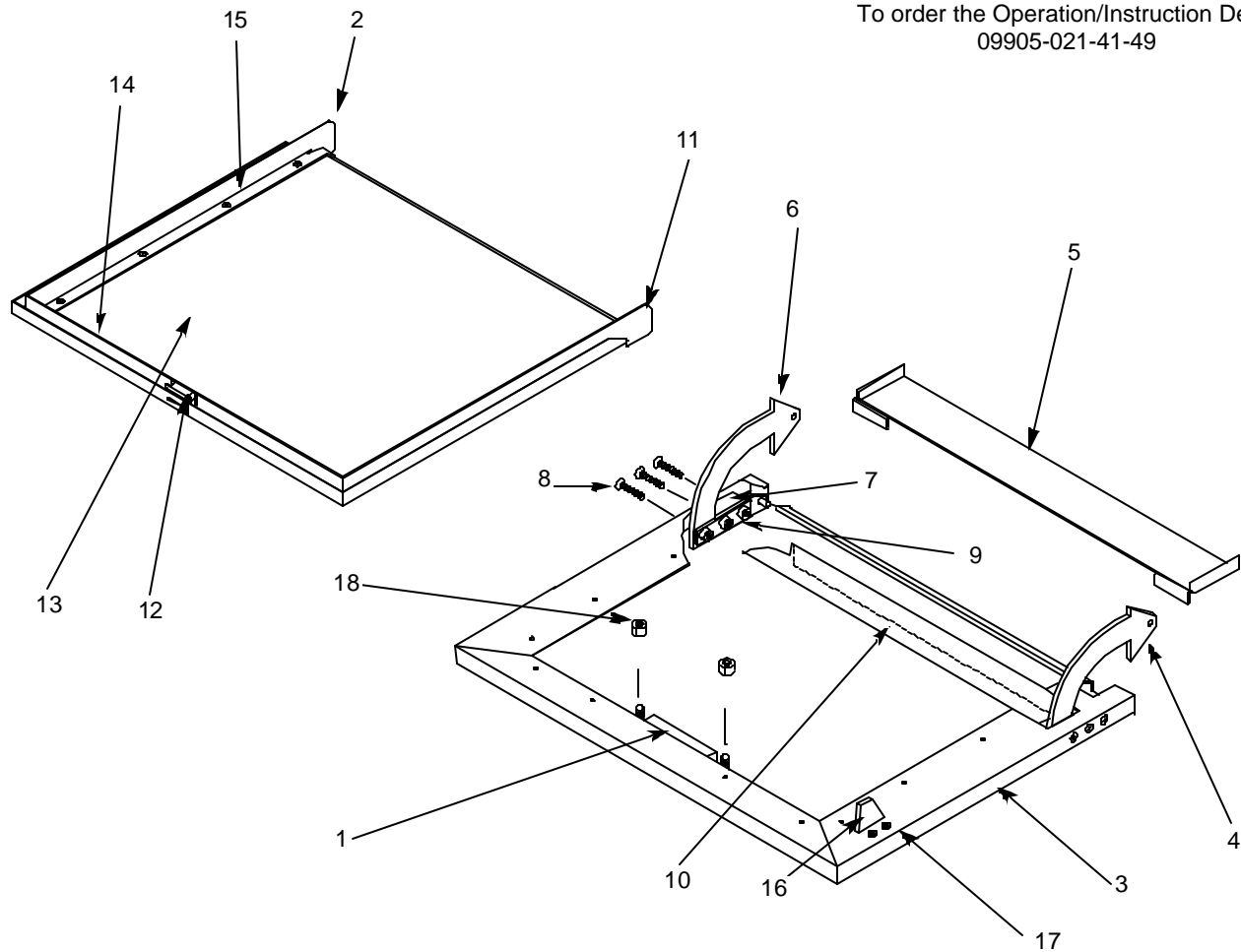


SECTION 6: PARTS SECTION

DOOR ASSEMBLY

Order this entire assembly using 05700-011-39-15

To order the Operation/Instruction Decal
09905-021-41-49

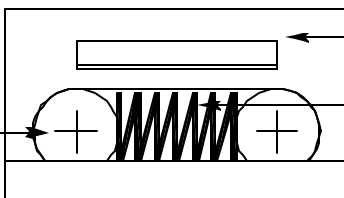


| ITEM | QTY | DESCRIPTION | Mfg. No. |
|------|-----|--|-----------------|
| 1 | 1 | Door Handle, S/S | 05340-011-60-25 |
| 2 | 1 | Seal Channel, Inner Door, Left | 05700-031-32-89 |
| 3 | 1 | Kit, Outer Door with Tricnuts | 06401-003-19-59 |
| 4 | 1 | Right Hinge Assembly Weldment | 05700-021-38-75 |
| 5 | 1 | Spray Baffle | 05700-031-37-56 |
| 6 | 1 | Left Hinge Assembly Weldment | 05700-021-38-76 |
| 7 | 2 | Spacer, Hinge UHMW | 05700-011-44-23 |
| 8 | 6 | Fastener, Screw, 1/4"-20 x 1-1/2" Long | 05305-011-44-50 |
| 9 | 2 | Hinge Retaining Plate Assembly | 05700-011-44-37 |
| 10 | 1 | Baffle, Door | 05700-001-44-75 |
| 11 | 1 | Seal Channel, Inner Door, Right | 05700-031-32-91 |
| 12 | 1 | Latch Assembly | 05700-011-44-41 |
| 13 | 1 | Inner Door | 05700-031-32-85 |
| 14 | 1 | Seal Channel, Inner Door, Top | 05700-031-32-90 |
| 15 | 12 | Fastener, Screw, 10-32 Counter Sink, 1/2" Long | 05305-011-44-51 |
| 16 | 1 | Striker, Door Switch | 05700-011-44-24 |
| 17 | 2 | Fastener, Screw 10-32 x 1/2" Long | 05305-011-44-52 |
| 18 | 2 | Locknut, 10-32, S/S Hex with Nylon Insert | 05310-373-02-00 |

SECTION 6: PARTS SECTION
MISCELLANEOUS DOOR SUB-ASSEMBLIES

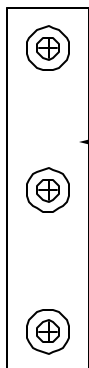
Door Latch Assembly
 05700-011-44-41

Latch Roller
 05700-011-44-38

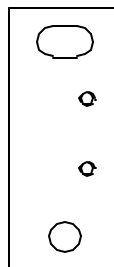


Door Latch Casting
 05700-011-44-40

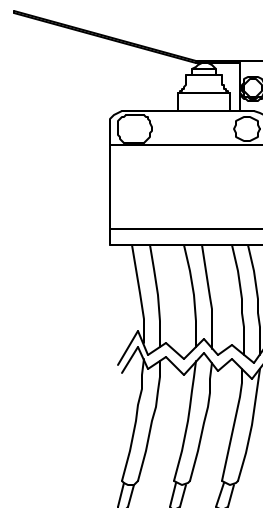
Latch Spring
 05700-011-44-39



Hinge Retaining Plate
 05700-011-44-37



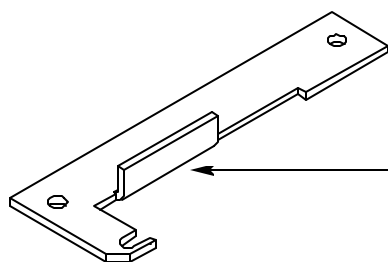
Switch Plate
 05700-011-44-22



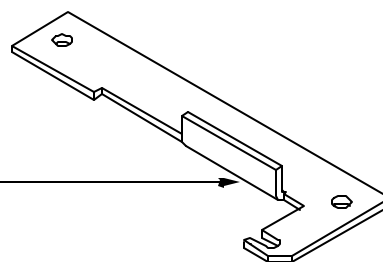
Door Switch
 05930-303-38-00



Door Spring
 05340-011-44-58

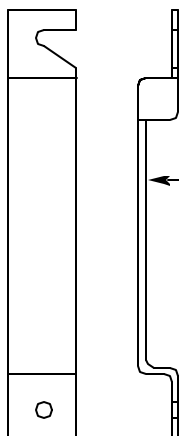


Stop, Left Hinge
 05700-021-37-67

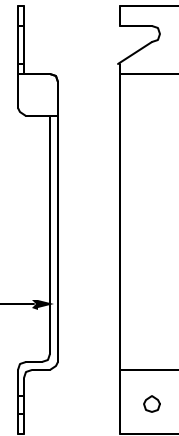


Stop, Right HInge
 05700-021-37-68

Hinge Components secured with:
 Locknut, 1/4"-20 S/S Hex with Nylon Insert
 05310-374-01-00

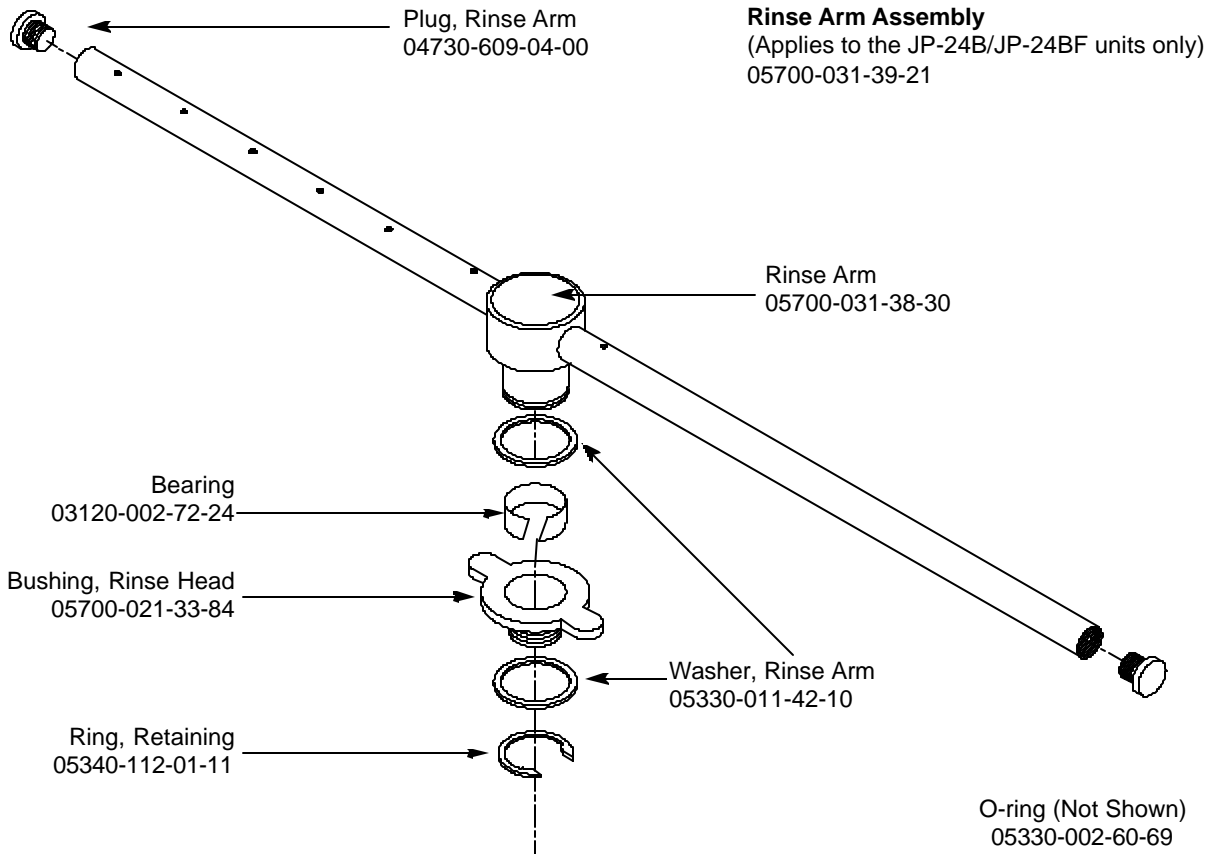


Cover, Left Hinge Weldment
 05700-002-18-41

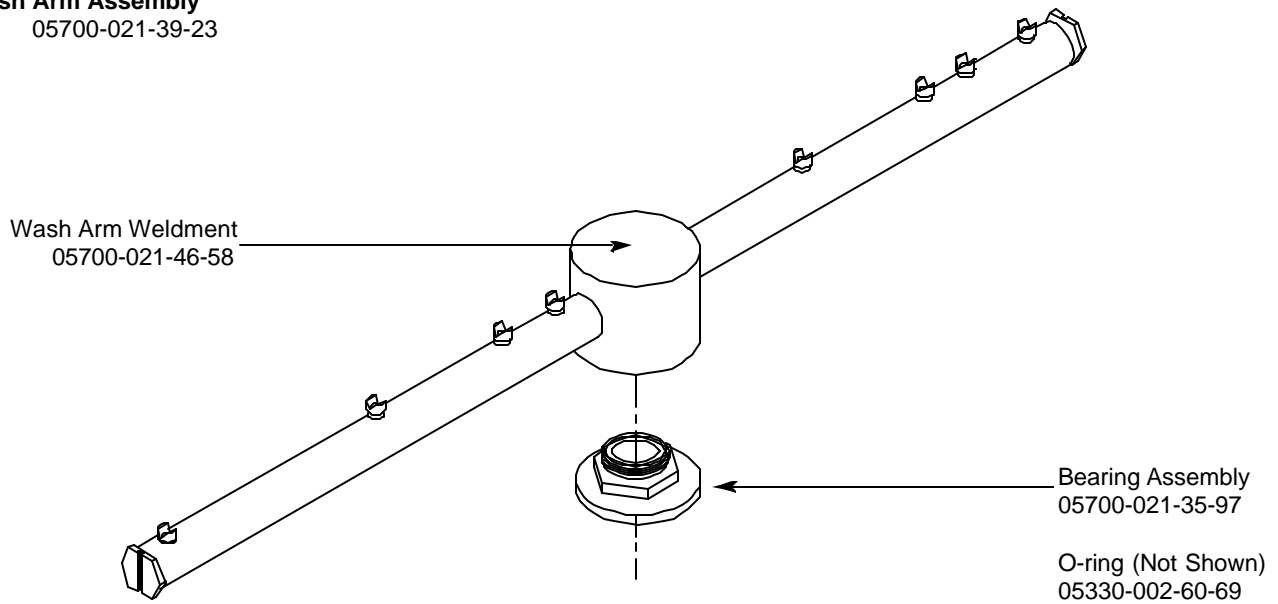


Cover, Right HInge Weldment
 05700-002-18-42

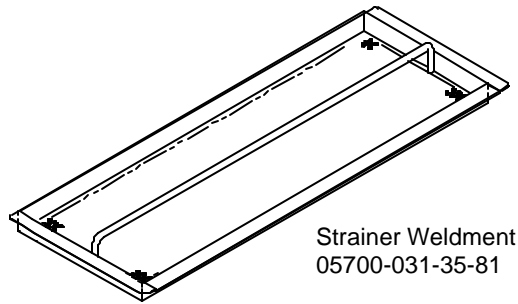
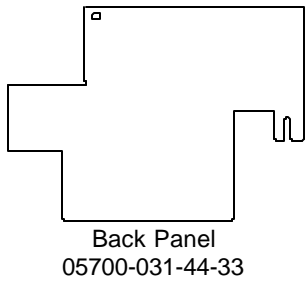
SECTION 6: PARTS SECTION
RINSE ARM & WASH ARM ASSEMBLIES



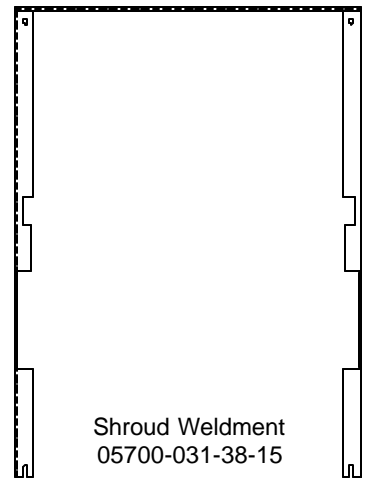
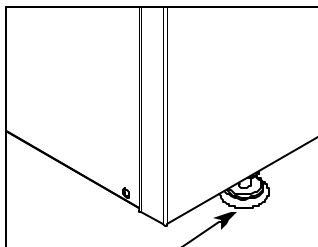
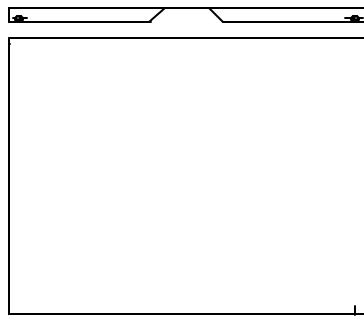
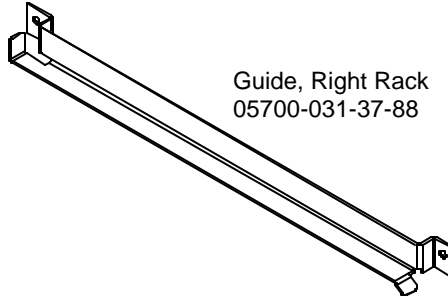
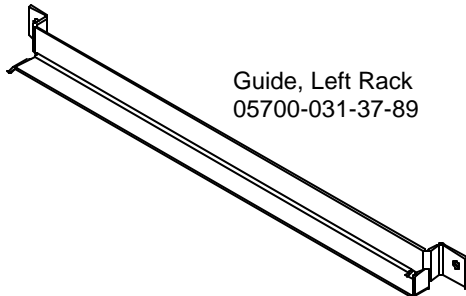
Wash Arm Assembly
 05700-021-39-23



SECTION 6: PARTS SECTION
FRAME & PANEL COMPONENTS/MISCELLANEOUS PARTS

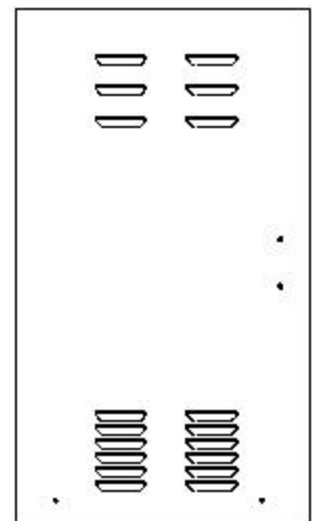
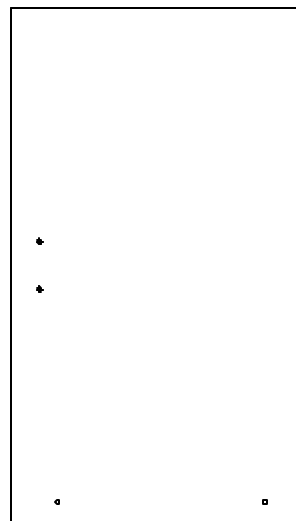
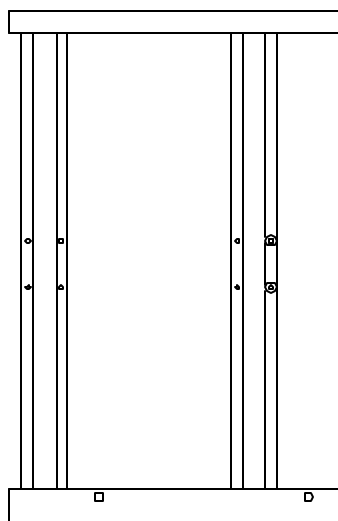
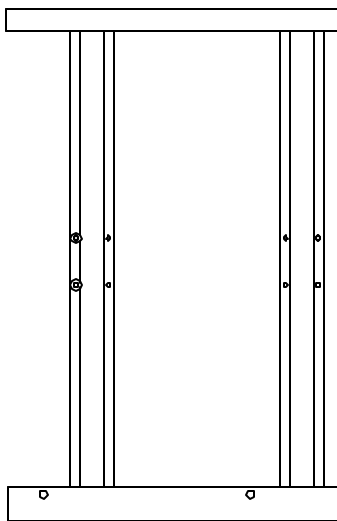


Attaches with:
Nut, Nylon Wing, 1/4"-20
05310-994-01-00



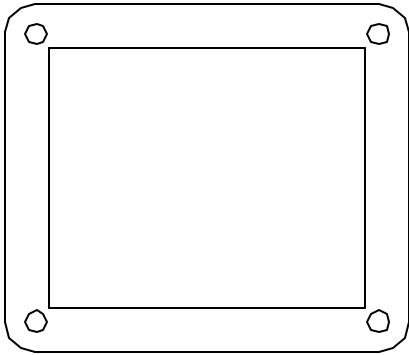
Secured with 10-32 x 1/2"
Long Screws
05305-173-04-00

The dress panels are secured with 10-32 x 1/2" Truss Head Screws, 05305-011-39-36



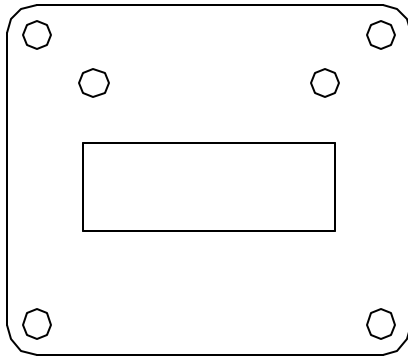
SECTION 6: PARTS SECTION

CYCLE COUNTER RETROFIT KIT

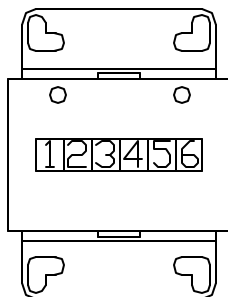


Template, Cycle Counter Mount
05700-002-94-37

To order the complete Cycle Counter Retrofit Kit with hardware, use part number 06401-002-95-14.



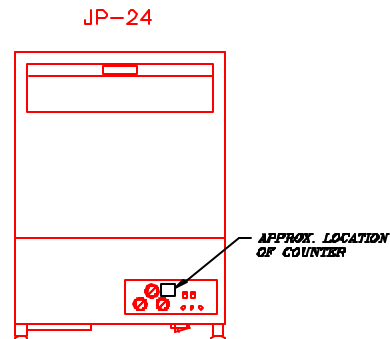
Cycle Counter Mount
05700-002-94-36



Cycle Counter, 240V
05990-111-47-42

Instructions for Adding Cycle Counter to JP-24 Undercounter Dish Machine

1. Locate the template on the front of the plastic control panel in the approximate location as shown in the diagram below.
2. Use a 3/32" diameter drill bit to drill the four mounting holes through the plastic control panel.
3. Mount the template to the front of the control panel using the screws and locknuts provided.
4. Using the template as a guide, cut the 1-3/8" x 1-1/8" cutout (the inside of the template) from the plastic control panel. Use a Dremel tool (or similar) or drill multiple holes along the edge of the template in order to cut away the cutout.
5. Remove the template from the control panel.
6. Assemble the counter (with mounting plate) to the control panel using the four screws and locknuts provided.
7. One lead wire from the counter is connected together with the blue wires from the fill solenoid valve and the rinse/fill light (using the existing wire nut that connects these two wires together).
8. The other lead wire from the counter is connected together with the red wires from the fill solenoid valve and the rinse/fill light (using the existing wire nut that connects these two wires together).
9. The counter should increment each time the fill solenoid valve is turned on.

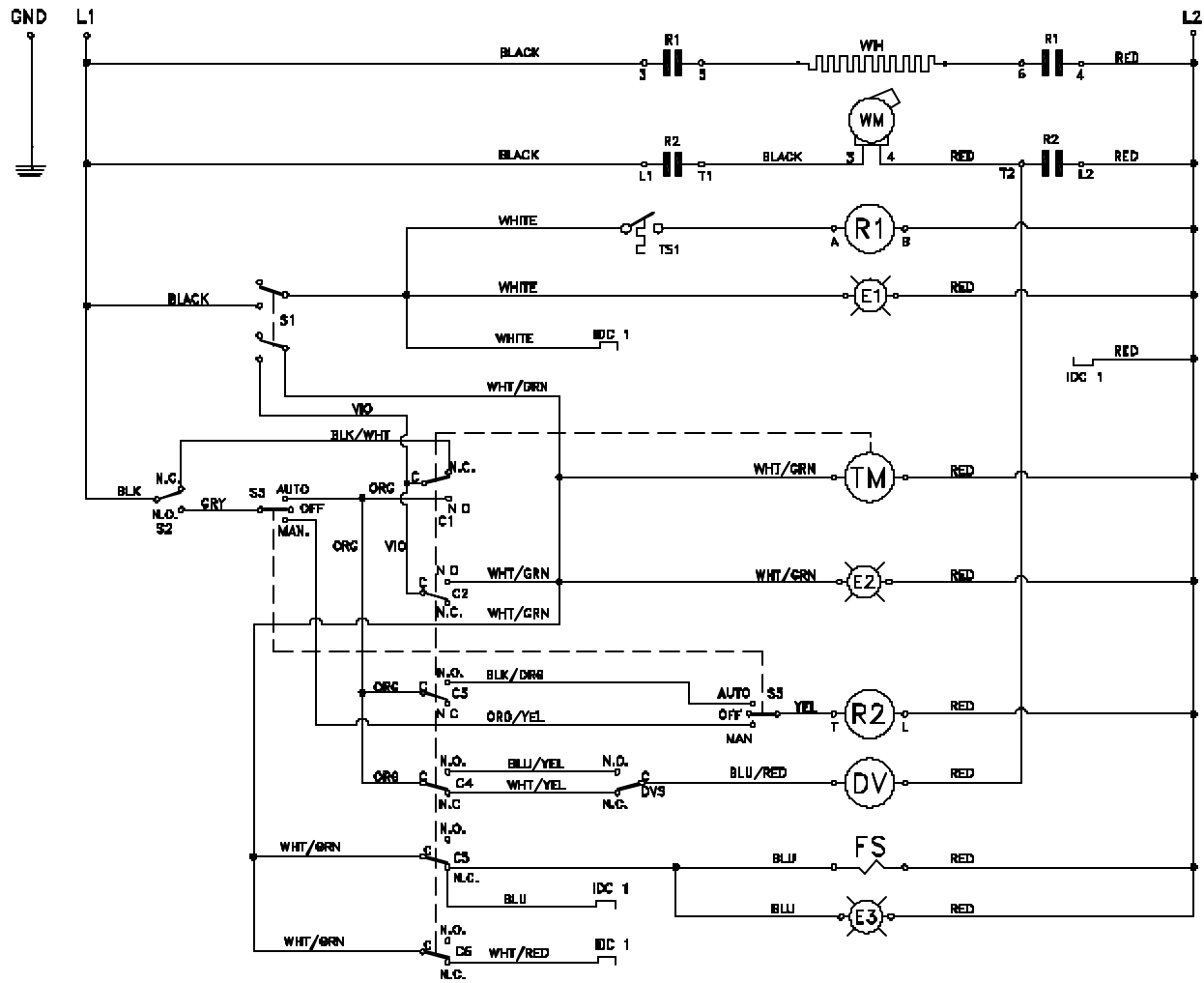


Instruction Sheet
05700-002-95-15

SECTION 7: ELECTRICAL SCHEMATICS

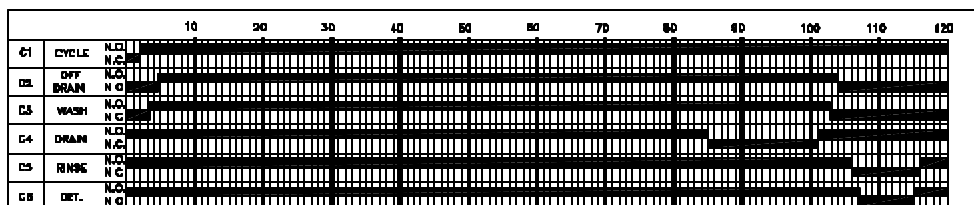
SECTION 7: ELECTRICAL SCHEMATICS

JP-24/JP-24F 208-230 VOLT - 50/60 HERTZ - SINGLE PHASE



- | | | | |
|------------------------|-----------------------|-------------------------|---------------------------------|
| REGULATING WASH HEATER | POWER ON LIGHT | CYCLE/RESET MICROSWITCH | ON/FILL-OFF/DRAIN SWITCH |
| WASH PUMP MOTOR | CYCLE LIGHT | OFF/DRAIN MICROSWITCH | DOOR SWITCH |
| TIMER MOTOR | RINSE/FILL LIGHT | WASH MICROSWITCH | AUTO/OFF/MAN WASH-DELIME SWITCH |
| DRAIN VALVE | WASH RELAY CONTACTS | DRAIN MICROSWITCH | DOOR SWITCH |
| WASH RELAY COIL | FILL SOLENOID | FILL MICROSWITCH | AUTO/OFF/MAN WASH-DELIME SWITCH |
| HEATER RELAY COIL | HEATER RELAY CONTACTS | DETERGENT MICROSWITCH | DRAIN VALVE SWITCH |
| | | HEATER PAD THERMISTAT | |

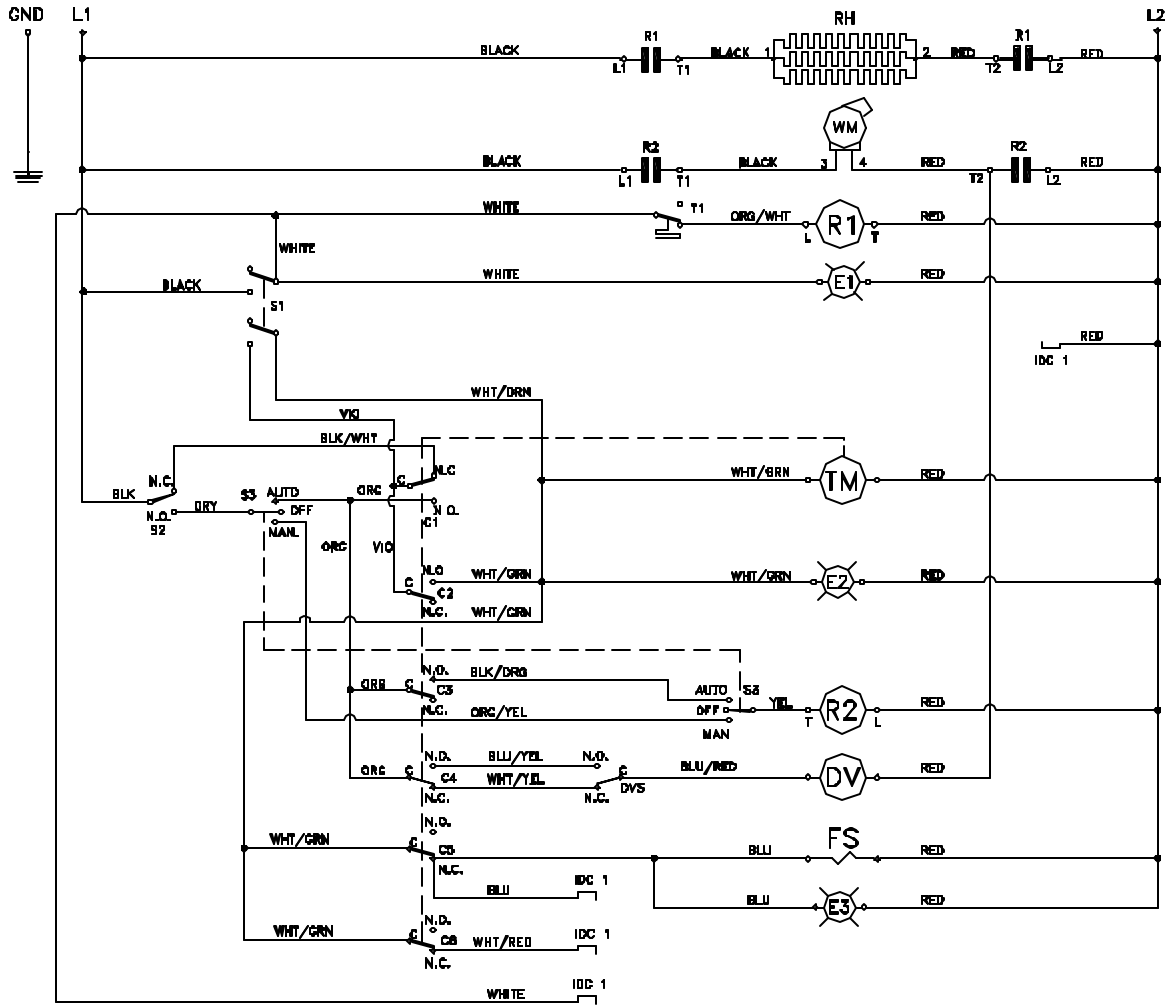
TIMING CHART



09905-131-42-77E

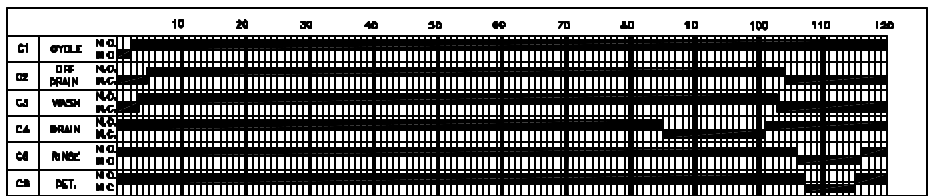
SECTION 7: ELECTRICAL SCHEMATICS

JP-24B/JP-24BF 208-230 VOLT - 50/60 HERTZ - SINGLE PHASE



- | | | | | | | | | | |
|--|-------------------------|--|-----------------------|--|-----|-------------------------|--|----|----------------------------------|
| | RINSE TANK HEATER | | POWER ON LIGHT | | C1 | CYCLE/RESET MICROSWITCH | | S1 | ON/FILL-OFF/DRAIN SWITCH |
| | WASH PUMP MOTOR | | CYCLE LIGHT | | C2 | OFF/DRAIN MICROSWITCH | | S2 | DOOR SWITCH |
| | TIMER MOTOR | | RINSE/FILL LIGHT | | C3 | WASH MICROSWITCH | | S3 | AUTO/OFF/MAN,WASH-D/DLINE SWITCH |
| | DRAIN VALVE | | RINSE HEATER CONTACTS | | C4 | DRAIN MICROSWITCH | | S | FILL SOLENOID |
| | WASH RELAY COIL | | WASH RELAY CONTACTS | | C5 | FILL MICROSWITCH | | TH | RINSE HEATER THERMOSTAT |
| | RINSE HEATER RELAY COIL | | | | DVS | DRAIN VALVE SWITCH | | | |

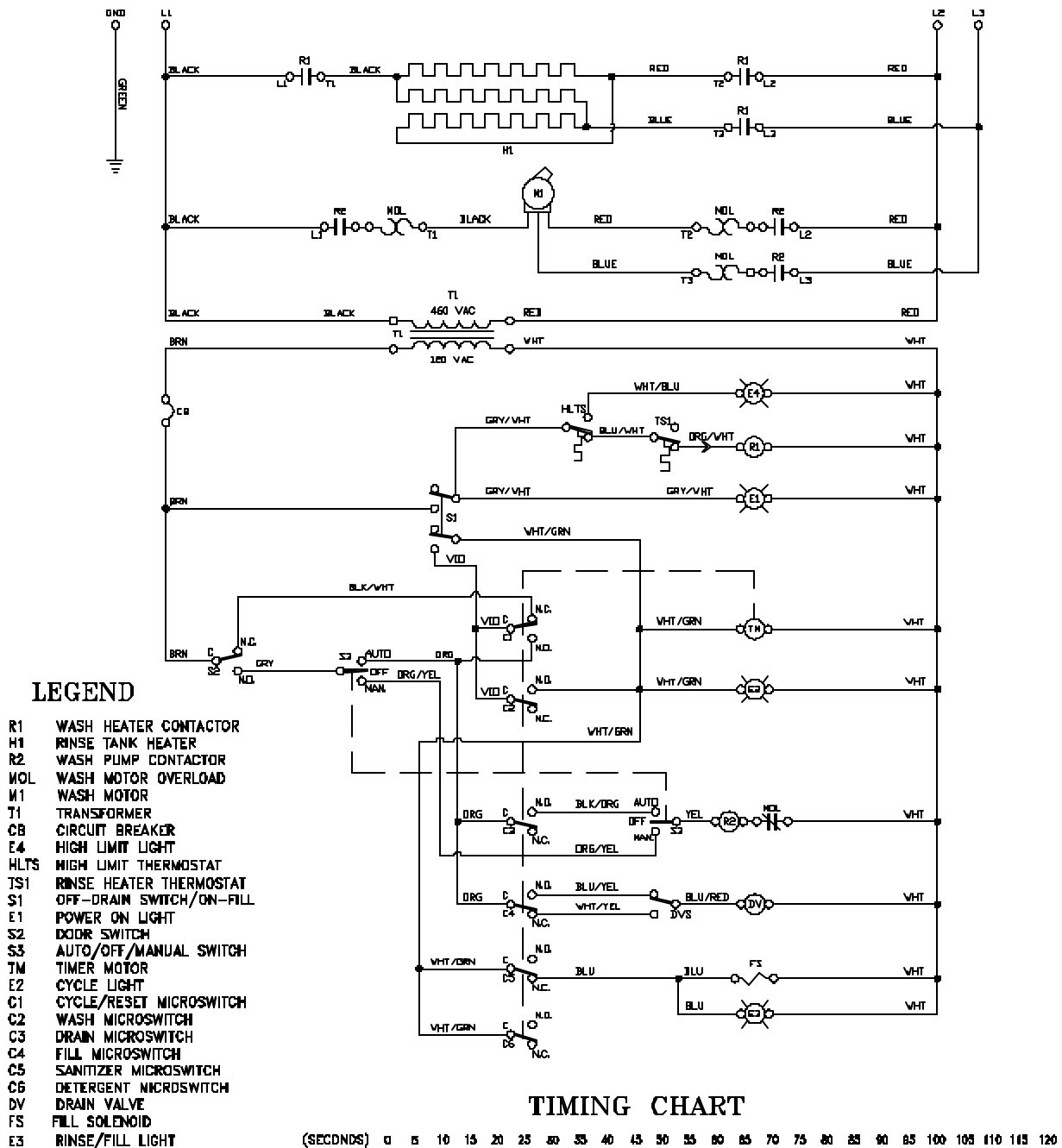
TIMING CHART



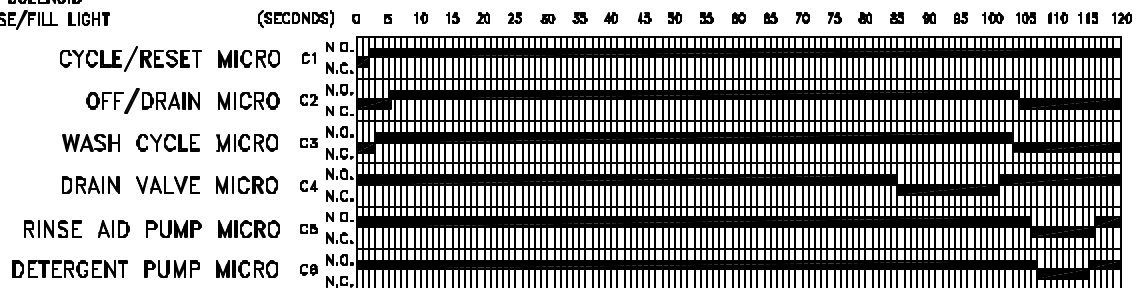
09905-131-42-75D

SECTION 7: ELECTRICAL SCHEMATICS

JP-24B/JP-24BF 460 VOLT - 60 HERTZ - THREE PHASE



TIMING CHART



9905-002-31-93

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