

ADAMATION 87 Adams Street P.O. Box 95037 Newton, MA 02495-0037 Tel.: (617) 244-7500

ARC SERIES

SLAP Series Operation, Maintenance And Repair Instructions PART NUMBER: 99-9000-030

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# MANUFACTURER'S DISHWASHING MACHINE WARRANTY AND LIMITATION OF LIABILITY

Adamation warrants each Adamation dishwashing machine to be free from defects in material and workmanship under "normal use and service" (which does not include normal wear of parts). Within a period of 12 months from date of installation of the dishwasher or eighteen (18) months from date of shipment from factory, whichever comes first, Adamation, Inc. will repair or replace any parts which in Adamation, Inc.'s sole judgment, are defective in material or workmanship and will furnish or pay for the necessary pre-approved labor to accomplish same.

Warranty part shipment and service can only be obtained by contacting the National Service Department, P.O. Box 95037, 87 Adams Street, Newton, MA 02495-0037 - Toll Free Number 1-800-225-3075. Adamation normally ships warranty parts via ground shipment from its factory in Newton, MA with Adamation assuming the ground shipment charges. If the customer elects to utilize an express method of shipping, then the customer shall pay the difference in cost between express shipping charges and ground shipping charges. Request for shipment must be before 2:30 P.M. E.S.T.

The Adamation Service "Hot Line" is available to discuss any service problem at 1-800-225-3075 from 8:30 A.M. to 5:00 P.M. E.S.T. After working hours, service is available by calling 617-244-7500, which will connect you with an answering service and "beeper" network.

Adamation shall have a reasonable time to make such repairs and/or replacements and all labor is to be performed during regular working hours. All overtime premiums will be billed to the customer. The warranty parts and labor required is an integral part of the sale of the system and as such will not apply if the system is not operated and maintained in strict accordance with the instructions in the proper Adamation manual.

At Adamation's sole discretion, any and/or all terms of the warranty can be cancelled if payment for this system has not been received within agreed upon terms.

This warranty specifically does not cover:

- A. Improper plumbing connections by others.
- B. Improper electrical connections by others.
- C. Malfunction caused by improper cleaning or from overloading.
- D. Damage caused by unreasonable neglect and carelessness in operation.
- E. Inadequate or excessive water and/or steam pressure.
- F. Failures due to deposits resulting from water conditions, detergents, or improper cleaning.
- G. Improper cleaning of drain valves, line strainers, pumps, screens, and all wash and/or rinse nozzles.
- H. Improper installation or malfunction of chemical dispensing equipment.

Certain specialized equipment not manufactured by Adamation is, at times, supplied by Adamation but is warranted and serviced only by the local representative of the particular manufacturer. The following or similar equipment falls into this category.

- 1. Electric Powered or gas fired Boosters
- 2. Disposers

Replacement parts are guaranteed for ninety days, or the remainder of the basic dishwasher guarantee, whichever is longer.

This warranty is applicable only for the initial place of installation. Any change of the original installation terminates this warranty.

Adamation's warranty obligation with respect to machines located outside of the United States or located in the State of Alaska and Hawaii are limited to the furnishing of replacement parts only.

This warranty is in lieu of all other warranties, express or implied and includes without limitation any implied warranty of merchantability or fitness for a particular purpose or any other obligation or liability on the part of Adamation whether in contract, strict liability, tort or otherwise and is governed by the laws of the Commonwealth of Massachusetts.

In no event will Adamation be liable for loss of use of facilities or other property and such things as-but not limited to-additional labor costs, loss of revenue or anticipated profits and other damages of any kind whether direct, indirect, incidental or consequential.

### SECTION 1 - INTRODUCTION

This instruction manual contains general information, installation, operation, principles of operation, trouble-shooting and maintenance information for Adamation SLAP Series dishwashing machines. A number of accessories are available for each SLAP Series dishwashing machine. These are described in this manual. Parts lists with accompanying exploded views of all replaceable parts of a SLAP Series dishwashing machine are included in Section 5.

### BASIC SLAP SERIES DISHWASHING MACHINE

The Basic SLAP series Adamation dishwashing machine consists of a straight rack conveyor machine with tabling attached to either end. Dishracks are automatically driven through the enclosed cabinet in which wash and rinse functions are performed on soiled dishware. An outline drawing of the basic SLAP Series dishwasher, identifying the major sections of the machine, is shown in Figure 1-1.

The manner in which this machine operates to perform its dishwashing function is described briefly below. This description applies only to the basic SLAP Series dishwashing machine. Various modifications and options which convert the basic SLAP Series machine to other (SLAP 66, SLAP 80, SLAP 86, and SLAP 100) models are described throughout this manual.

Soiled tablewares are placed in the dishracks at the loading station. Heavy food soil (garbage) must be scraped from the tableware before they enter the machine. The rack conveyor carries the loaded dishracks into and through the cabinet where the following functions are performed:

### STEAM EXHAUST VENTS (Optional)

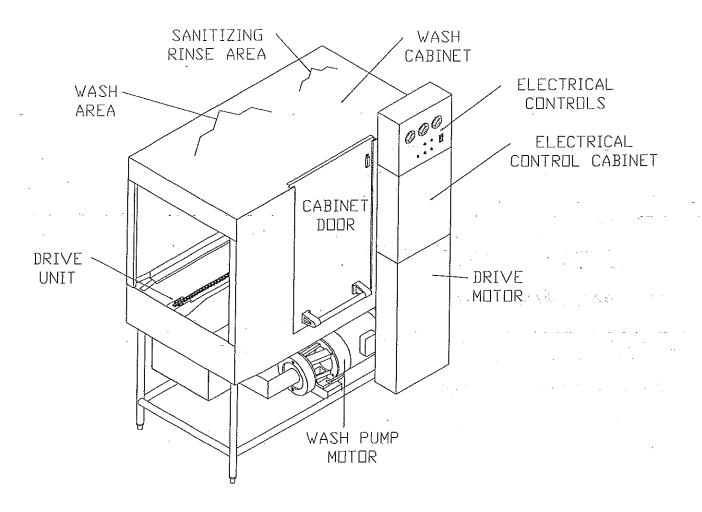
Optional steam exhaust vents at the entrance and exit ends of the SLAP Series dishwasher cabinet are adjusted so as to prevent steam from escaping the cabinet into the dishwashing area.

# PREWASH HOOD AND SINK (Optional 22" and 36")

Tablewares are sprayed with hot water (overflowed from wash and rinse tanks) at 110 to 140°F in this optional prewash stage, prior to entering the power wash cabinet. The water temperature is at a level, which will remove the remaining surface food soil and liquids from the tableware surface without baking the soil onto the tableware. One perforated deep-well basket retains all larger pieces of food soil and garbage. The prewash water drains through the perforated basket into a prewash sink where it is then recirculated.

### POWER WASH CABINET

A dishrack with tablewares passing through the power wash cabinet is subjected to a high volume spray of 160 to 165°F (150 to 155°F for SLAP 64) water, with detergent added. The wash water is retained in a heated tank beneath the cabinet and recirculated. A one-gallon per minute make-up water supply freshens the cleaning water. Here, all remaining food soil, grease and soluble material are removed from the dishware.



### POWER RINSE (SLAP 64 ONLY)

Same as power wash, except water temperature is 165°F and no detergent is added.

### FINAL (SANITIZING) RINSE

The dishrack now passes between spray arms, which subjects the surfaces of the tableware to 180 to 195°F water at a flow pressure of 20 psi. Provisions are made for the installation of a rinse additive injector if the user so desires.

The high temperature of the final rinse water performs the final cleaning function, sanitizes the tableware and preheats it for rapid air-drying. The dishrack emerges from the final rinse cabinet through a spray curtain. If a rinse additive is used in the final rinse water, dishes will dry in room atmosphere in about 20 seconds; without a rinse additive it may require as long as one minute.

### NOTE

This is not the only, or necessarily the primary, reason for using a rinse additive. Consult a rinse additive vendor for the full advantages.

# RACK DIRECTION

In Figure 1-1, the rack conveyor is shown operating in a left to right direction (when viewed from above). The SLAP Series machines can be supplied with either left to right or right to left rack conveyor. In most cases, the information contained in this manual applies to either. If differences are significant, an explanation will be included. In parts lists and exploded views, where alternate parts are required for left to right or right to left directions, these are so identified and different part numbers are assigned.

### CABINET DOOR

The SLAP Series dishwashing machine is supplied with a cabinet door, which opens vertically, as shown in Figure 1-1. The door is used to access the internal scrap baskets, final rinse pan, wash tubes, and curtains.

### DIMENSIONS

The SLAP Series dishwashing machine cabinet is designed to accept a normal sized serving tray (14"  $\times$  18") placed vertically in the dishrack. The machine opening is 24" high  $\times$  22" wide and will accept a standard 20"  $\times$  20" dish rack.

### UTILITY REQUIREMENTS

When the dishwashing machine was ordered, the buyer was provided with an Adamation survey report describing the exact utility requirements (electricity, rinse hot water, steam, wash tank hot water, etc.). Before installation, all utility ratings must be checked and verified. The machine can be assembled and installed in a very short time (if necessary), but it cannot be operated unless the incoming utilities meet the requirements of the machine and of the National Sanitation Foundation.

# DAMAGE INSPECTION

Immediately upon arrival, all shipping containers received should be checked against the bill of lading. Report any missing containers to the carrier and also to the Adamation National Service Department (immediately by phone). At this time, all containers received should also be inspected visually for external evidence of damage in transit. If any container shows such evidence, notify the carrier and have his representative present when the container is opened. Transit damage claims must be made to the carrier, not to Adamation. Notify the Adamation National Service Department of any damaged equipment received.

If any of the cartons which contain parts, arrive damaged to the extent that parts may be missing, immediately request a complete listing of all parts shipped in that container from the Adamation National Service Department. Notify Adamation and the carrier of any missing parts.

### UNPACKING

Remove the dishwasher from the shipping crate, being careful not to damage any external parts or surfaces. When lifting the machine with the use of a hi lift or a fork lift, be sure to protect drain lines and valves by using blocking between the machine frame and the lifting forks.

Remove the shipping box inside the wash cabinet. Unpack the box and remove the square wash tubes and curtains. Place the wash tubes in the upper and lower manifolds. Wash tubes lock into position by turning tube until the locking pin on the wash tube aligns with the locking tab of the socket on the upper and lower manifold. Install the curtains into the SLAP Series machine as indicated by the curtain labels on the exterior of the dishwasher.

# INSTALLATION

1. Set the machine in place in the dishwashing area. Adjust the bullet feet of the machine until the entrance and exit heights are 34" above finished floor. Place a level across the top of the machine (from left to right). Adjust the bullet feet of the machine up or down until the machine is level. Place a level across the top of the machine (from front to back). Adjust the bullet feet of the machine up or down until the machine is level. After all adjustments are made, make sure that the entrance and exit heights of the machine remain at 34" above finished floor.

### INSTALLATION (cont.)

2. Install dish tables into entrance and exit of machine. Locate and drill holes for mounting bolts between dish tables and SLAP machine. Note all contact surfaces of the dish tables to SLAP machine (This will vary with table design). Remove dish tables from the entrance and exit of the SLAP machine and apply silicone sealer to all contact surfaces. Reinstall dish tables into the entrance and exit of SLAP machine and secure dish tables using mounting bolts. Apply silicone sealer to all outside contact points of the dish tables and SLAP machine to prevent any chance of water leaks. Dish tables should be pitched slightly towards SLAP machine to allow excess water to flow into machine.

### ELECTRIAL CONNECTIONS

Incoming electrical power supply to the SLAP Series dishwasher <u>MUST</u> comply with all local electrical codes and have a fused power disconnect switch (supply by others) or similar protective device installed. This disconnect switch should be at an accessible location in the vicinity of the dishwasher and <u>MUST</u> be factored & sized according to the proper amperage rating per the data plate, located on the front of the SLAP Series dishwasher.

- 1. Remove the center cover of the SLAP Series electrical control panel to access all of the electrical components. A 1-3/8" diameter hole is provided for the incoming power supply line on the bottom of the electrical control panel.
- Connect the hot leads of the power supply line to L1, L2, & L3 of the heater line contactor (left contactor) and connect the ground wire to the grounding lug located at the bottom left of the electrical control panel. (See Figure 5-9)
- ** SPECIAL NOTE: Before putting the dishwasher in operation, check the direction of rotation of the pump motor. To do this, check the end of the motor shaft that projects through the motor housing. An arrow label shows the correct shaft rotation. If the pump is rotating in the wrong rotation, first turn off the building's power source to the machine and then interchange any two of the three L1, L2, & L3 incoming power connections to the heater line contactor.

## PLUMBING CONNECTIONS

All final plumbing connections to the SLAP Series dishwasher  $\underline{\text{MUST}}$  comply with local plumbing codes.

### 1. HOT WATER

The SLAP Series machine requires one hot water connection with the following criteria:

- a. Flow pressure: 20 psig
- b. Flow rate: 4.5 GPM
- c. Water temperature: 180 to 195°F

A manual shut off valve (supplied by others) must be added to the supply hot water line at an accessible location in the vicinity of the dishwasher.

# PLUMBING CONNECTIONS (cont.)

#### 2. DRAIN

The SLAP Series machine requires two drain connections with the following criteria:

- a. Main drain valve 1 ½" diameter copper or equivalent
- b. Overflow drain 2" diameter copper or equivalent
- SPECIAL NOTE: If soldering is required to the main drain valve, remove the drain tailpiece from the drain valve body first to eliminate the chance of heat damage to the drain.

#### STEAM (If required) 3.

The SLAP Series machine requires one steam supply and one condensate return connections with the following criteria:

- a. Steam supply %" diameter IPS (F)
- b. Condensate return ¾" diameter IPS (F)
- c. Maximum/minimum flow pressure 15/5 psi
- d. Maximum steam consumption 2 Bhp (1 Bhp = Approx. 30 lbs per hour)

# INSTALLATION CHECK OUT

After the SLAP dishwashing machine is completely installed and all required . ~. service connections are made, the machine must be inspected to make sure that all work has been performed properly.

- Machine is leveled
- Dish tables are installed correctly
- All final plumbing connections are correct
- All final electrical connections are correct
- Soap dispenser is installed*

*NOTE: Soap dispensing and rinse additive equipment are not supplied with your SLAP Series dishwasher, please contact your local chemical supplier to install and maintain this equipment.

### INITIAL START UP

The SLAP Series dishwashing machine has been thoroughly tested and all timing circuits have been adjusted at the factory.

- Make sure the machine power switch is in the "OFF" position.
- Turn "ON" the main power supply disconnect switch to the machine.
- Close main drain valve under machine.
- Make sure that the final rinse pan is installed under the final rinse spray pipes.
- Make sure that the three (3) scrap baskets are installed in the wash cabinet.
- Make sure that the six (6) square wash tubes are installed properly in the upper and lower manifolds.
- Make sure that all curtains are located and installed correctly in the machine.
- Close the wash cabinet door. 8. NOTE: The SLAP Series machine is equipped with a door interlock switch. When the cabinet access door is open, the control circuit is interrupted and the machine will not operate.

### INITIAL START UP (cont.)

- Turn "ON" the main water feed to the machine.
- 10. Switch the machine to "ON"
  - a. The machine pilot light illuminates.
  - b. The automatic fill solenoid will open and begin filling the machine. NOTE: Check all plumbing for leaks during the automatic fill cycle.
  - c. When the automatic fill solenoid closes (turns "OFF"), open the wash cabinet door and remove one scrap basket. The water level should be approximately half an inch below the installed scrap baskets. If water level is too low, refer to SECTION 4, TROUBLESHOOTING, for automatic fill timer adjustment.
  - d. When power wash temperature reaches 160 to 165°F, the machine is ready for use.
- 11. Start the SLAP Series dishwashing machine by pushing a dishrack into the machine entrance. The rack will activate the auto start lever and turn "ON" the drive system and the wash pump system. The final rinse is equipped with a delay "ON" circuit, so it will activate when the dishrack enters the final
  - a. While the machine is running, check the following:
    - Motor rotation Motors should operate in the direction/rotation as indicated on their respective arrow labels.
    - Wash tank temperature Temperature should be 160 to 165°F (150 to 155°F for SLAP 64) while machine is operating.
    - Rinse tank temperature (SLAP 64) Temperature should be 160 to 165°F while machine is operating.
    - Final rinse temperature Temperature should be 180 to 195°F while machine is operating.
    - Final rinse pressure Gauge pressure should be set at 20 psi while machine is operating.
  - b. The drive and pump will stop automatically when the rack exits the SLAP Series machine.

Heating system is energized as long as the machine is filled with water and the machine switch is in "ON" position.

### DAILY START UP

- Close main drain valve.
- Install final rinse pan at exit of machine.
- Install scrap baskets into wash/rinse cabinet.
- Close wash/rinse cabinet doors.
- Turn main power supply disconnect switch to "ON" position.
- 5. 6. 7. Turn machine power switch to "ON" position.
- Machine will automatically fill tank(s) with water.
- When machine stops filling, push dishrack into machine entrance. Machine will automatically start when dishrack enters machine.
- If machine does not start, make sure water supply valve to machine is open 9. and main power supply disconnect switch is "ON". Repeat steps #6 through #8.
- Report ALL problems to your shift supervisor and/or Adamation Service at 10. 1-800-225-3075.

### SHUT DOWN

- Turn machine power switch to "OFF" position.
- Turn main power supply disconnect switch to "OFF" position.
- Open main drain valve.
- Open wash/rinse cabinet doors.

### SHUT DOWN (cont.)

- 5. Remove scrap baskets from wash/rinse cabinet and clean thoroughly. Place scrap baskets on table to dry.
- 6. Remove final rinse pan at exit of machine and clean pan thoroughly. Place pan on table to dry.
- 7. Remove ALL square wash tubes from machine. Remove end caps and clean tubes thoroughly.
- 8. Replace end caps on ALL square wash tubes and reinstall wash tubes into machine.
- 9. Remove ALL curtains from machine and wash thoroughly. Replace ALL curtains in their respective places.
- 10. Wash out and wipe down INSIDE and OUTSIDE of wash/rinse cabinet(s).

NOTE: To keep your SLAP Series dishwasher working at optimum performance, scrap baskets should be emptied after each meal or peak period. Also, on machines without a prewash unit, tablewares should be prescrapped and pre-washed at an external scrapping sink prior to running them through the dishwasher.

### PREVENTIVE MAINTENANCE

Proper cleaning of your SLAP Series dishwashing machine is the best preventive maintenance that will keep it operating properly and trouble free for many years. The following points should also be addressed and be included in your preventive maintenance routine.

- Periodic close inspection of the machine interior should be made to access, if any, build up (accumulation) of water scale and/or food soil. Water conditions and pre-washing techniques will determine how often special cleaning of your machine is required. If special cleaning is necessary:
  - a. Remove all curtains, scrap baskets/tray, and wash tubes, so that all hard to reach areas are accessible.
  - b. Using a scrub brush and a de-liming solution (or hot soapy water), scour all interior surfaces of the SLAP Series dishwashing machine, including the heating element. Using the same cleaning solution, scour all curtains, scrap baskets/tray, and wash tubes.
  - c. Rinse all interior surfaces and components with clean water before using your machine again.
- 2. Periodic inspection of water line strainers should be performed to protect solenoid valves from water scale & sediment. Loosen the nut located at the bottom of the water line strainer and remove the sediment screen inside. Flush this screen with clean water and replace into water line strainer.

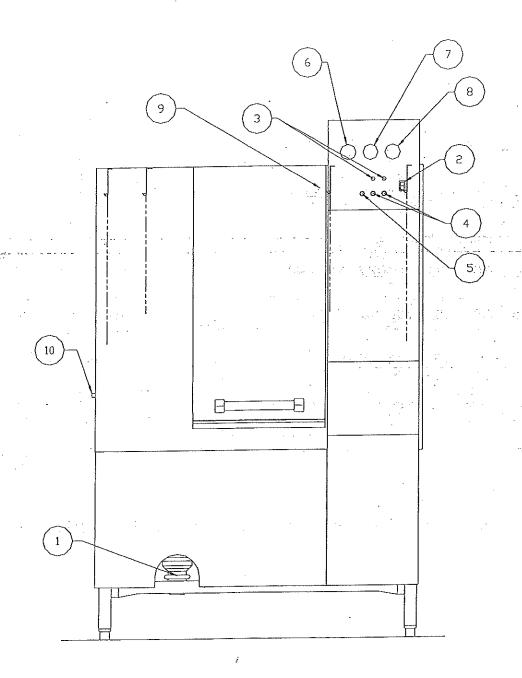
  NOTE: Make sure that the main water feed valve is closed before attempting this procedure.
- 3. Wash/rinse pump(s) and drive motors are fitted with sealed ball bearings. It is not necessary to lubricate these motors. However, the exterior surfaces of these motors should be kept as clean as possible. Periodically wipe down wash/rinse pump(s) and drive motor to remove any accumulating dust.
- ** WARNING: DO NOT SPRAY WATER ANYWHERE NEAR THESE MOTORS.

# SECTION 3 - OPERATION

# OPERATING CONTROLS AND INDICATORS

All of the controls and indicators required to start and operate the dishwashing machine are listed below, together with a short functional description of each. Figure 3-1 shows the physical location of each control and indicator. All electrical controls are plainly marked either on the machine or on the control itself.

- 1. WASH TANK DRAIN VALVE This is used to drain the wash tank for cleaning, shutdown, and maintenance.
- 2. MACHINE POWER SWITCH (ON/OFF) This is the main operating switch of the dishwashing machine. In the "OFF" position, all pumps, drive motors, heating units, and water circuits are stopped. In the "ON" position, the machine will automatically fill with water. It will only start when the proper water level is attained and a dishrack is inserted into the machine entrance.
- 3. PILOT LIGHTS The "ORANGE" pilot light illuminates when the main building power supply to dishwashing machine is "ON". The "RED" pilot light illuminates when the dishwashing machine power switch is "ON".
- 4. CONTROL CIRCUIT OVERLOAD BREAKERS These provide short circuit protection for both the high voltage and low voltage components in the "CONTROL CIRCUIT".
- 5. TRANSFORMER FUSE (1/8 AMP) This provides overload protection for the control circuit transformer.
- 6. POWER WASH/RINSE TEMPERATURE GAUGE(S) This displays the temperature of the water in the wash tank. This water is then recirculated through the upper and lower wash arms to clean the washables.
- 7. FINAL RINSE TEMPERATURE GAUGE This displays the temperature of the final rinse water just prior to entering the spray arms. The gauge only indicates when the final rinse water is flowing.
- 8. FINAL RINSE PRESSURE GAUGE This displays the flow pressure of the final rinse water just prior to entering the spray arms. This gauge only indicates when the final rinse water is flowing.
- 9. DOOR INTERLOCK SWITCH This removes all low voltage from the control circuit. When a cabinet door is open, all pumps, drive motors, heating units, and water circuits are turned "OFF".
  - NOTE: This switch is not intended to replace turning "OFF" the main power supply disconnect to dishwashing machine during shutdown or maintenance procedures.
- 10. AUTO START SWITCH This initiates the wash and rinse cycles when a dishrack is inserted into the machine entrance.
- 11. MAIN POWER SUPPLY DISCONNECT SWITCH TO DISHWASHING MACHINE (NOT SHOWN) This device (supplied by others) provides a power disconnect and short circuit protection for the incoming 3 phase electrical service. This device should be utilized in accordance with the START UP and SHUT DOWN procedures from this manual. This device is not supplied with your SLAP Series dishwasher. It should be installed in accordance with all electrical codes by a licensed electrician.



OPERATING CONTROLS AND INDICATORS FIGURE 3-1

### SECTION 4 - TROUBLE SHOOTING

### TROUBLESHOOTING GUIDE

The information in this section is intended to assist the machine operator and/or qualified service personnel in locating and resolving minor problems. If a problem cannot be readily corrected, the machine operator or manager should contact Adamation Service or the nearest authorized service representative. Before following any of the procedures given in this section, the machine operator should be thoroughly familiar with the start up and shut down procedures for their SLAP Series dishwashing machine.

** WARNING: Before any service or inspection, turn main power supply disconnect switch for the dishwasher to "OFF" position.

PROBLEM	LOOK FOR	CORRECTIONS
Machine will not start	1. Main power "OFF" 2. Door open	1. Turn "ON" main power 2. All doors must be closed. Door interlock switches prevent the operation of the
· · · · · · · · · · · · · · · · · · ·	3. Table limit switch (optional)	machine. 3. Table limit switch is located at the end of the clean dish area; Remove any rack(s) from
	4. Transformer fuse blown	this area. 4. Replace the 1/8 Amp fuse located on the front of the electric panel.
Machine will not fill	<ol> <li>Main water "OFF"</li> <li>Main power "OFF"</li> <li>Door open</li> </ol>	<ol> <li>Turn "ON" main water</li> <li>Turn "ON" main power</li> <li>All doors must be closed. Door interlock switches prevent the operation of the machine.</li> </ol>
•	4. Table limit switch (optional)	4. Table limit switch is located at the end of the clean dish area; Remove any rack(s) from this area.
	5. Transformer fuse blown	5. Replace the 1/8 Amp fuse located on the front of the electric panel.
		1 0 1 1
Auto fill will not stop	<ol> <li>Drain valve open</li> <li>Float switch stuck</li> </ol>	<ol> <li>Close drain valve</li> <li>Make sure float switch         moves up and down         freely. Remove any         debris from around</li> </ol>
Strategy and a supplementary		float.

# TROUBLESHOOTING GUIDE (cont.)

Drive and pump will not start 1. Main power "OFF" 1. Turn "ON" main to 2. Machine power "OFF" 2. Turn on machine Machine will ru through auto fi	power.
and then be rea operation.	
3. Auto start switch is 3. Auto start swit stuck located at the of the machine activated by en rack(s). This s must move freel	entrance and is tering witch
4. Door open 4. All doors must closed. Door in switches preven operation of th machine.	terlock t the
5. Table limit switch 5. Table limit swi (optional) located at the the clean dish	end of area;
Remove any rack	(s) from
this area.  6. Blown 7 Amp fuse(s) 6. Both the pump m and drive motor protected by (3	are
fuses, located the electrical	inside
	•
Pumps start, but drive 1. Jammed drive chain 1. Inspect the int drive chain for objects, remove	foreign
required.  2. Drive motor overload  2. This is caused in the drive characters above.	
Drive and pump will not 1. Auto start switch is 1. Auto start switch	ch is
stop  stuck  located at the of the machine activated by enrack(s). This sometimes above.	entrance and is tering witch

# TROUBLESHOOTING GUIDE (cont.)

PROBLEM	LOOK FOR	CORRECTIONS
Water overflows out from machine	<ol> <li>Scrap baskets are clogged with food soil</li> </ol>	1. Clean scrap baskets according to SHUT DOWN procedure
	2. Overflow drain blocked	2. Remove final rinse pan and check for blockage in overflow drain
	<ol><li>Washing buss boxes or sheet pans flat on dish rack</li></ol>	<ol> <li>These items should be angled toward the rear of machine</li> </ol>
Washables are not cleaned	1. Check soap dispenser	1. Check and fill soap
properly	2. Wash tubes clogged	dispenser  2. Clean wash tubes according to SHUT DOWN procedure
	3. Rinse nozzles clogged	3. Clean out blocked nozzles
er e ser e wege († 1905)	4. Final rinse temperature low	
	5. Curtains not installed properly	5. Install all curtains according to specified requirements

The problems indicated previously (above) are considered general machine maintenance and are not covered under Adamation Service Warranty. Please rule out these problems and corrections before calling your authorized service representative.

The following adjustments are meant to be performed by authorized Adamation service representatives:

# TROUBLESHOOTING GUIDE - FOR AUTHORIZED ADAMATION SERVICE REPRESENTATIVES

	CORRECTIONS	
Machine starts, then 1. Low water level in 1. Increase sets stops and auto fill tanks automatic turns "ON" (Plug in)		

Final rinse doesn't turn "ON" or turns "ON" too late

- 1. Incorrect final rinse 1. Decrease set time on timer setting
  - final rinse timer

# TROUBLESHOOTING GUIDE - FOR AUTHORIZED ADAMATION SERVICE REPRESENTATIVES (cont.)

PROBLEM	LOOK FOR	CORRECTIONS
Machine turns "OFF" before rack completely exits machine	<ol> <li>Incorrect machine timer setting</li> <li>Chain drive clutch slipping</li> </ol>	<ol> <li>Increase set time on machine timer</li> <li>Adjust tension on chain drive clutch *See CLUTCH ADJUSTMENT*</li> </ol>
Tank temperature too low	1. Incorrect thermostat setting	1. Adjust thermostat for electric heat. Thermostat is located inside heater element enclosure
Drive chain stops when engaged onto dishrack	1. Chain drive clutch slipping	1. Adjust tension on chain drive clutch

### CLUTCH ADJUSTMENT

The chain drive clutch installed on this machine is a friction disc type clutch. It has been factory set to slip when the drive chain or the dish racks encounter any obstacles. This unit should only be adjusted by factory trained or Adamation authorized service representatives. Improper adjustment could cause serious damage to your dishwasher, dishracks, and/or injury to the operators. To adjust the chain drive clutch:

*See CLUTCH ADJUSTMENT*

- 1. Remove the lower section of the electrical control panel cover. This will allow access to the chain drive motor and clutch.
- 2. Loosen the set screw on the adjustment nut of the drive chain clutch.
- 3. Place three (3) full racks of dishes into the machine.
- 4. When the machine starts, it should pull these racks through the machine. By applying pressure to the exiting rack of the machine, the drive chain clutch should slip.
- 5. If the drive chain clutch doesn't slip, loosen the adjusting nut on the end of the clutch until it begins to slip.
- 6. Repeat step #4 to make sure drive chain clutch is able to pull three (3) racks through the machine.
- 7. Tighten the set screw on the adjustment nut to secure drive clutch settings.
- 8. Re-assemble the lower section of the electrical control panel cover.

### SECTION 5 - ILLUSTRATED PARTS LIST

### GENERAL

The following pages contain technical drawings of the parts incorporated into your SLAP Series dishwashing machine. Each drawing contains a parts breakdown list with associated Adamation part numbers. A description of each part and the quantity of each part necessary.

Orders for replacement parts should be addressed to:

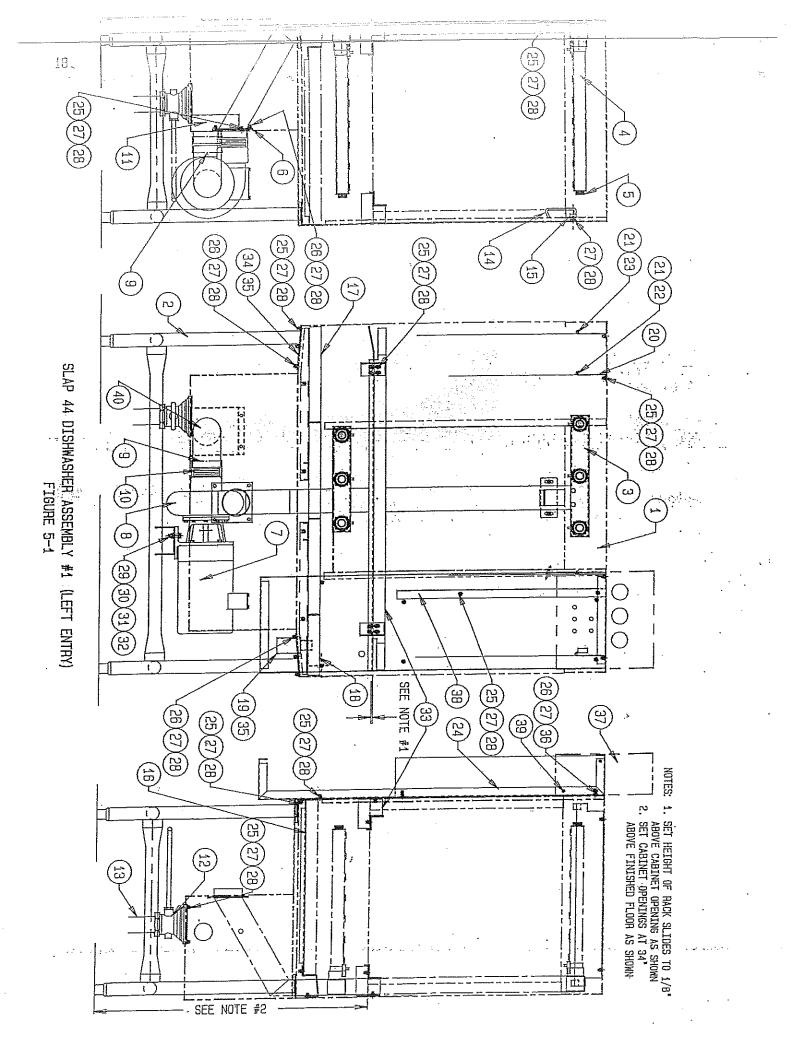


PHONE NUMBERS: 722-7900

FAX NUMBER:

323-726-4700

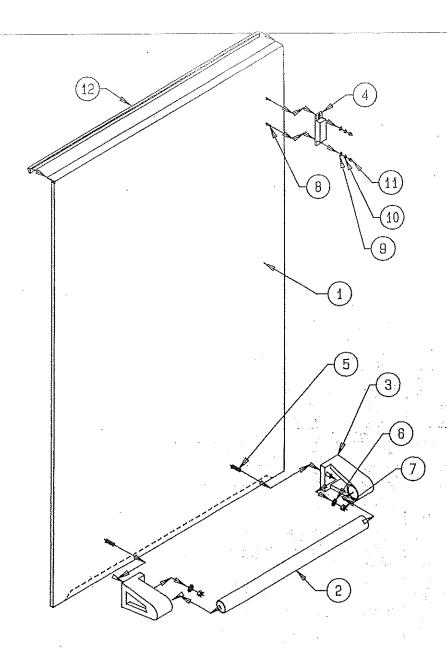
The order should contain the Adamation part number (s), the parts description (s), the quantity required and the model and serial number (MUST BE INCLUDED WITH ORDER) of the machine (from the machine nameplate) for which the part (s) are/is being ordered. Note that "NPN" means that no Adamation part number as been assigned.



INDEX NO.	PART NUMBER	PARTS LISTSLAP 44 DISHWASHER ASSEMBLY #1 (LEFT ENTRY)	ONTY PER ASSMLY
1 2 3 4 5 6 7 8 9 10 11 2 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30 31 32 33 34 35 36 37 38 39 40	N.P.N. 42-0665-300 41-0621-400 N.P.N. 11-0619-400 22-0126-407 11-0117-800 41-0137-800 42-0664-700 42-0664-500 41-0137-900 11-0421-900 70-1150-005 70-1150-008 N.P.N. 60-7500-002 60-7500-003 10-1800-420 10-1903-420 10-1903-420 10-1801-518 10-1801-518 10-1900-518	WASH ARM, HIGH PRESSURE, S/S CAP, WASH ARM, 3/4" NPT, PLATED GASKET, WASH PUMP/RISER, 5" X 5" MOTOR, WEG WASH PUMP, 2 H.P. PUMP, PRICE RC300 COUPLING, 3" NEOPRENE PIPE NIPPLE, 3" MODIFIED PUMP INTAKE, SLAP 44 MACHINE PUMP DRAIN VALVE, ROTARY, PVC TAIL PIECE, DRAIN HOOK, DOOR BRACKET, DOOR HOOK SUPPORT, SCRAP BASKET, SLAP 44 BASKETS, SCRAP, SLAP 44 PAN, FINAL RINSE, SLAP 44 TUBE, OVERFLOW, SLAP 44 ROD, CURTAIN, SLAP 44 ROD, CURTAIN, 24-5/8" LONG CURTAIN, 16" LONG CURTAIN, 20" LONG BODY, ELECTRIC CABINET (REF. DWG#D2E-1-2027/B) STUD, 1/4-20 X 1/2" LONG, S/S STUD, 1/4-20 X 3/4" LONG, S/S NUT, ELASTIC STOP, 1/4-20, S/S	111661111213114422152606242211241161

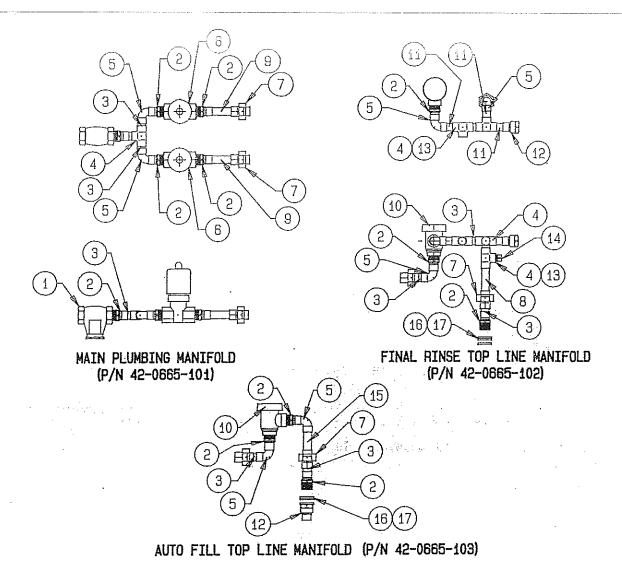
INDEX NO.	PART NUMBER	PARTS LISTSLAP 44 DISHWASHER ASSEMBLY #2 (LEFT ENTRY)	QNTY PER ASSMLY
17 18 19	41-0220-700 N.P.N. N.P.N. N.P.N. N.P.N. 70-0900-035	SHAFT, IDLER, S/S, SLAP 44 (REF. DWG#D2M-2-472/A) BEARING, 1/2" BLOCK, 2-BOLT, NYLON COLLAR, 1/2" SHAFT, NYLON SPROCKET, 1/2" BORE, #50B12 KEY, #7 WOODRUFF BOLT, HEX HEAD, 3/8-16 X 2-1/2" LONG, S/S NUT, HEX, 3/8-16, S/S WASHER, FLAT, 3/8", S/S WASHER, LOCK, 3/8", S/S ** LINK, CONNECTING, #50-DD3 ** CHAIN, #50 PEER, 13 PITCHES ** PUSHER, RACK, 12 GA. S/S MOTOR, BISON, 220V, 12RPM, 1PH CLUTCH, HERSEY FRICTION SPROCKET, FOR HERSEY CLUTCH, #35A22 BRACKET, MOTOR, S/S, SLAP 44 (REF. DWG#D1M-2-206) CHAIN, #35 LINK, #35 CHAIN MASTER SPROCKET, DRIVE, #35B26 SCREW, PAN HEAD, #10/32 X 5/8" LONG, S/S	1 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1

^{*} NOTE: FOR DETAIL ASSEMBLY OF CHAIN DOG AND DRIVE CHAIN, PLEASE REFER TO FIGURE 5-6.



SLAP 44 DISHWASHER CABINET DOOR ASSEMBLY FIGURE 5-3

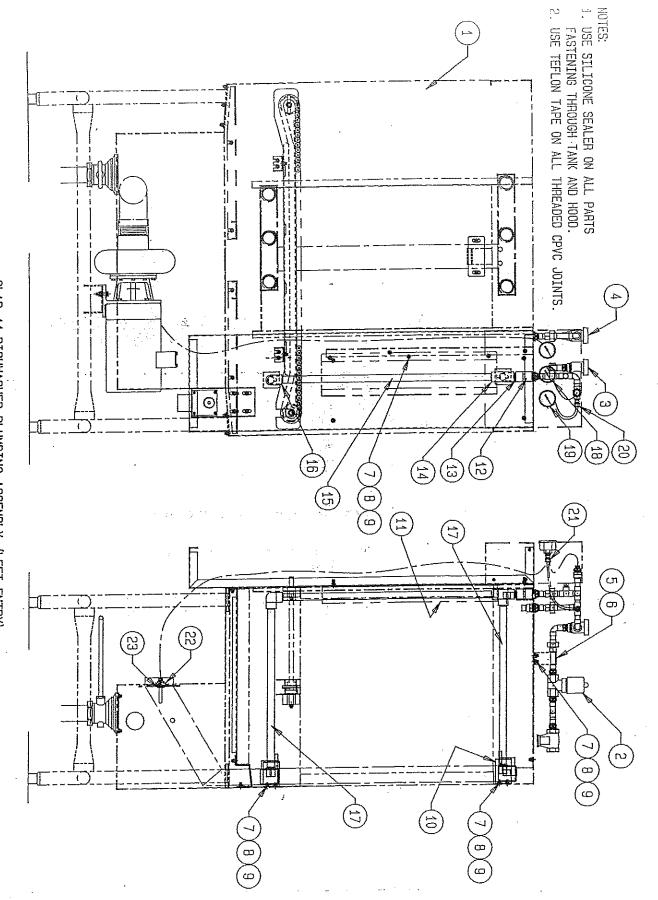
INDEX NO.	PART NUMBER	PARTS LISTSLAP 44 DISHWASHER CABINET DOOR ASSEMBLY	GNTY PER ASSMLY
1 2 3 4 5 6 7 8 9 10 11 12	42-0138-700 N.P.N. N.P.N. 55-7400-1 <b>%</b> 0 60-7500-003 10-1800-420 10-1903-420 N.P.N. 10-1800-420 10-1801-832 10-1906-832 65-7109-016		1 1 2 1 2 2 2 2 2 2 2 2 1



SLAP 44 DISHWASHER PLUMBING MANIFOLD ASSEMBLIES FIGURE 5-4

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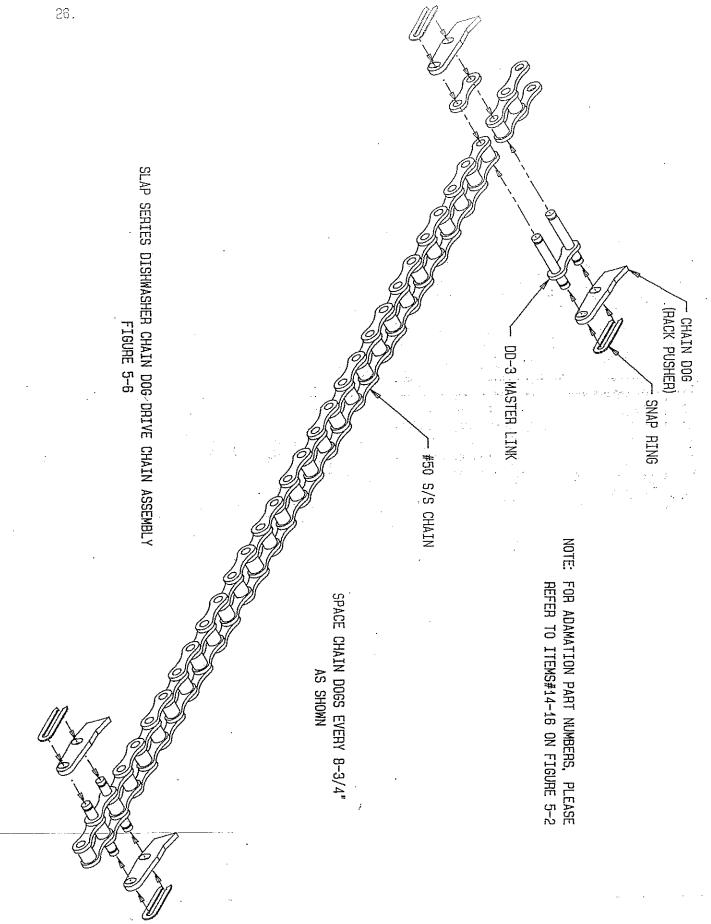
INDEX NO.	PART NUMBER	PARTS LISTSLAP 44 PLUMBING MANIFOLD ASSEMBLIES	QNTY PER ASSMLY
1 2	75-7500-521 75-0026-016	ADAPTER, WRT, 1/2" C X M	1 11 6
3	65-4922-004 75-7602-070		4
5	75-1702-004		7
6	N.P.N.	SOLENOID, 1/2" HAYES, 240V	2
7	75-8202-004		4 .
. 8	65-4922-004		1 .
9	65-4922-004		2 2 3
10	75-7550-115		2
11	65-4922-004		3
12	75-0026-015	ADAPTER, WRT, 1/2" C X F	2
13	75-0751-502	FLUSH BUSHING, 1/2" C X 1/4" F	2
14	75-6201-002	PLUG, SQUARE HEAD, 1/2" NPT	1
15	65-4922-004	TUBING, COPPER, 1/2° X 2-1/2" LONG	1
16	19-1500-201	WASHER, 7/8" ID X 1-1/4" OD	4
17	19-4200-500	GASKET, 7/8" ID X 1-1/4" OD	2

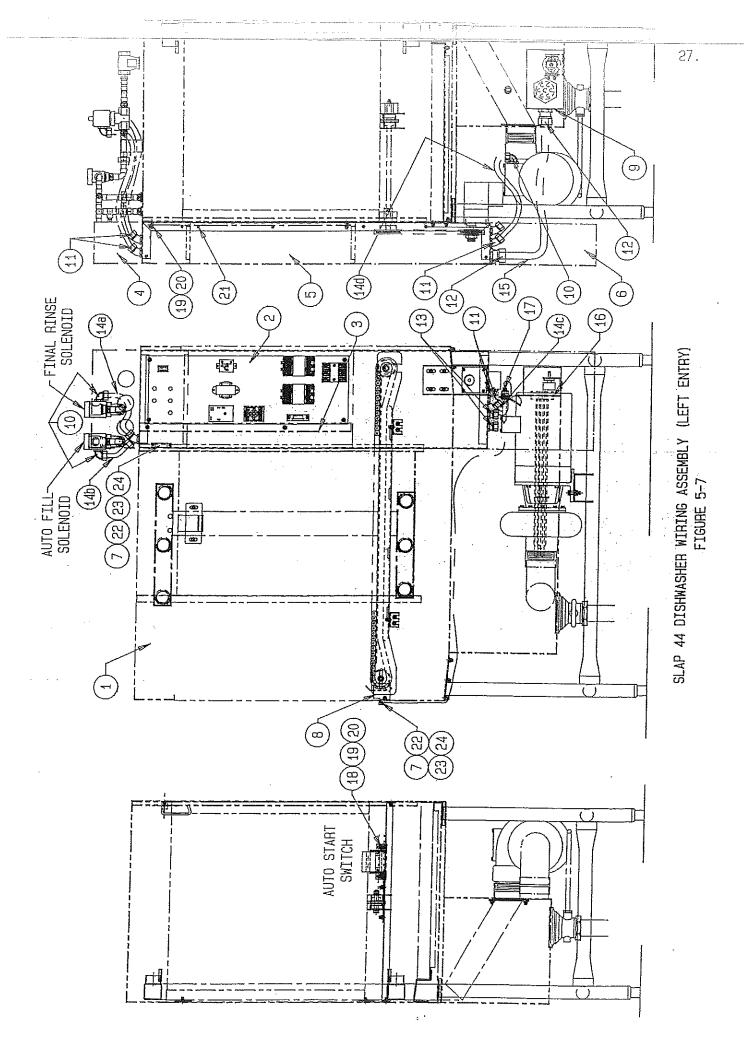


SLAP 44 DISHWASHER PLUMBING ASSEMBLY (LEFT ENTRY) FIGURE 5-5

PART NUMBER	DADTS I TET	ENTOVY	ONTV
I AIII NOMECII	LANIS CIOI SCAL 44 LCOMBING MSSCHOLI (ECLI	EMIKT	QNTY PER
		-	ASSMLY
		-	AGGILT
		3	1
		i.	1
		₡.	1
		•	1
			1 2 2 11
			2
			11
			11
			5
		-	1
			1
			1
		·	1
F	FIRDH 4/0" F V F V ON POVO		1
	DIDE FINAL DINCE CODAY		1 2 2
	THERMOMETER MILLINKO		2
			-
			1
	FITTING COMPRESSION 1/4" F X 1/4" TURING RDASS		1
			2
			2
	N.P.N. 42-0665-101 42-0665-103 42-0665-103 42-0659-203 70-1000-526 60-7500-002 10-1800-420 41-0621-600 41-0621-500 N.P.N. 75-5131-004 N.P.N.	N.P.N. 42-0665-101 MANIFOLD, MAIN PLUMBING, SLAP 44 42-0665-102 MANIFOLD, FINAL RINSE TOP LINE, SLAP 44 42-0665-103 MANIFOLD, AUTO FILL TOP LINE, SLAP 44 42-0659-203 70-1000-526 GCLAMP, #12, 9/16" TO 1-1/4" STUD, 1/4-20 X 1/2" LONG, S/S 10-1800-420 MASHER, FLAT, 1/4", S/S NUT, ELASTIC STOP, 1/4-20, S/S 41-0621-500 N.P.N. 75-5131-004 N.P.N. N.P.N. N.P.N. N.P.N. 42-0664-400 N.P.N. V.P.N. 42-0664-400 N.P.N. N.P.N. N.P.N. SAUGE, PRESSURE, MILJOKO SAUGE, PRESSURE, MILJOKO FITTING, COMPRESSION, 1/2" M X 1/4" TUBING, BRASS FITTING, COMPRESSION, 1/4" F X 1/4" TUBING, BRASS FITTING, COMPRESSION, 1/4" F X 1/4" TUBING, BRASS 19-1500-200 WASHER, 7/8" ID X 1-1/2" OD, S/S	N.P.N. 42-0665-101 MANIFOLD, MAIN PLUMBING, SLAP 44 42-0665-102 MANIFOLD, AUTO FILL TOP LINE, SLAP 44 42-0659-203 70-1000-526 60-7500-002 10-1800-420 11-1800-420 MANIFOLD, AUTO FILL TOP LINE, SLAP 44 STUD, 1/4-20 X 1/2" LONG, S/S WASHER, FLAT, 1/4", S/S NUT, ELASTIC STOP, 1/4-20, S/S HANGER, FINAL RINSE PIPE, S/S GUARD, FINAL RINSE PIPE, S/S GUARD, FINAL RINSE PIPE, S/S CUPLING, 1/2" F X 1/2" F, CPVC CLOSE NIPPLE, 1/2", BRASS TEE, 1/2" F X F X 90°, CPVC PIPE, FINAL RINSE SPRAY N.P.N. 42-0664-400 N.P.N. N.P.N. N.P.N. M.P.N. STITTING, COMPRESSION, 1/2" M X 1/4" TUBING, BRASS TITTING, COMPRESSION, 1/4" F X 1/4" TUBING, BRASS 19-1500-200 WASHER, 7/8" ID X 1-1/2" 0D, S/S

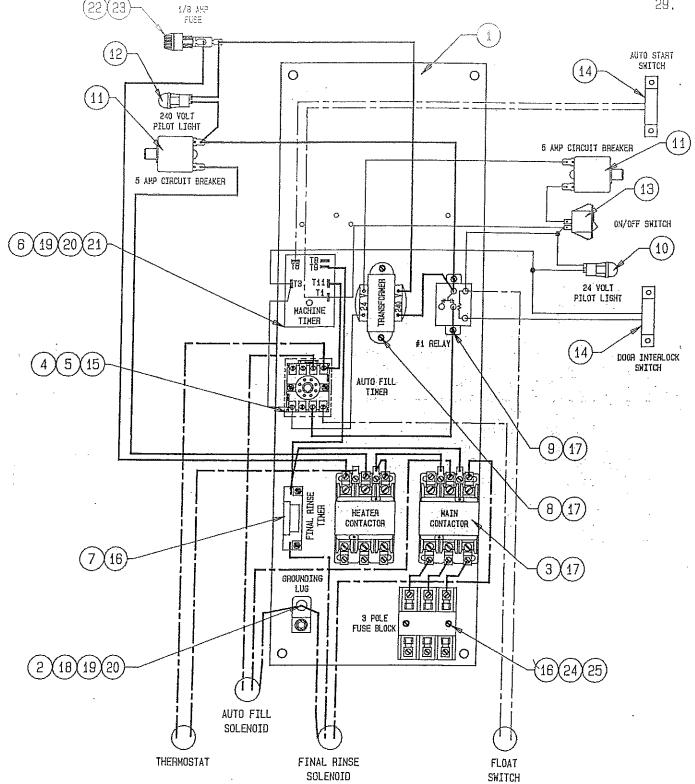
j





INDEX NO.	PART NUMBER	PARTS LISTSLAP 44 DISHWASHER WIRING ASS'Y (LEFT ENTRY)	QNTY PER ASSMLY
1 2 3 4 5 6 7 8 9 10 11 12 13 14a 14b 14c 14d 15 16 7 18 19 20 21 22 23 24	N.P.N. N.P.N. N.P.N. N.P.N. 55-7400-170 45-0412-700 N.P.N. 19-4201-700 N.P.N. 60-7500-002 10-1800-420 10-1903-420 10-1903-832 N.P.N. 10-1801-832 10-1903-832	ASSEMBLY, PADDLE SWITCH, SLAP 44 ASSEMBLY, ELECTRIC HEATER, VULCAN FITTING, LIQUITITE, 1/2" X 90° FITTING, LIQUITITE, 1/2" X 45° FITTING, LIQUITITE, 1" STRAIGHT FITTING, STRAIGHT WIRE STRAIN RELIEF LIQUITITE, 1/2"D X 16" LONG (FINAL RINSE) LIQUITITE, 1/2"D X 15" LONG (AUTO FILL) LIQUITITE, 1/2"D X 27" LONG (CHAIN DRIVE) LIQUITITE, 1/2"D X 27" LONG (WASH PUMP) LIQUITITE, 1"D X 27" LONG (ELECTRIC HEAT) GASKET, ELECTRIC HEAT, 2-3/8" SWITCH, RAPID SENSOR FLOAT STUD, 1/4-20 X 1/2" LONG, S/S WASHER, FLAT, 1/4", S/S NUT, ELASTIC STOP, 1/4-20, S/S SCREW, PAN HEAD, #8/32 X 3/8" LONG, S/S STUD, #8/32 X 3/8" LONG, S/S WASHER, FLAT, #8/32, S/S WASHER, FLAT, #8/32, S/S	1 1 1 1 1 1 1 2 1 1 1 1 1 2 1 4 8 8 20 4 4 4

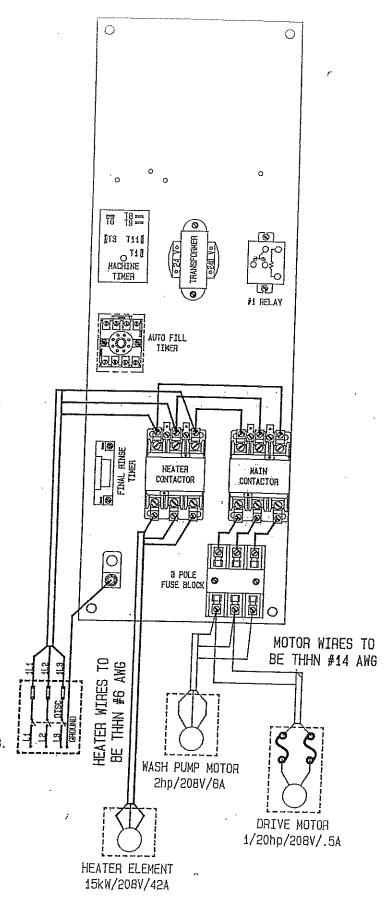




SLAP 44 DISHWASHER ELECTRICAL CONTROL BACK PANEL WIRING ASSEMBLY FIGURE 5-8

LEGEND:				
Well-constraint to be a few constraints and the constraints and the constraints are a second to the constraints and the constraints are a second to the constraints and the constraints are a second to the constraints are a	EXTERNAL	COMPONENT	WIRING	(208 VOLT)
-	INTERNAL	COMPONENT	WIRING	(24 VOLT)
	EXTERNAL	COMPONENT	WIRING	(24 VOLT)

INDEX NO.	PART NUMBER	PARTS LISTSLAP 44 DISHWASHER ELECTRICAL CONTROL BACK PANEL WIRING ASSEMBLY	ONTY PER ASSMLY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	N.P.N. N.P.N. 55-1050-321 55-7000-006 55-7900-156 N.P.N. 55-7800-700 N.P.N. 55-2860-802 55-0970-002 55-2860-801 N.P.N. 55-7400-170 N.P.N. 10-1003-632 10-1001-632 60-7500-002 10-1800-420 10-1903-420 60-7500-004 N.P.N. N.P.N. N.P.N. N.P.N.	SOCKET, PLUG IN, 8-PIN TIMER/RELAY, PLUG IN, 24V TIMER, DELAY OFF TIMER, UNIVERSAL ARTISAN TRANSFORMER, STANCOR #P8575 RELAY, DETROL, 30A, 24V, SPDT LIGHT, PILOT, RED, 24V BREAKER, CIRCUIT, 5A, P/B LIGHT, PILOT, AMBER, 240V SWITCH, ROCKER, SPST, ITW SWITCH, PROXIMITY, MAGNETIC SCREW, PAN HEAD, #6/32 X 7/8" LONG, S/S SCREW, PAN HEAD, #6/32 X 3/8" LONG, S/S SCREW, PAN HEAD, #6/32 X 3/16" LONG, S/S STUD, 1/4-20 X 1/2" LONG, S/S NUT, ELASTIC STOP, 1/4-20, S/S STUD, 1/4-20 X 1-1/2" LONG, S/S STUD, 1/4-20 X 1-1/2" LONG, S/S HOLDER, FUSE, HKP-BBHH FUSE, 1/8 AMP AGC	112111111211246812211113



208 VOLTS 48 AMPS 60HZ 3PH.
(TOTAL OF ACTUAL AMPS REQUIRED)
DISCONNECT AMPS TO BE FACTORED AND
DETERMINED BY LOCAL CODES WITH
APPROPRIATE FUSABLE ENGLOSURE BY OTHERS.

SLAP 44 DISHWASHER ELECTRIC HEATER, WASH PUMP, AND DRIVE MOTOR WIRING DIAGRAM FIGURE 5-9