# INSTALLATION/OPERATION & TECHNICAL MANUAL

#### FOR JACKSON MODELS:

AJ-64CE AJ-86CE AJ-100CE

AJ-64CS AJ-86CGP AJ-100 CGP

AJ-86CS

# AND ASSOCIATED OPTION PACKAGES INCLUDING:

SIDE LOADER
D226 EXTERNAL STEAM BOOSTER



Jackson WWS ,INC. P.O. Box 1060 Barbourville, KY. 40906 (606) 523-9795 Fax: (606) 523-9196 www.jacksonwws.com

#### MANUFACTURERS WARRANTY

#### ONE YEAR LIMITED PARTS & LABOR WARRANTY

ALL NEW JACKSON DISHWASHERS ARE WARRANTED TO THE ORIGINAL PURCHASER TO BE FREE FROM DEFECTS IN MATERIAL OR WORKMANSHIP, UNDER NORMAL USE AND OPERATION FOR A PERIOD OF (1) ONE YEAR FROM THE DATE OF PURCHASE, BUT IN NO EVENT TO EXCEED (18) EIGHTEEN MONTHS FROM THE DATE OF SHIPMENT FROM THE FACTORY.

Jackson WWS agrees under this warranty to repair or replace, at its discretion, any original part which fails under normal use due to faulty material or workmanship during the warranty period, providing the equipment has been unaltered, and has been properly installed, maintained and operated in accordance with the applicable factory instruction manual furnished with the machine and the failure is reported to the authorized service agency within the warranty period. This includes the use of factory specified genuine replacement parts, purchased directly from a Jackson authorized parts distributor or service agency. Use of generic replacement parts may create a hazard and void warranty certification.

The labor to repair or replace such failed part will be paid by Jackson WWS, within the continental United States, Hawaii and Canada, during the warranty period provided a Jackson WWS authorized service agency, or those having prior authorization from the factory, performs the service. Any repair work by persons other than a Jackson WWS authorized service agency is the sole responsibility of the customer. Labor coverage is limited to regular hourly rates, overtime premiums and emergency service charges will not be paid by Jackson WWS.

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

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

#### TRAVEL LIMITATIONS

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

#### WARRANTY REGISTRATION CARD

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

#### REPLACEMENT PARTS WARRANTY

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

#### PRODUCT CHANGES AND UPDATES

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

THIS IS THE ENTIRE AND ONLY WARRANTY OF JACKSON WWS. JACKSON'S LIABILITY ON ANY CLAIM OF ANY KIND, INCLUDING NEGLIGENCE, WITH RESPECT TO THE GOODS OR SERVICES COVERED HEREUNDER, SHALL IN NO CASE EXCEED THE PRICE OF THE GOODS OR SERVICES OR PART THEREOF WHICH GIVES RISE TO THE CLAIM.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING FOR FITNESS OR MERCHANTABILITY, THAT ARE NOT SET FORTH HEREIN, OR THAT EXTEND BEYOND THE DURATION HEREOF. UNDER NO CIRCUMSTANCES WILL JACKSON WWS BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, OR FOR THE DAMAGES IN THE NATURE OF PENALTIES, ARISING OUT OF THE USE OR INABILITY TO USE ANY OF ITS PRODUCTS.

#### ITEMS NOT COVERED

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



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

LLAM E AL 1-888-800-5672 PARA REG ISTRAR ESTE PRO DUCTO!
AL NO HACERIO LA GARANTIA SERA ANULADA!

S.V.P. APPELER 1-888-800-5672 PO UR ENREG ISTRER CE PRO DUIT,
LA GARANTE SERA ANNULEE PO UR TO UT PRO DUITNON - ENREG ISTREE

REVISION	REVISION DATE	MADE BY	APPLICABLE ECN	DETAILS	
D	04-06-05	MAW	6999, 7193 7217, 7064 7212, 7259 6685, 7096 6964, 7006	Updated drawings for limit switch actuators. Changed AJ-86 drain plumbing copper lengths. Added rack rail stabilizer kit. Replaced heater 04540-121-76-93 with 04540-002-29-82. Updated installation instructions. Added 3 instruction sheets for limit switches. Added instruction sheet for curtains. Added AJ-86CGP & AJ-100CGP models.	
E	02-02-06	MAW	7600,7558	Added gas exhaust fan schematic, updated electric exhaust fan schematic, updated dimensions pages. Replace Drain Weldment 05700-021-68-28 with 05700-002-51-12.	
F	05-02-06	MAW	7572, 7730 7634, 7743 7428, 7571 7554, 7475 7463, 7462 7367, 7789	Pawl bar for AJ-86 R-L unit with a side loader option. Updated scrap basket drawings. Vent cowl assembly for a hooded side loader. Service instructions for replacing wash/rinse motors. Added prison pawl bar packages. Thermostat replacement kits, updated drain quench assembly, replaced wash thermostat 05930-121-67-72 with 05930-003-13-65. Heater replacement instructions. Updated steam booster schematic. Rinse fill motor assembly. Wash, rinse & PSI decals. Update door assembly numbers. Drain quench kit.	
PG, 116	04-19-07	MAW	7898	Added 09905-003-32-20 fan load decal.	
5 thru 22, 104	09-29-2007	MAW	N/A	Updated dimensions page. Removed alternate table limit switches.	
G	10-09-2009	KJS	8044	Changed the part from a weldment (05700-021-67-50) to a casting (09515-003-58-12).	
Н	08-12-2013	RLC	QOF NDB-219	Updated Manufacturer information.	
I	09-15-2014	KAP	N/A	Updated Jackson Logo	
J	02-06-2014	KAP	N/A	Updated temperatures on pg's 7, 8, 13, 14, 19, and 20. Updated drawing on pg. 39	
K	10-06-2015	KAP	N/A	Updated rack rail assembly on pg. 97	

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#### AJ-64CS

AJ = AJ series of rack conveyors

64 = 64" wide machine 86 = 86" wide machine 100 = 100" wide machine

CE = Electrically heated, hot water sanitizing machine CS = Steam heated, hot water sanitizing machine CGP = Gas heated, hot water sanitizing machine

Model:	
Serial No.:	
Installation Date:	
Service Rep. Name:	
Phone No.:	

Jackson WWS ,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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# **OPERATING CHARACTERISTICS**

RACKS PER HOUR:		FLOWRATE (GPM):			
AJ-64-86-100CE/CS/CGP	287	AJ-64-86-100CE/CS/CGP	3.7		
DISHES OR GLASSES PER HOUR:		STEAM COIL TANK HEAT (CS MODELS ONLY):			
AJ-64-86-100CE/CS/CGP	7200	STEAM INLET PRESSURE (PSIG)	10-20		
PREWASH TANK CAPACITY (GALLONS):		STEAM CONNECTION NPT CONSUMPTION @ 15 PSIG (lbs/hr):	3/4"		
AJ-86CE/CS/CGP	16	AJ-64-86-100CS/CSL	100		
AJ-100CE/CS/CGP	16	MOTOR ELECTRICAL CHARACTERISTICS:			
WASH TANK CAPACITY (GALLONS):		DRIVE MOTOR HP	1/4		
AJ-64-86-100CE/CS/CGP	15.4	WASH MOTOR HP POWER RINSE MOTOR HP	2		
POWER RINSE TANK CAPACITY (GALLONS):		PREWASH MOTOR HP: AJ-86 MODELS	1		
AJ-86CE/CS/CGP	15.4	AJ-100 MODELS	2		
AJ-100CE/CS/CGP	15.4	NOTE T STATE OF STATE	1050/ . 5		
PREWASH PUMP CAPACITY (GPM):		NOTE: Typical Electrical Circuit is based upon (1) the full amperage load of the machine and (2) fixed-trip circuit breaker sizes as listed in the NI			
AJ-86CE/CS/CGP	120	Edition. Local codes may require more stringent	t protec-		
AJ-100CE/CS/CGP	270	tion than what is displayed here. Always verify with yo electrical service contractor that your circuit protection			
WASH PUMP CAPACITY		adequate and meets all applicable national arcodes. These numbers are provided in this man	nd local		
GALLONS PER MINUTE (ALL MODELS):	270	ply for reference and may change without notice given time.			
POWER RINSE PUMP CAPACITY		given time.			
GALLONS PER MINUTE (ALL MODELS):	270				
VENTING REQUIREMENTS (CFM)(100% CAP.):					
INPUT END	200				
OUTPUT END TOTAL	400				
TOTAL	600				
CONVEYOR SPEED (FPM):					
AJ-64-86-100CE/CS/CGP MACHINES	8.0				
GALLONS PER RACK:					
AJ-64-86-100CE/CS/CGP MACHINES	.77				
WATER TEMPERATURES:					
AJ-64-86-100CE/CS/CGP MODELS:					
WASH (MINIMUM)	150°F				
POWER RINSE (MINIMUM)	160°F				
FINAL RINSE (MINIMUM)	180°F				
FLOW PRESSURE (PSI)	$20\pm 5$				

#### **ELECTRICAL REQUIREMENTS**

# **AJ-64CE MODELS**

				TYPICAL
VOLTS	PH	<u>HZ</u>	TOTAL AMPS	ELECTRICAL CIRCUIT
208	1	60	139 A	175 AMP
230	1	60	128 A	175 AMP
208	3	60	82 A	110 AMP
230	3	60	76 A	100 AMP
460	3	60	38 A	50 AMP

# **AJ-64CS MODELS**

				TYPICAL
			TOTAL	ELECTRICAL
<b>VOLTS</b>	<u>PH</u>	<u>HZ</u>	<b>AMPS</b>	CIRCUIT
208	1	60	19 A	25 AMP
230	1	60	19 A	25 AMP
208	3	60	13 A	20 AMP
230	3	60	13 A	20 AMP
460	3	60	7 A	15 AMP

# **AJ-86CE MODELS**

VOLTS 208 230	<u>PH</u> 1	<b>HZ</b> 60 60	TOTAL <u>AMPS</u> 145 A 134 A	TYPICAL ELECTRICAL CIRCUIT 200 AMP 175 AMP
208 230	3 3	60 60	86 A 79 A	110 AMP 100 AMP
460	3	60	39 A	50 AMP

# **AJ-86CGP MODELS**

			T0T41	TYPICAL
VOLTS	PH	HZ	TOTAL AMPS	ELECTRICAL CIRCUIT
208	<u> </u>	60	26 A	35 AMP
230	1	60	26 A	35 AMP
208	3	60	17 A	25 AMP
230	3	60	17 A	25 AMP
460	3	60	9 A	15 AMP

# **AJ-86CS MODELS**

VOLTS	PH	HZ	TOTAL AMPS	TYPICAL ELECTRICAL CIRCUIT
208	1	60	25 A	35 AMP
230	1	60	25 A	35 AMP
208	3	60	16 A	20 AMP
230	3	60	16 A	20 AMP
460	3	60	8 A	15 AMP

#### ELECTRICAL REQUIREMENTS (CONTINUED)/D226 STEAM BOOSTER PARAMETERS

# AJ-100CE MODELS

				TYPICAL
			TOTAL	<b>ELECTRICAL</b>
<b>VOLTS</b>	<u>PH</u>	<u>HZ</u>	<u>AMPS</u>	CIRCUIT
208	1	60	148 A	200 AMP
230	1	60	136 A	175 AMP
208	3	60	88 A	110 AMP
230	3	60	81 A	110 AMP
460	3	60	41 A	60 AMP

# **AJ-100CGP MODELS**

				TYPICAL
			TOTAL	ELECTRICAL
<b>VOLTS</b>	<u>PH</u>	<u>HZ</u>	<u>AMPS</u>	CIRCUIT
208	1	60	28 A	35 AMP
230	1	60	28 A	35 AMP
208	3	60	19 A	25 AMP
230	3	60	19 A	25 AMP
460	3	60	10 A	15 AMP

# **AJ-100CS MODELS**

			TOTAL	TYPICAL ELECTRICAL
<u>VOLTS</u>	<u>PH</u>	<u>HZ</u>	<u>AMPS</u>	<u>CIRCUIT</u>
208	1	60	28 A	35 AMP
230	1	60	28 A	35 AMP
208	3	60	18 A	25 AMP
230	3	60	18 A	25 AMP
460	3	60	9 A	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.

# **D226 STEAM BOOSTER**

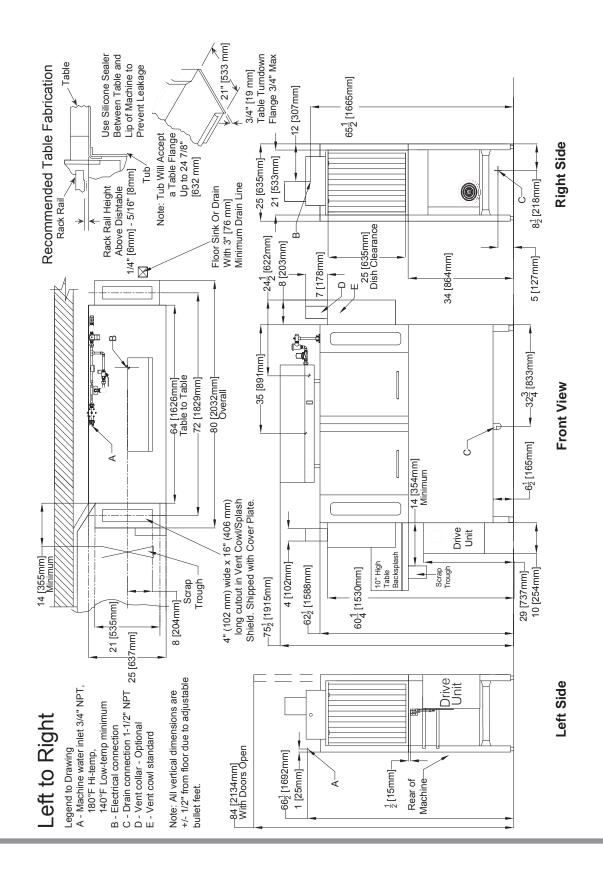
ELECTRICAL REQUIREMENTS: VOLTAGE (V) FREQUENCY (HZ)	208-230 60
PHASE	SINGLE
WATER REQUIREMENTS: INCOMING WATER TEMPERATURE (MINIMUM) FLOW PRESSURE (PSI)	110°F 20±5
STEAM REQUIREMENTS: INCOMING STEAM PRESSURE (PSIG)	15-25
HEAT EXCHANGER SPECIFICATIONS:*	
TUBESIDE WORKING PRESSURE (PSI)	125
SHELLSIDE WORKING PRESSURE (PSI)	125
TUBESIDE HYDROSTATIC TEST PRESSURE (PS	SI) 250
SHELLSIDE HYDROSTATIC TEST PRESSURE (F	PSI)
	188
MAXIMUM OPERATING TEMPERATURE	295°F
MAXIMUM SHELLSIDE STEAM PRESSURE (PSI	) 125

<sup>\* -</sup> Indicates typical design criteria but is subject to change without notice. For more information, contact you authorized Jackson service representative.

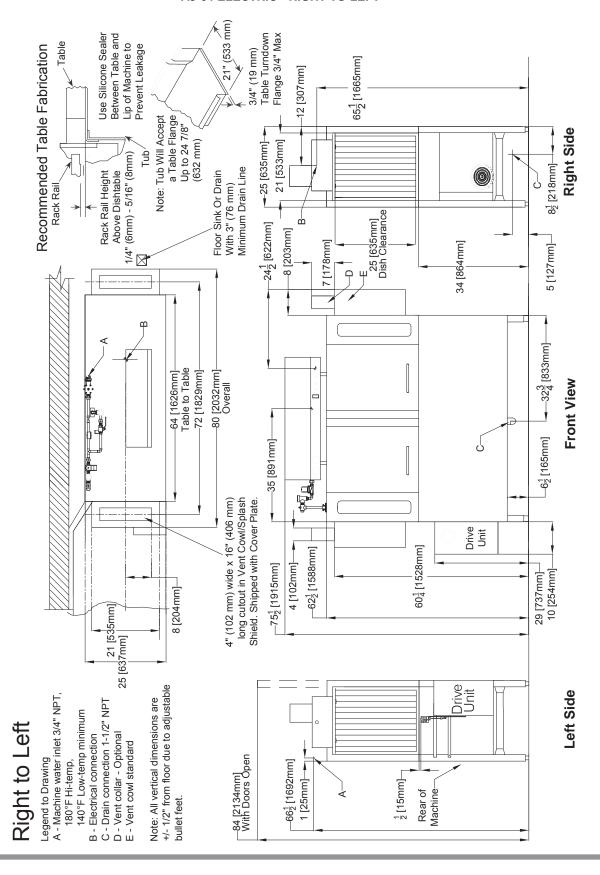
#### WATER OUTLET SAFETY VALVE SET PRESSURE (PSI):

SET PRESSURE (PSI): 125 STEAM RELIEF VALVE SET PRESSURE (PSI): 50

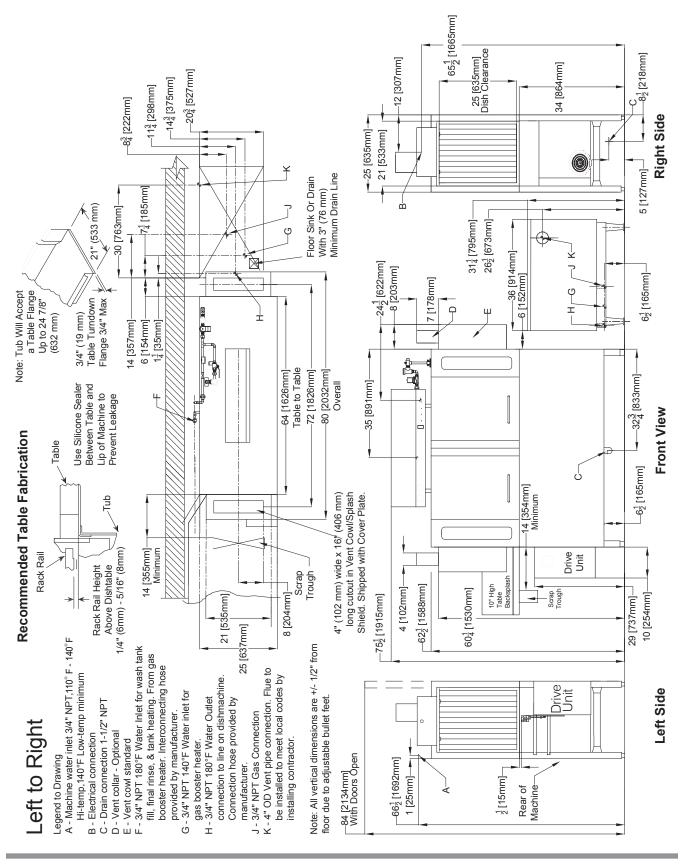
#### AJ-64 ELECTRIC - LEFT TO RIGHT



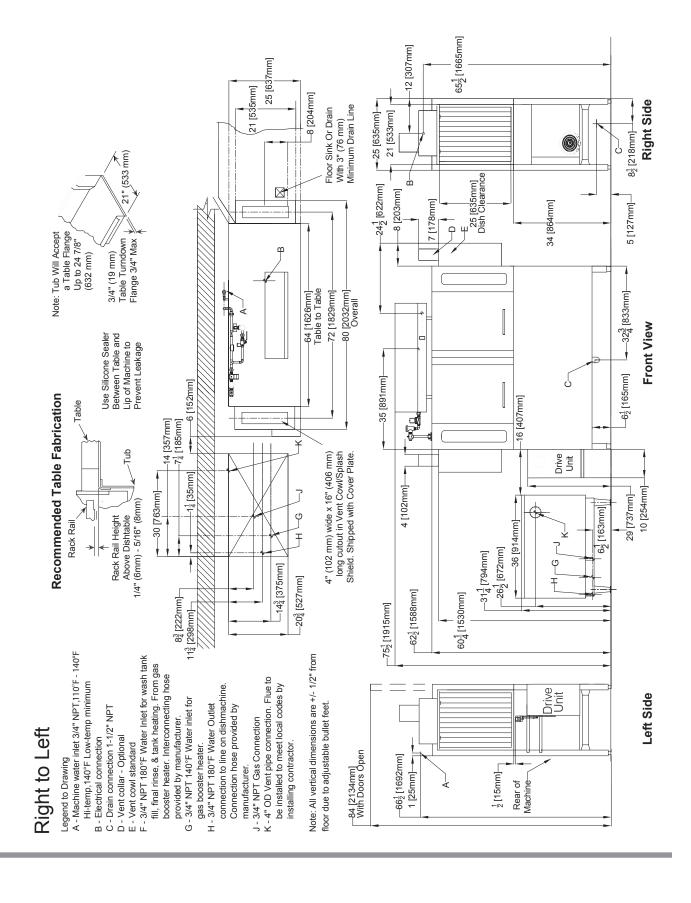
#### AJ-64 ELECTRIC - RIGHT TO LEFT



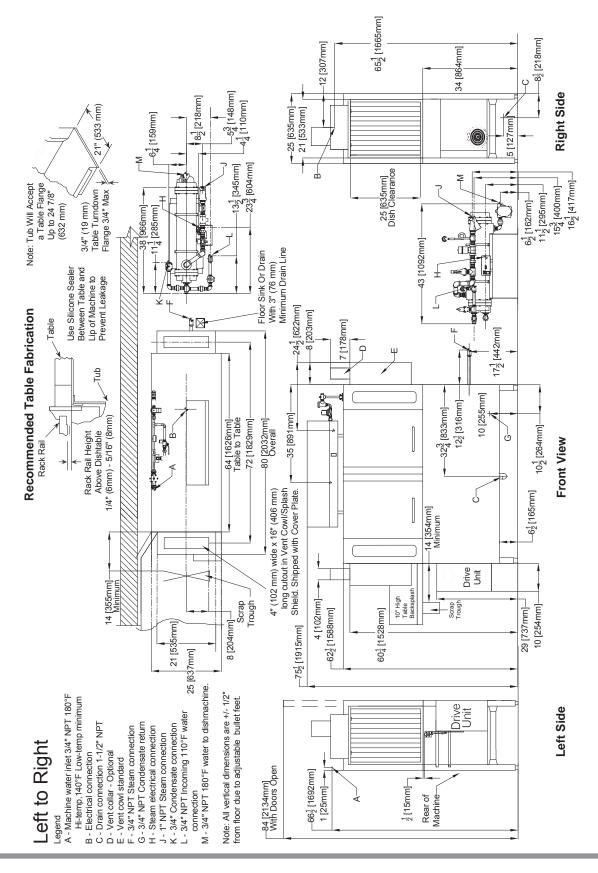
#### AJ-64 GAS - LEFT TO RIGHT



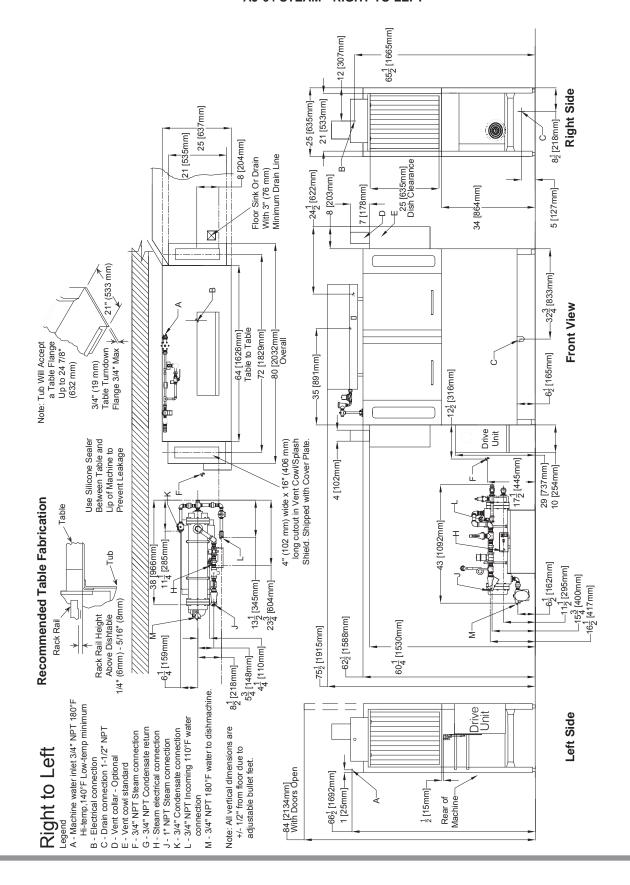
#### AJ-64 GAS - RIGHT TO LEFT



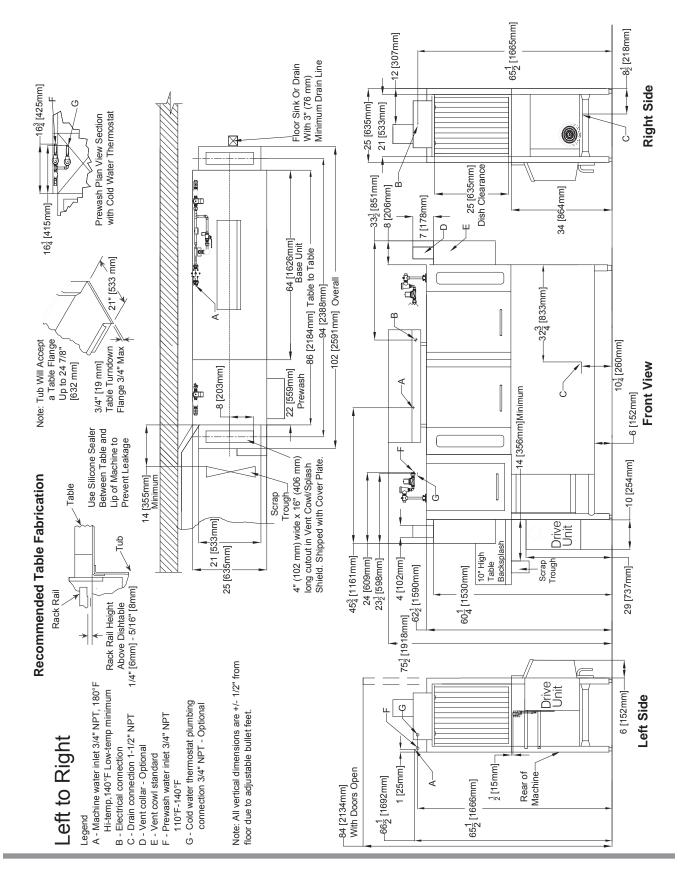
#### AJ-64 STEAM - LEFT TO RIGHT



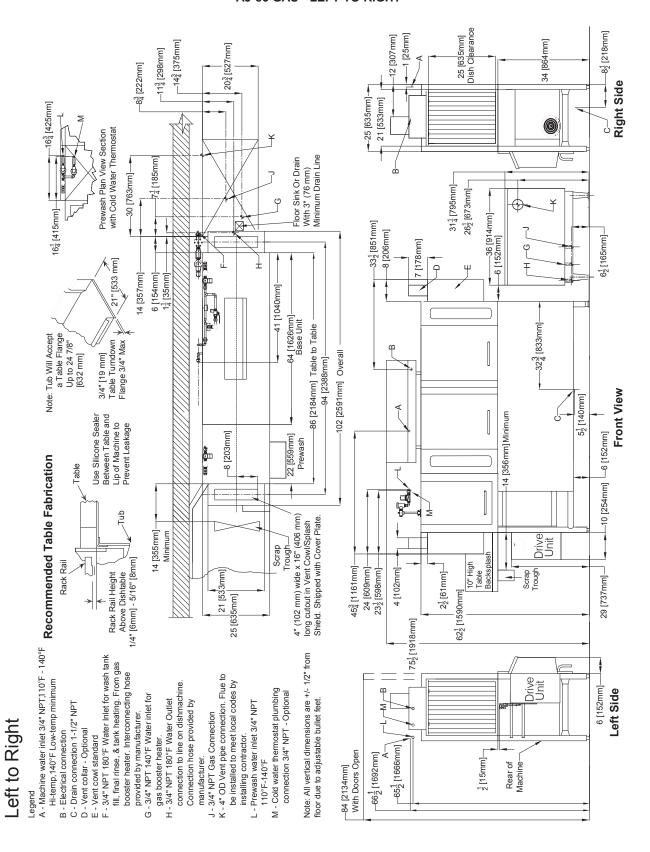
#### AJ-64 STEAM - RIGHT TO LEFT



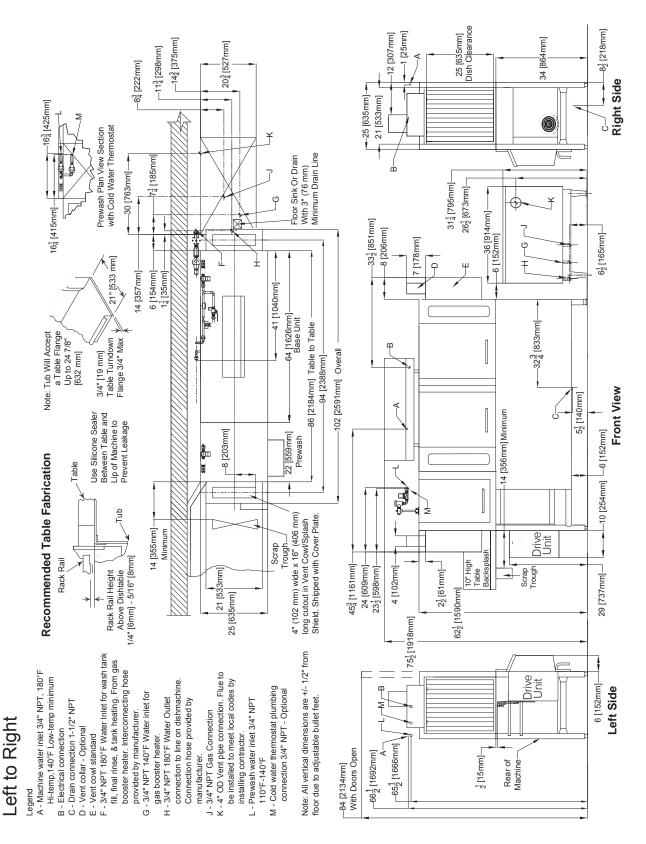
#### AJ-86 ELECTRIC - LEFT TO RIGHT



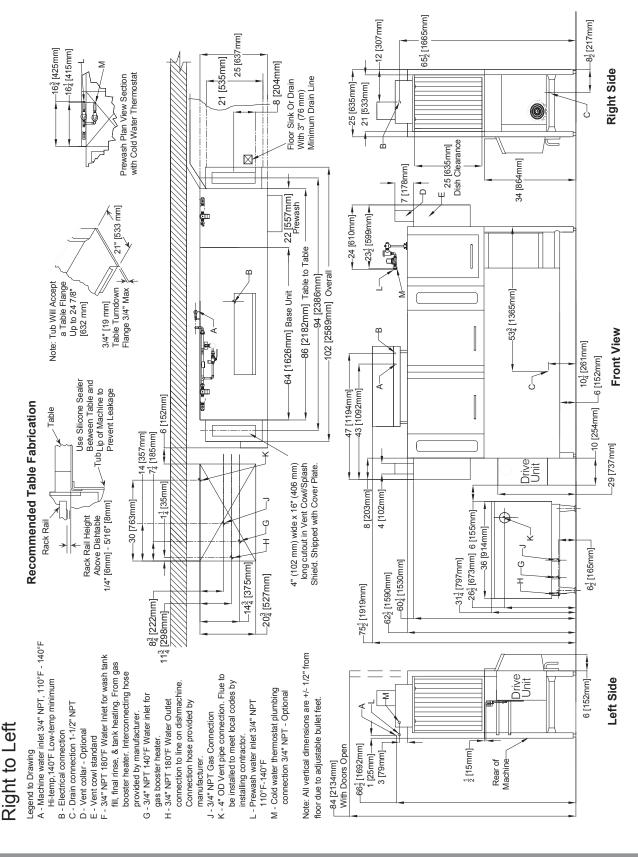
#### AJ-86 GAS - LEFT TO RIGHT



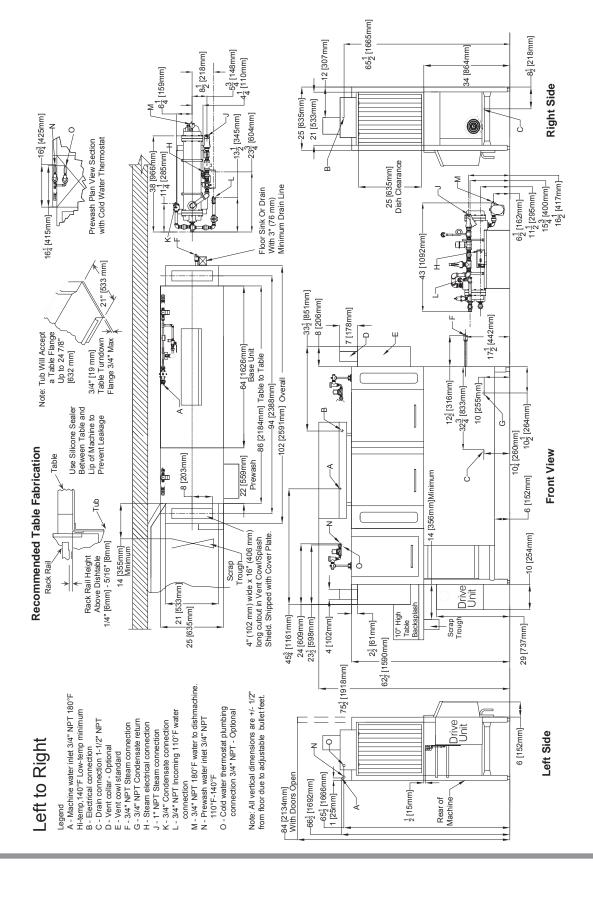
#### AJ-86 GAS - LEFT TO RIGHT



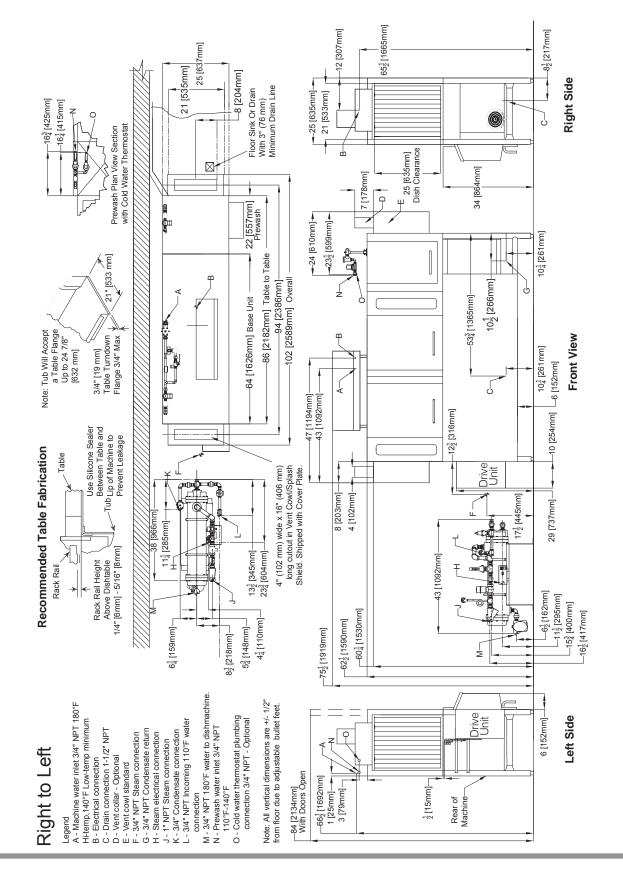
#### AJ-86 GAS - RIGHT TO LEFT



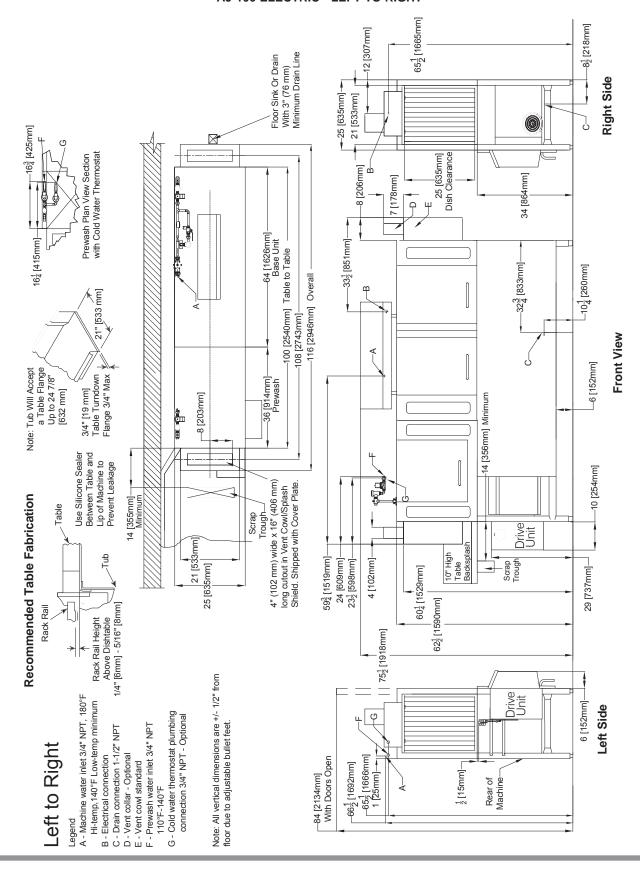
#### AJ-86 STEAM - LEFT TO RIGHT



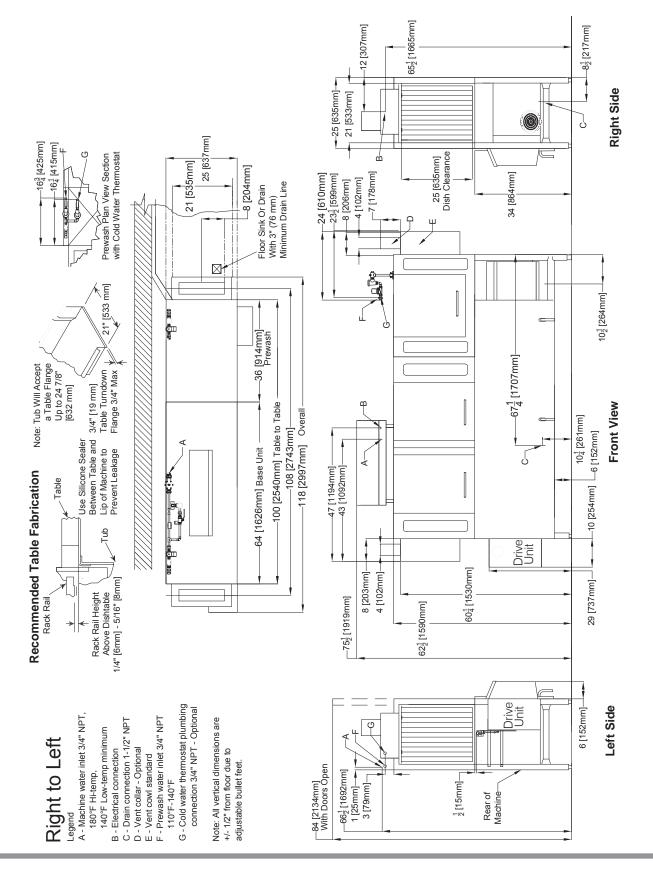
#### AJ-86 STEAM - RIGHT TO LEFT



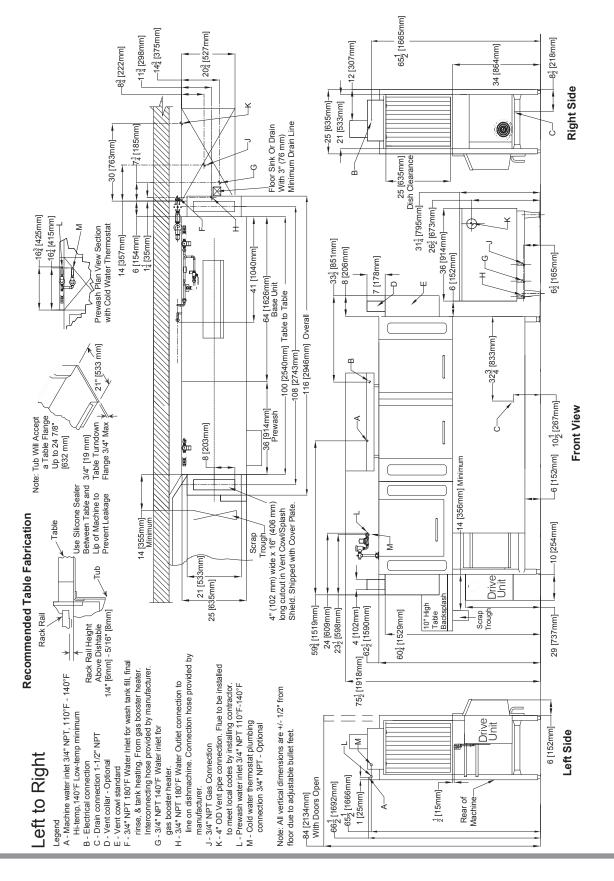
#### **AJ-100 ELECTRIC - LEFT TO RIGHT**



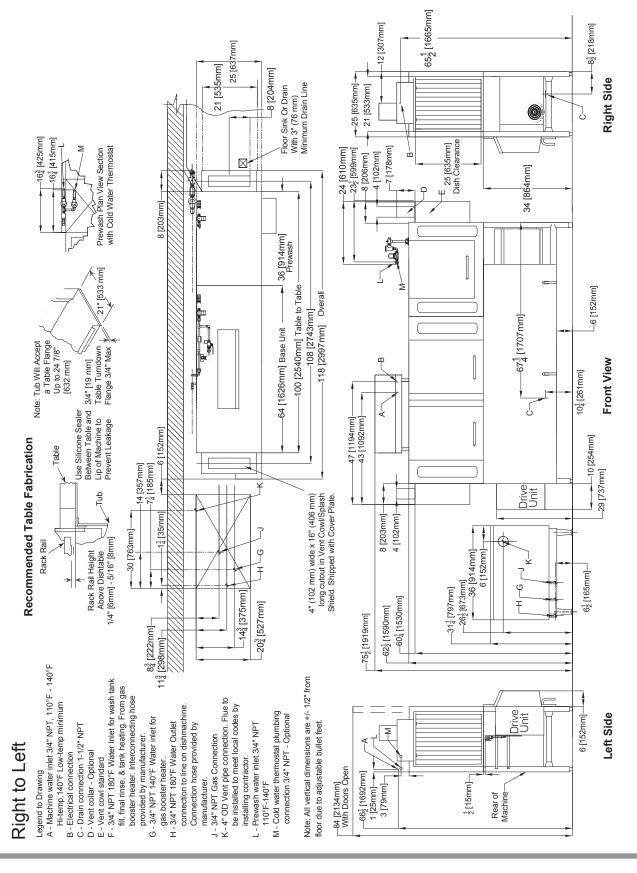
#### **AJ-100 ELECTRIC - RIGHT TO LEFT**



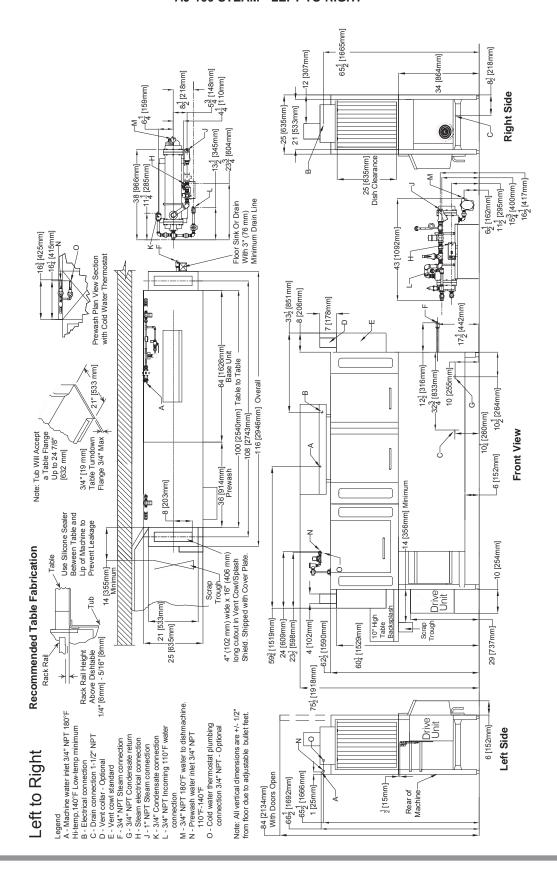
#### AJ-100 GAS - LEFT TO RIGHT



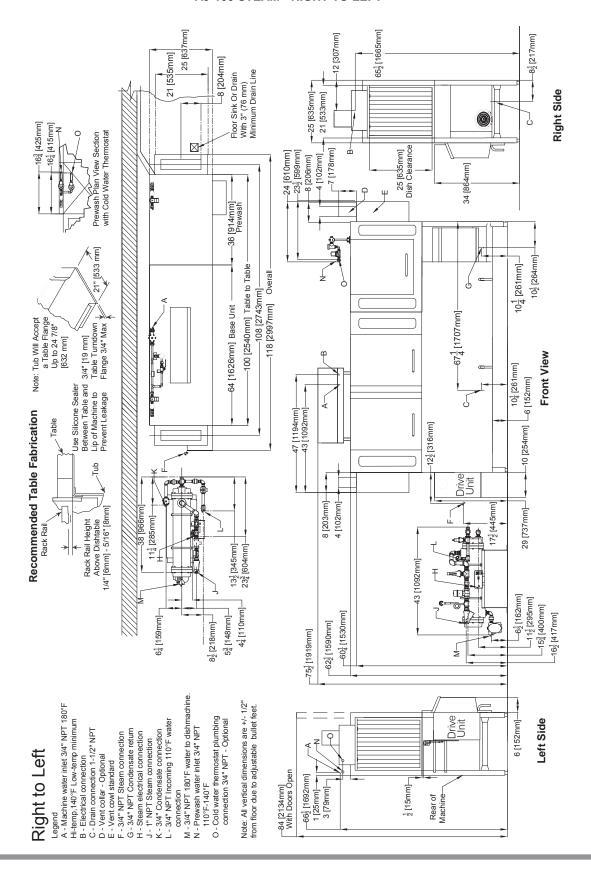
#### AJ-100 GAS - RIGHT TO LEFT



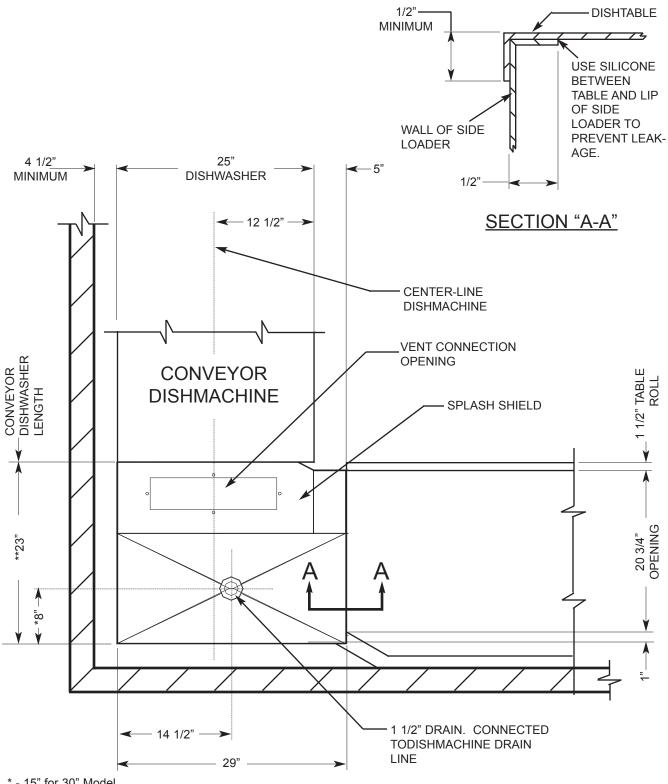
#### AJ-100 STEAM - LEFT TO RIGHT



#### AJ-100 STEAM - RIGHT TO LEFT



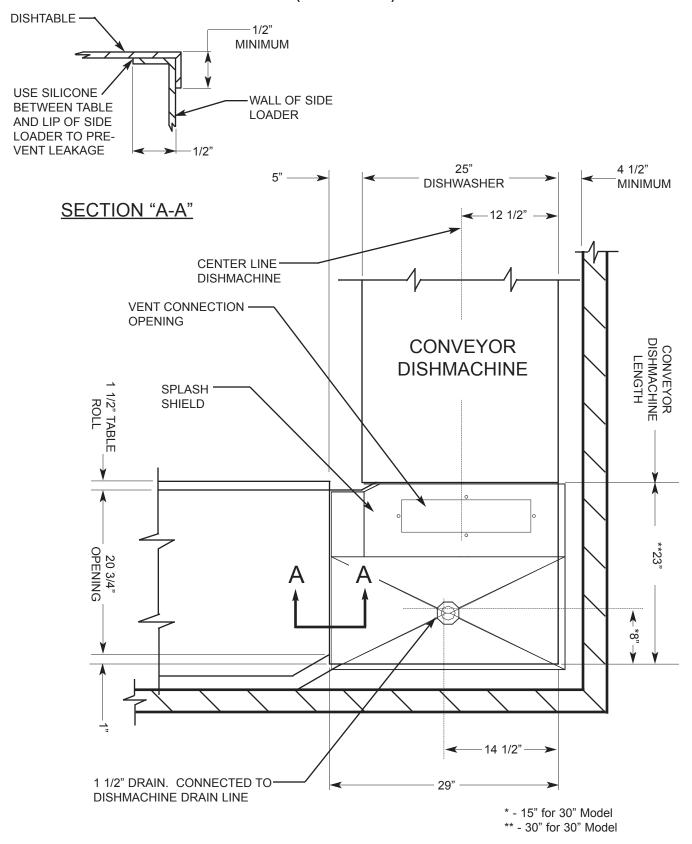
SIDE LOADER (LEFT TO RIGHT) DIMENSIONS



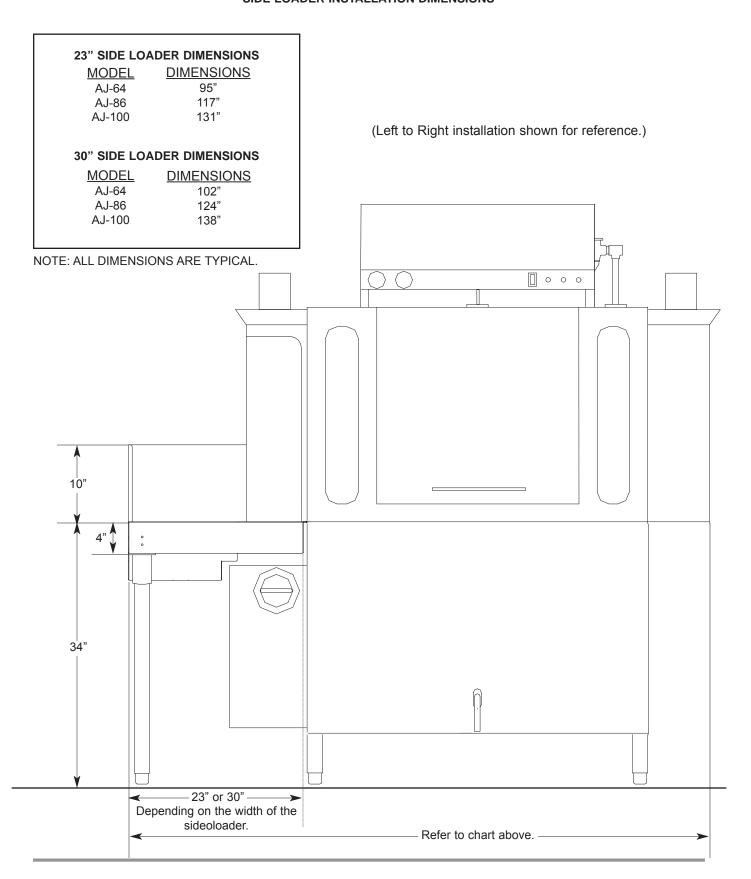
<sup>\* - 15&</sup>quot; for 30" Model

<sup>\*\* - 30&</sup>quot; for 30" Model

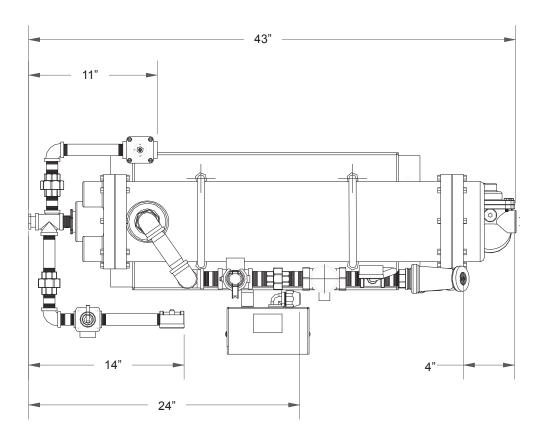
SIDE LOADER (RIGHT TO LEFT) DIMENSIONS

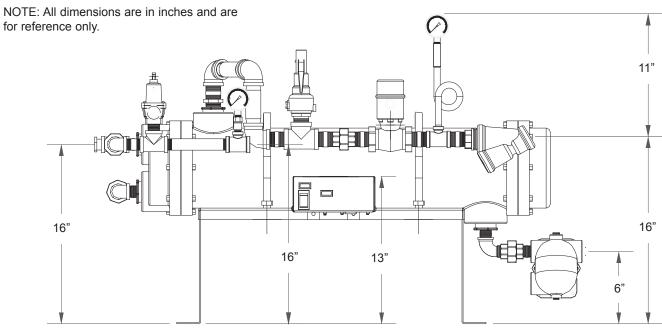


#### SIDE LOADER INSTALLATION DIMENSIONS

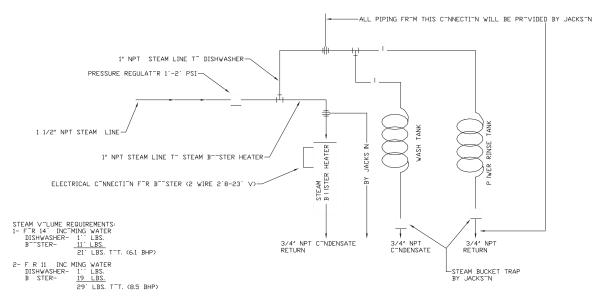


#### **D226 STEAM BOOSTER DIMENSIONS**





#### **D226 STEAM BOOSTER PLUMBING LINE DRAWINGS**

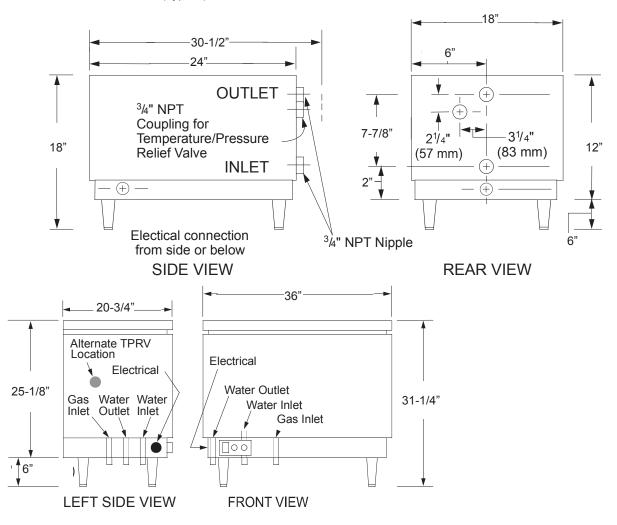


PLUMBER TT CTNNECT ALL CTNDENSATE RETURNS TT EITHER DRAIN TR TT CTNDENSATE RETURN LINE

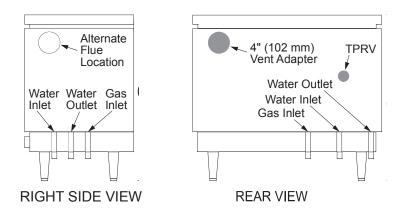
Steam Booster Piping - Double Tank Machine

#### TYPICAL ELECTRIC AND GAS BOOSTER DIMENSIONS

#### Electric Booster Dimensions (Typical)



Gas Booster Dimensions (Typical)



#### INSTALLATION INSTRUCTIONS



NOTE: THE INSTRUCTIONS PROVIDED HEREIN, UNLESS OTHERWISE SPECIFIED ARE FOR THE DISHMACHINES ONLY. THERE ARE SEPARATE DIRECTIONS FOR THE GAS BOOSTER.

**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 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:** The machine should be unboxed and removed from shipping pallet prior to being installed. Open the front door and remove all of the packing materials. Once unpacked, 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.

**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. You will be able to adjust the overall height of the unit by turning the bullet feet from between 75-1/2" to 76-1/2".

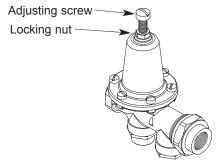


**PLUMBING THE DISHMACHINE:** All plumbing connections must comply with all applicable local, state, and national plumbing codes. The plumber is responsible for ensuring that the incoming water line is thoroughly flushed prior to connecting it to any component of the dishmachine. It is necessary to remove 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.

Water hardness should be a maximum of 6 grains per gallon. Harder water should be treated prior to using the machine. Iron in the water supply can cause staining. A filter designed to remove iron from the supply water is highly recommended for supplies in excess of 0.1 ppm (parts per million).

**CONNECTING THE DRAIN LINE:** The drain for the models covered in this manual are gravity discharge drains. All piping from the machine to the drain must be a minimum 1 1/2" NPT and should not be reduced. There must also be an air gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 30 gallons per minute.

WATER SUPPLY CONNECTION: Ensure that you have read the section entitled "PLUMBING THE DISHMACHINE" above before proceeding. It is also recommended that a pressure regulator (not supplied) be installed in the incoming water line. The supply water temperature must meet the minimum requirements listed on the machine data plate. Install the water supply line (3/4" pipe size minimum) to the dishmachine line strainer. 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 25 PSI "flow" pressure at the recommended temperature indicated on the data plate.



Incoming Plumbing Assembly

(Optional)

If the water level is too low or too high, check the incoming water pressure. It should be  $20 \pm 5$  PSI. Too high of pressure results in too much water; too low of pressure results in too little water. To adust the regulator, loosen the nut at the top, this will allow you to screw or unscrew the adjustment. With a screwdriver, turn the adjuster clockwise to increase pressure or counter clockwise to decrease it.

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.

# **INSTALLATION INSTRUCTIONS (CONTINUED)**

**STEAM LINE CONNECTIONS:** Some machines covered in this manual are designed to use low pressure steam as a source of heat for wash tank water. The machines come with lines by which outside source steam needs to be connected. Connect all incoming steam lines in accordance with the steam booster manufacturer's instructions. Ensure that all applicable codes and regulations are adhered to. See machine data plate for information concerning steam flow pressure.

**GAS CONNECTIONS:** Some machines covered in this manual are designed to use gas as an outside source of heat for wash tank water. The machines come with connections by which an outside source needs to be connected. Connect all incoming gas lines in accordance with the gas booster manufacturer's instructions. Ensure that all applicable codes and regulations are adhered to.

**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.

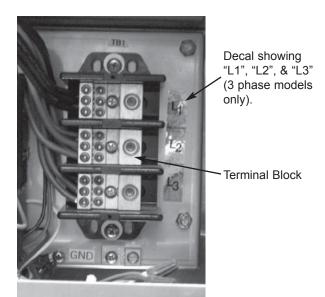
**ELECTRICAL POWER CONNECTION:** Electrical and grounding connections must comply with the applicable portions of the National Electrical Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

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

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

To install the incoming power lines, open the control box. Install 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, L2, and L3 (3 phase only)) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided. Tighten the connections. 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.



Incoming Power Connection

**VENTILATION OF DISHMACHINE:** The dishmachine should be located with provisions for venting into an adequate exhaust hood or ventilation system. This is essential to permit efficient removal of the condensation exhaust. Ensure that the exhaust system is acceptable in accordance with all applicable codes and standards.

NOTE: Any damage that is caused by steam or moisture due to improper ventilation is NOT covered under the warranty.

This units covered in this manual have the following exhaust requirements:

Load End: 200 CFM Unload End: 400 CFM

The exhaust system must be sized to handle this volume for the dishmachine to operate as it was designed to.

# **INSTALLATION INSTRUCTIONS (CONTINUED)**

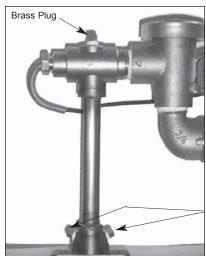
**ELECTRIC HEAT:** The thermostats for the machines covered in this manual are factory set. They should not be adjusted except by an authorized service agent.

**CHEMICAL FEEDER EQUIPMENT:** Detergent may be introduced into the unit through the removal of the bulkhead plug in the rear of the tub and replacing it with the third party detergent injection fitting. Remove the bulkhead plug in the side of the tub to install the detergent concentration probe.

For more information concerning detergent concerns, please refer to the page entitled "Detergent Control".

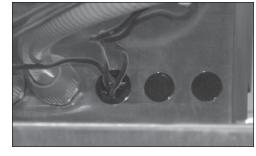


Detergent Connection Point (Machine rear view)

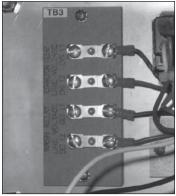


The 1/8" brass plugs on the incoming plumbing rinse injector may be removed to install rinse aid injection fittings.





All wires for the chemical injectors should be routed through one of the extra openings in the back of the control box.



Connection Points

Terminals in the control box marked "CVS" provide a constant voltage signal whenever the drive motor is operating.

Terminals in the control box marked "DET" provide a voltage signal whenever the wash motor is operating.

#### **DELIMING OPERATIONS**

**DELIMING OPERATIONS:** In order to maintain the dishmachine at its optimum performance level, it will be required to remove lime and corrosion deposits on a frequent basis. A deliming solution should be available from your detergent supplier. Read and follow all instructions on the label of the deliming solution.

To proceed with the deliming operation, fill the dishmachine and add the correct amount of deliming solution as recommended by the deliming solution manufacturer. The water capacity of the various tanks of the dishmachine can be verified on the specification sheet(s) of this manual.

Perform the following operations to delime the dishmachine:

- 1. Turn the AUTOMATIC/DELIME switch on the back of the control box to the DELIME position.
- 2. Disconnect or turn off all chemical feeder pumps.
- 3. Close all doors (after adding the deliming solution).
- 4. Run the machine for the recommended period of time.
- 5. Turn the unit off and open the doors.



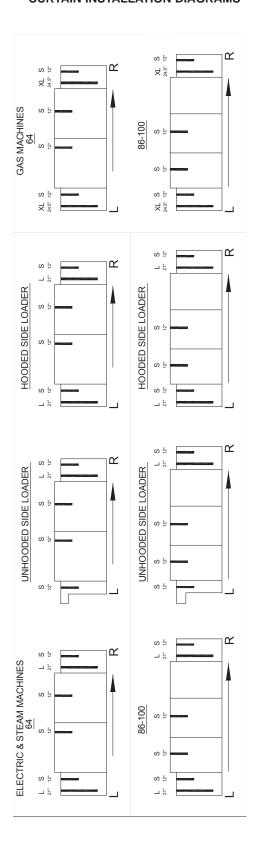
Delime Switch

- 6. Wait five minutes, then inspect the inside of the machine. If the machine is not delimed, run another time cycle as per the deliming solution's instructions.
- 7. When clean, drain and re-fill the machine.
- 8. Run in MANUAL for 10 minutes to remove residual deliming solution.
- 9. Drain and re-fill the machine.

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

# **CURTAIN INSTALLATION DIAGRAMS**

Please refer to the chart for placement of the curtains.



#### SIDE LOADER INSTALLATION & OPERATION INSTRUCTIONS

This accessory assists in the delivery of a full dish rack from the break down (scrapping) table to the dishmachine. It will convert the direction of travel 90°. Since the Side Loader is shipped mounted on the conveyor dishwasher there is no additional installation required for this option. As it is operated mechanically by the dishwasher it does not require any plumbing or electrical connections.

This Side Loader does not require or add any additional electrical or mechanical devices to the unit which could create operational or maintenance problems. As designed the drive mechanism is powered by the conveyor drive motor on the dishmachine. An extension on the pawl bar provides the drive to push the racks into the unit.

PREPARATION: Before proceeding with the start-up of the unit, verify that the Side Loader pan strainer is installed.

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 unscraped 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.

**WASHING A RACK OF WARE:** Once a rack is fully loaded it should be positioned against the front of the dish table. The rack should then be moved into the Side Loader until it activates the actuator switch. Once the the machine is started, it should pull the rack through the machine and push it out the unload end. Once a rack has started through, you may put another rack in.

**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 become clogged, 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, remove the pan strainer and clean as required. Wipe out the inside of the Side Loader and then reinsert the strainer.

#### D226 STEAM BOOSTER INSTALLATION & OPERATION INSTRUCTIONS

#### **CONCEALED DAMAGE OR MISSING PARTS:**



IMPORTANT: FOR YOUR PROTECTION, PLEASE READ AND OBSERVE THE FOLLOWING:

This steam booster has been thoroughly inspected and carefully packed before leaving our warehouse.

Concealed loss or damage means loss or damage which does not become apparent until the booster has been unpacked. The contents may be damaged in transit due to rough handling even though the carton may not show external damage.

If it is found that the shipment has concealed damage, PLEASE DO NOT RETURN IT TO JACKSON, but notify the carrier (within 48 hours) asking them to send their agent to fill out an inspection report. Save the cartons so he may inspect them and be sure to note in the report any black marks, creases, tears, crushed corners or any other marks indicating rough handling. Also, notify your JACKSON dealer immediately.

If it is discovered that there are missing parts, please notify your JACKSON dealer immediately.

# **EQUIPMENT MOUNTING:**

Your booster should come pre-assembled and will require that it be permanently mounted in place. The platform has pre-punched holes to allow for mounting to the installation floor. **NOTE:** The D226 Booster must be properly mounted and level before being used. Once the platform is secure to the floor, attach the water and steam lines in accordance with local and national codes.

#### **PLUMBING:**

# NOTE: ALL CONNECTIONS MUST COMPLY WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL PLUMBING CODES.

The plumber is responsible for ensuring that the water line is **THOROUGHLY FLUSHED BEFORE** connecting it to any manual or solenoid valve. It is necessary to remove all foreign matter such as chips (resulting from cutting or threading pipes), pipe joint compound or, if soldered fittings are used, bits of solder or cuttings from the lines. This debris, if not removed, may lodge in the valves and render them inoperative.

The D226 Booster is designed to take incoming water from a minimum temperature of 110°F to approximately 180°F for use in the final rinse of your Jackson dishmachine. In order to do this, water is supplied to the booster and is heated by tubes carrying 15-25 PSIG flow steam. Heat is transferred from the steam into the water, raising the temperature.

Install condensate drains in accordance with applicable codes.

The D226 Booster is designed to operate at a water flow rate of  $20 \pm 5$  PSI. The assembly comes with a water pressure regulator, which is preset at the factory. However, adjustment may be required so ensure that you verify the the flow pressure before beginning operations. See the instructions regarding adjustment and maintenance of the water pressure regulator for more information.



**WARNING:** The D226 Booster is designed to heat water to a minimum of 180°F and is extremely hot during operations. Advise personnel of the dangers associated with touching booster components as burns or severe injury can occur.



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

# D226 STEAM BOOSTER INSTALLATION & OPERATION INSTRUCTIONS (CONTINUED)

#### **ELECTRICAL:**

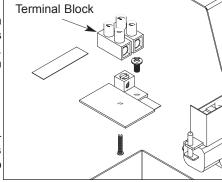


**WARNING:** Electrical and grounding connections must comply with applicable portions of the National Electrical Code ANSI / NFPA 70 (latest edition) and/or other electrical codes. Disconnect electrical power supply and place a tag or lock at the disconnect switch to indicate that you are working on the circuit.

To connect the incoming power, run the conduit for power wires through the open hole in the back of the control box. Connect the power wires to the terminal block as it is labeled (L1 and L2). Run the ground wire to the grounding lug marked "GND". Tight connections and conduit nuts and close the control box by putting the cover on and securing with the 10-32 screws.

# **OPERATION:**

**WARNING:** The heat exchanger used in the D226 Booster system is a pressure vessel with very precise operating parameters. Safety equipment such as relief valves should never be tampered with or disabled. These devices are meant to protect the equipment and the operator from harm, damage and death.



D226 Conrtol Box

- 1. Ensure that water, steam and any condensate drains are connected to the booster.
- 2. Start the water flow first, open the condensate drains and then begin steam flow.
- 3. On the control box, press the power switch and put it in the ON position. The power light should illuminate.

The unit should run normally now.



WARNING: Do not shock the system by applying the steam before the water. This can cause damage to the booster.

The following explanation describes the operation of the D226 Booster.

NOTE: This explanation assumes that water and steam have been connected to the machine.

- 1. When the power switch (S1) is placed in the ON position, power is provided to both the power light (E1) and the thermostat (TS1).
- 2. The thermostat (TS1) will close when the water falls below the minimum setpoint, energizing the steam solenoid light (E2) and the steam solenoid (FS1).
- 3. The steam solenoid (FS1) will remain open, allowing steam into the booster, until the water temperature reaches the desired temperature. At that point, the thermostat (TS1) will open, de-energizing the steam solenoid (FS1) and the steam solenoid light (E2).



**IMPORTANT:** Please remember that all of the components in the control box are under line voltage (208-240 volts). Under no circumstance is the control box cover to be removed or opened during normal operations!

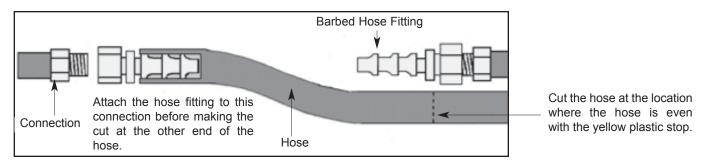
#### **SHUTDOWN (FOR SERVICE ONLY):**



**WARNING:** The D226 Booster is designed to heat water to a minimum of 180°F and is extremely hot during operations. Advise personnel of the dangers associated with touching booster components as burns or severe injury can occur.

- 1. Turn the power switch to the OFF position. The power light should extinguish.
- 2. Secure steam flow to the unit.
- 3. Secure water flow.
- 4. Close the condensate drains as required by procedure and/or code.
- 5. Do not attempt to clean, wipe down or perform any maintenance on the booster until it has been given a generous amount of time to cool down.

#### GAS CONVEYOR HOSE INSTALLATION



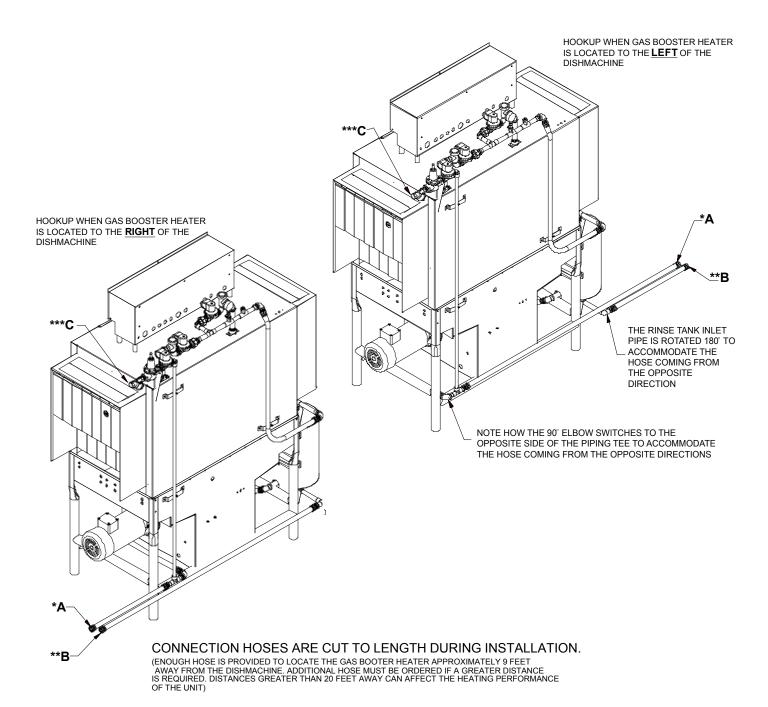
Due to the fact that each customer may have different requirements for the orientation of the gas booster heater relative to the main dishmachine, the hose lengths that connect the two units must be customized during each installation. The appropriate 3/4" hosing, fittings and gaskets have been provided.

To prevent incorrect measurements of the hose, it is recommended to place one barbed hose fitting into the end of the uncut length of hose coil and attach that fitting to an appropriate connection. Run the hose to the corresponding connection on the other unit before cutting the hose. Use a barbed hose fitting that is screwed into the second connection on the other unit before cutting the hose. Use a barbed hose fitting that is screwed onto the second connection to gauge the correct distance. Ensure a smooth "flow" of hose without any sharp turns or kinks.

To aid in pushing the barbed hose fitting into the hose, place the fitting on a hard surface (i.e. the floor) with the barbed end of the fitting pointing upward and push the hose down onto the fitting. A small amount of lubricant (i.e. petroleum jelly) may aid in this process.

GAS CONVEYOR HOSE INSTALLATION (CONTINUED)

#### TYPICAL RECIRCULATING WATER HOOK-UP FOR ALL GAS HEATED CONVEYORS



<sup>\*</sup> HOSES MARKED  $\underline{\mathbf{A}}$  IN THE ABOVE ILLUSTRATIONS CONNECT TO THE  $\mathbf{INLET}$  WATER CONNECTION OF THE GAS BOOSTER HEATER

<sup>\*\*</sup> HOSES MARKED  $\underline{\mathbf{B}}$  IN THE ABOVE ILLUSTRATIONS CONNECT TO THE  $\mathbf{OUTLET}$  WATER CONNECTION OF THE GAS BOOSTER HEATER

<sup>\*\*\*</sup> ITEMS MARKED  $\underline{C}$  ARE THE INCOMING PLUMBING CONNECTIONS TO MACHINE THAT SHOULD BE 110 - 140 DEGREES

#### DISHMACHINE OPERATING INSTRUCTIONS

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

- 1. Close door(s) on dishmachine.
- 2. Close the drain valve(s).

**POWER UP (ELECTRICALLY-HEATED MODELS):** 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.

**POWER UP (STEAM-HEATED MODELS):** 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. Ensure that the steam service is connected and that steam is flowing to the machine. Without steam, the water will not reach the required minimum temperatures that the machine is designed to operate at.

**POWER UP (GAS-HEATED MODELS):** 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. Ensure that the gas service is connected and that gas is flowing to the machine. Without gas, the water will not reach the required minimum temperatures that the machine is designed to operate at.

**FILLING THE WASH TUB:** Ensure that the delime switch is in the NORMAL position, and place the power switch into the ON position. The machine should fill automatically and shut off when the appropriate level is reached (just below the pan strainer). 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.



Machines equipped with prewash sections should not be run without water in those sections. This can cause damage to components.

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 unscraped 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.

**WASHING A RACK OF WARE:** To wash a rack, simply slide a rack of soiled ware into the load end of the machine. Once the the machine is started, it should pull the rack through the machine and push it out the unload end. Once a rack has started through, you may put another rack in.

**OPERATIONAL INSPECTION:** Based upon usage, the pan strainers may become clogged with soil and debris as the work-day progresses. Operators should regularly inspect the pan strainers to ensure they have not become clogged. If the strainers do, they will reduce the washing capability of the machine. Instruct operators to clean out the pan strainers at regular intervals or as required by work load.

NOTE: On units equipped with prewash sections (AJ-86 and AJ-100), operators should also take the time to inspect the prewash section strainers and clean them as required by workload.

**SHUTDOWN AND CLEANING (ELECTRICALLY-HEATED MODELS):** At the end of the workday, place the power switch in the OFF position and open the door(s). Open the drain valves and allow the machine to drain completely. Remove the pawl bar assembly (clean as required). Remove the pan strainers and, if equipped, the prewash strainers, run off sheets and scrap basket strainer. Remove the wash and, if equipped, the prewash arms and verify that the nozzles and arms are free from obstructions. Flush the arms with fresh water. Remove the pump suction strainers and clean out as required. Remove the rinse tray assembly and clean. Remove the curtains and scrub with a mild detergent and warm water. Wipe out the inside of the unit and then reassemble with the components previously removed.

**DISHMACHINE OPERATION INSTRUCTIONS (CONTINUED)** 

**SHUTDOWN AND CLEANING (STEAM-HEATED MODELS):** At the end of the workday, place the power switch in the OFF position, secure the flow of steam to the machine and open the door(s). Open the drain valves and allow the machine to drain completely. Remove the pawl bar assembly (clean as required). Remove the pan strainers and, if equipped, the prewash strainers, run off sheets and scrap basket strainer. Remove the wash and, if equipped, the prewash arms and verify that the nozzles and arms are free from obstructions. Flush the arms with fresh water. Remove the pump suction strainers and clean out as required. Remove the rinse tray assembly and clean. Remove the curtains and scrub with a mild detergent and warm water. Wipe out the inside of the unit and then reassemble with the components previously removed.

**SHUTDOWN AND CLEANING (GAS-HEATED MODELS):** At the end of the work day, shut down the gas booster in accordance with manufacturer's instructions. Place the power switch in the OFF position, secure the flow to the machine and open the door(s). Open the drain valves and allow the machine to drain completely. Remove the pawl bar assembly (clean as required). Remove the pan strainers and, if equipped, the prewash strainers, run off sheets and scrap basket strainer. Remove the wash and, if equipped, the prewash arms and verify that the nozzles and arms are free from obstructions. Flush the arms with fresh water. Remove the pump suction strainers and clean out as required. Remove the rinse tray assembly and clean. Remove the curtains and scrub with a mild detergent and warm water. Wipe out the inside of the unit and then reassemble with the components previously removed.

#### **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.

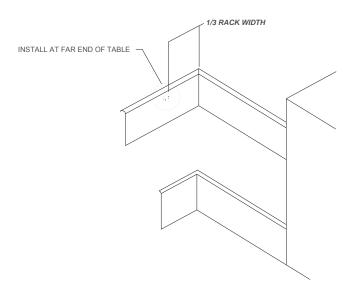
As explained before, water temperature is an important factor in ensuring that your dishmachine functions properly. The data plate located on each unit details what the minimum temperatures must be for either the incoming water supply, the wash tank and the rinse tank, depending on what model of dishmachine 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.

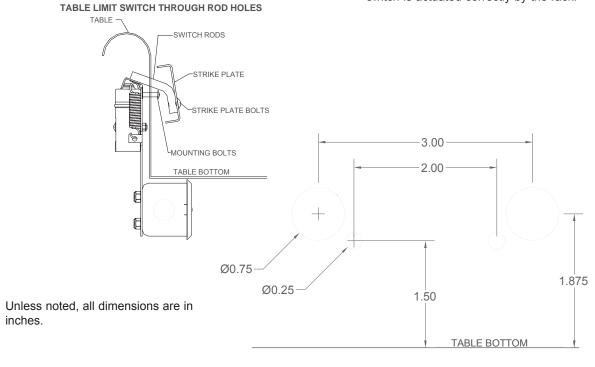
#### STRIKER PLATE LIMIT SWITCH INSTALLATION INSTRUCTIONS

#### **Installation Instructions:**

- 1. Wiring: The switch is wired common and normally open because of the hinge design. By interrupting the line in series with the door switches, the dishmachine ceases to operate. Refer to the machine schematic for details on how to wire the switch.
- 2. Parts of the table switch are mounted in the dishtable, at the end of the table and under the table. See the drawing(s) for the relationship of the switch to the table.
- 3. Move the limit switch as far down on the two slots as possible and see that the limit switch is straight on the base plate. This might require adjustment of the nut on the connector for the limit switch.
- 4. Then adjust the inside and the outside connector nuts for the connector box so that it lines up even with the limit switch and the base plate.
- 5. Tighten down the nuts for the seal so that they are tight.



6. If you have any difficulty you might have to adjust the connectors to the seal, screwing in or screwing out until the installation is straight on the table and the limit switch is actuated correctly by the rack.



#### PREVENTATIVE MAINTENANCE

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

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 of 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 Jackson.

Some problems, however, may having nothing to do with the machine itself and no amount of preventative maintanence 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 Jackson 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 Jackson 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.

### **D226 MAINTENANCE**

WARNING: Maintenance should only be performed by authorized service personnel in order to ensure safe and effective workmanship, while minimizing danger to operating personnel. The D226 Steam Booster is designed to operate at temperatures capable of causing burns to personnel. Always allow the unit to cool down to an acceptable temperature prior to performing any maintenance.

Very little maintenance is required to be performed on the D226 Booster. So long as the steam and water used with the unit have the proper filtration and are operated at the correct temperature and pressures, then you should expect many years of reliable service out of your system.

# **MAINTENANCE OF THE WATER PRESSURE REGULATOR:**

Incoming water pressure can be regulated by adjusting the water pressure regulator on the system. In order to adjust pressure, loosen the top nut on the regulator. This will allow you to turn the adjusting screw. Turn the adjusting screw clockwise to increase pressure and counter-clockwise to decrease. Pressure can be read on the pressure gauge located on the water outlet side of the heat exchanger. Once the desired pressure is achieved, tighten the top nut to ensure that the adjustment cannot be accidently changed.

The water pressure regulator has an internal strainer that can be removed through the bottom hexagonal plug. This may need to be periodically checked depending on the water quality. It is important that the water supply to the water pressure regulator be secured prior to trying to clean the strainer.

# MAINTENANCE OF THE RELIEF VALVES, SAFETY VALVES AND THERMOSTAT:

These components are shipped from the factory preset and should not be tampered with. None of these components are considered adjustable and no attempt should be made to do so. If a component does not appear to be working properly, then it should be replaced immediately by an authorized service representative.

# **LUBRICATION CHART FOR DRIVE GEAR**

Note: The maintenance procedures detailed here are manufacturer's instructions for the WINSMITH brand of gear reducer that is installed on the rack conveyors covered in this manual.

Ambient Temperature Final Stage Worm Speed¹ ISO Viscosity Grade AGMA Lubricant No.	-30 - 15°F up to 2000 FPM 220 5S	16 - 50°F up to 2000 FPM 460 #7 Compounded	51 - 95°F up to 450 FPM 680 #8 Compounded	51 - 95°F above 450 FPM 460 #7 Compounded	96 - 131°F up to 450 FPM 680 8S	96 - 131°F above 450 FPM 460¹ 7S
Mobil	SHC 630	600W Super Cylinder	Extra Hecla Super	600W Super Cylinder	SHC 636	SHC 634
American Lubricants	SHC-90W	AGMA #7 Gear Oil	AGMA #8 Gear Oil	AGMA #7 Gear Oil	N/A	N/A
Castrol	Tribol 800/220	Tribol 1105-7C	Tribol 1105-8C	Tribol 1105-7C	Tribol 800/680	Tribol 800/460
Chevron	Tegra 220	Cylinder Oil W460	Cylinder Oil W680	Cylinder Oil W460	Tegra 680	Tegra 460
Conoco	Syncon R & O 220	Inca Oil 460	Inca Oil 680	Inca Oil 460	N/A	Syncon R & O 460
Exxon (Esso)	Teresstic SHP220	Spartan EP 460	Spartan EP 680	Spartan EP 460	Teresstic SHP 680	Teresstic SHP 460
Fiske Brothers	SPO-MG	SPO-277	SPO-288	SPO-277	N/A	N/A
Shell	Omala RL 220	Valvata J 460	Valvata J 680	Valvata J 460	Omala RL 680	Omala RL 460
Texaco	Pinnacle 220	Vanguard 460	Vanguard 680	Vanguard 460	Pinnacle 680	Pinnacle 460

<sup>(1)</sup> The sliding velocity in feet per minute (FPM) for standard ratios is determined by multiplying the speed of the worm in RPM by the factor from the table below. For selecting proper lubricant, use the speed of the worm in the final stage (input RPM divided by the first stage ratio).

#### DRIVE MOTOR GEAR REDUCER PREVENTATIVE MAINTENANCE

Note: The maintenance procedures detailed here are manufacturer's instructions for the WINSMITH brand of gear reducer that is installed on the rack conveyors covered in this manual.

#### Lubrication & Maintenance:

Factory filling - WINSMITH speed reducers are oil filled at the factory to the proper level for the standard mounting position that you will find it in on the unit. The oil level should be checked and adjusted (if necessary) prior to operation, using the oil level plug provided and while the unit is oriented in its operating position.

**Ambient temperature** - If the operating ambient temperature is other than 51 - 95°F, then refer to the lubrication chart and refill the unit with the correct grade based on actual ambient temperature and operating speed. See "Oil changing" below for additional information.

**Oil changing** - When changing the oil for any reason, it should be remembered that oils of various types may not be compatible. Therefore, when changing to a different oil, it is recommended that the housing be completely drained and thoroughly flushed with a light flushing oil prior to refilling with the appropriate lubricant. The oil level should be rechecked after a short period of operation and adjusted, if necessary. When changing double reduction models, each housing should be drained and filled independently, even though there may be a common level.

**Initial oil change**: The new oil in a speed reducer should be changed at the end of 250 hours of operation. This is equivalent to 30 days of peration for 8 hours per day; 15 days of operation for 16 hours per day, or 10 days of operation for 24 hours per day.

**Subsequent oil changes**: Under normal conditions, after the initial oil change, the oil should be changed after every 2500 hours of operation, or every 6 months, whichever occurs first. Under severe conditions (rapid temperature changes, moist, dirty or corrosive environment) it may be necessary to mchange oil at intervals of one to three months. Periodic examination of oil samples taken from the unit will help establish the appropriate interval.

**Synthetic oils**: Synthetic lubricants can be advantageous over mineral oils in that they generally are more stable, have a much longer life, and operate over a wider temperature range. These oils are appropriate for any application but are especially useful when units are subjected to low start-up temperatures or high operating temperatures. However, continuous operation above 225°F may cause damage to seals or other components. It is recommended that the initial oil be changed or filtered after the first 1500 hours of operation to remove metal particles that accumulate during break-in. Subsequent oil changes should be made after 5000 hours operation if units are operating in a clean environment. This can be extended to 10,000 hours if using new reformulated Mobil SHC lubricants (orange in color) and the lubricant remains free of contamination over this period. See comments under "Subsequent oil changes" for discussion of severe ambient conditions.

**Long term storage or infrequent operation**: If a speed reducer is to stand idle for an extended period of time, either prior to installation or during use, it is recommended that the unit be filled completely with oil to protect interior parts from rust and corrosion due to internal condensation. Be sure to drain the oil to the proper level before placing the speed reducer in service.

**Grease fittings**: Some units are equipped with grease fittings to lubricate bearings not adequately lubricated by the oil splash. These fittings must be lubricated every 3 - 6 months depending on operating conditions, bearing greases must be compatible with the type of gear lubricant being used (i.e. mineral, synthetic, food grade, etc.). For mineral oils, use a high quality lithium base NLGOI #2 bearing grease. For synthetic oils, use a synthetic bearing grease such as Mobil Synthetic Universal gease, Mobilith SHC 100 or a sutable equivalent. For food grade lubricants, use Chevron FM grease, NGLI 2, or equivalent.

Low input speeds (under 1600 RPM): When input speeds are less than 1600 RPM, grease fittings will be required to lubricate any bearings not partially covered by the normal oil level.

**Oil temperature**: Speed reducers in normal operation can generate temperatures up to 200°F depending on the type of reducer and the severity of the application 9loading, duration of service, ambient temperatures). Excessive oil temperatures may be the result of several factors including overloading, overfilling, underfilling or inadequate cooling.

#### **Nominal Ratio**

Size	5	7.5	10	15	20	25	30	40	50	60	80	100
920	0.347	0.263	0.225	0.216	0.202	0.191	0.215	0.200	0.188	0.182	0.164	0.161

Lubricant selections are provided by the lubricant manufacturer based on AGMA recommeded viscosity grades. Viscosity grades are based on Lubrication Standard ANSI/AGMA 9005-D94.

# SECTION 4: TROUBLESHOOTING SECTION

# SECTION 4: TROUBLESHOOTING

#### **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: Nothing on dishmachine operates. The power switch is ON and the power indicator light is OFF.

- 1. Machine is not wired correctly to incoming power source. Have an electrician verify wiring.
- 2. Machine circuit breaker is tripped. Reset the circuit breaker. If it trips again, contact an electrician to verify the machine amp draw.
- 3. Service breaker is tripped. Reset the service breaker. If it trips again, contact an electrician to verify the machine amp draw.

#### Problem: Machine will not fill. The power switch is ON and the power indicator light is ON.

- 1. No water supply to machine. Verify that water lines have been connected to the machine.
- 2. Dishmachine doors are not closed. Close doors completely.
- 3. Incoming water solenoid valve damaged/faulty. Verify that the valve is operating. If not, replace.
- 4. Tank floats faulty. Verify the wiring of the floats. Verify that no debris is jamming the floats. Replace if necessary.

## Problem: Machine fills, but fill is weak.

- 1. Low incoming water pressure. Verify that incoming water pressure during fill is 20 ±5 PSI.
- 2. Incoming water solenoid is clogged. Verify that debris is not entrapped in valve. If so, remove debris.

## Problem: Low wash tank temperature.

- 1. Low incoming water temperature. Verify that the incoming water temperature matches what is indicated on the machine data plate.
- 2. Heater not energizing. Verify that the wash tank heater is operating. If not, replace.
- 3. Low incoming voltage. Have an electrician verify that the power coming to the machine is the same as indicated on the data plate.

# Problem: Low wash arm pressure, poor spray pattern.

- 1. Clogged wash arm nozzles. Verify that nozzles are not clogged with debris. If so, remove debris.
- 2. Clogged wash tank or wash pump strainers. Clean out strainers if necessary.
- 3. Worn wash pump impeller. Verify status of impeller, replace if necessary.

# Problem: Low prewash arm pressure, poor spray pattern.

- 1. Clogged prewash arm nozzles. Verify that nozzles are not clogged with debris. If so, remove debris.
- 2. Clogged prewash tank or prewash pump strainers. Clean out strainers if necessary.
- 3. Worn prewash pump impeller. Verify status of impeller, replace if necessary.

#### Problem: Inadequate rinse.

- 1. Low incoming water pressure, Verify that incoming water pressure during fill is 20 ±5 PSI.
- 2. Incoming water solenoid is clogged. Verify that debris is not entrapped in valve. If so, remove debris.

# Problem: Pawl bar moves with no load, but does not move when loaded.

1. Clutch on drive assembly is out of adjustment. Adjust as required.

# SECTION 4: TROUBLESHOOTING

#### **COMMON PROBLEMS**

## Problem: Pawl bar does not move.

- 1. Failed or broken overload spring. Replace spring if necessary.
- 2. No power to the drive motor/failed drive motor. Verify power and wiring connections to the motor. If necessary, replace the motor.
- 3. Pawl bar not properly installed. Verify that the pawl bar is installed correctly.

# Problem: Racks go through the machine, but results are poor.

- 1. Verify that detergent is being dispensed into the machine at the appropriate quantities for the water volume. If not, get detergent to appropriate level and review results of washing ware.
- 2. Clogged strainers/scrap basket. Clean out strainers and scrap basket and replace.
- 3. Ware not being properly prescrapped. Review paragraph entitled "Ware Preparation" in Operating Instructions.
- 4. Wash or rinse arms missing end plugs or caps. Verify and replace as required.
- 5. Low tank heat.
- 6. Inadequate rinse.
- 7. Incorrect voltage coming to the machine. Verify that the voltage matches that on the machine data plate.
- 8. Wash pump cavitation due to low water level. Verify that the drains are shut and that the water level is correct.

## Problem: Spotting of silverware, glasses and dishes.

- 1. Incorrect final rinse temperature. Verify that the rinse water temperature matches that which is listed on the machine data plate.
- 2. Clogged wash and/or rinse nozzles and arms. Remove the arms and verify that they and their nozzles are from debris.
- 3. Excessively hard water. Install a water softener to reduce hardness.
- 4. Loss of water pressure due to clogged/obstructed wash pump. Turn the power off to the machine at the source. Drain the wash tank of water and verify that the pump intake is free from debris.
- 5. Improper scrapping procedures. Review the paragraph entitled "Ware Preparation" in Operating Instructions.
- 6. incorrect detergent/chemcial concentrations. Verify that the detergent/chemical concentrations are correct for the associated water volume.

# **TORQUE SETTINGS**

When replacing components either in the control box or the heater box area, the manufacturer has suggestions on how much to torque the screws and nuts used in securing items to the machine. Refer to the table below for the torque specifications:

<u>ITEMS</u>	TORQUE SPEC
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Relays	16 ln/lbs
Heater Contactor	35 In/lbs
Heater Nuts	16 In/lbs
Terminal Block	50 In/lbs

# SECTION 4: TROUBLESHOOTING

#### D226 TROUBLESHOOTING SECTION

**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: Power light does not illuminate.

- 1. Power not connected to the unit through the control box. Open the control box cover and verify that incoming power lines are connected and light.
- 2. Service breaker tripped or open. Verify that the breaker is closed.
- 3. Power switch connections could be loose. Ensure that the connections are of sound quality.
- 4. Power switch is faulty. Replace the power switch.
- 5. Power light is faulty. Replace the light.

### Problem: Water pressure is too low.

- 1. Water pressure regulator is out of adjustment. Follow the instructions provided in the maintenance section and adjust so that the flow pressure is  $20 \pm 5$  PSI.
- 2. Water pressure regulator internal strainer is clogged. Clean in accordance with the instructions provided in the maintenance section.
- 3. Water pressure regulator is faulty. Replace the regulator.
- 4. Water pressure gauge is faulty or the cut off from the system. Verify that the test cock valve under the gauge is open to allow for the sensing of line pressure. Replace gauge if necessary.
- 5. Heat exchanger is clogged. Replace the heat exchanger.

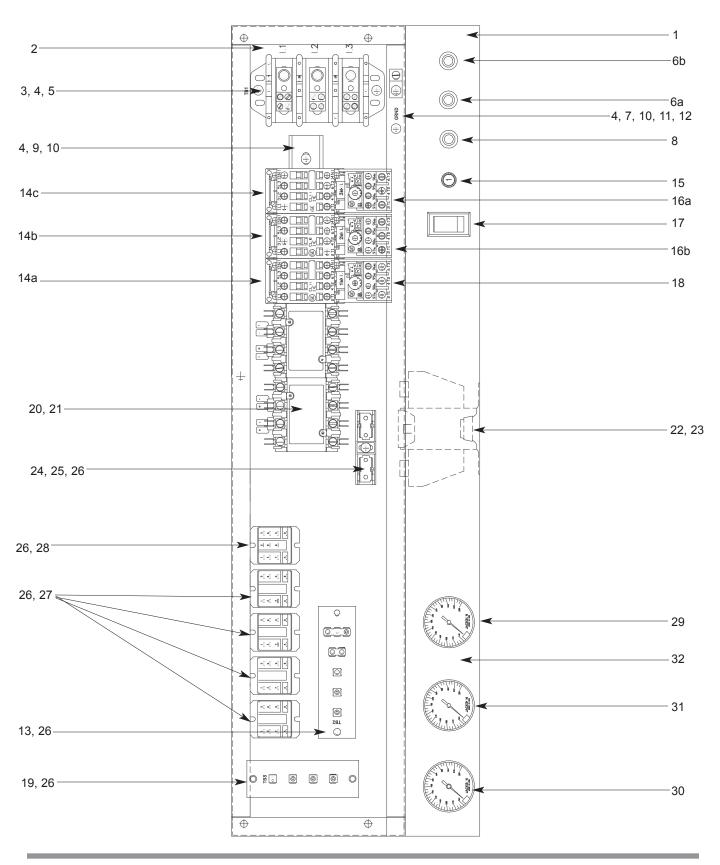
# Problem: Solenoid valve is not opening/shutting.

- 1. Power not connected to the unit through the control box. Open the control box cover and verify that incoming power lines are connected and light.
- 2. Service breaker tripped or open. Verify that the breaker is closed.
- 3. Power switch connections could be loose. Ensure that the connections are of sound quality.
- 4. Power switch is faulty. Replace the power switch.
- 5. Thermostat is faulty. Replace the thermostat.
- 6. Solenoid wires are loose or broken. Verify that the electrical connections are of sound quality.
- 7. Faulty solenoid coil. Replace the solenoid.

#### Problem: Outlet water temperature too low.

- 1. Power not connected to the unit through the control box. Open the control box cover and verify that incoming power lines are connected and light.
- 2. Service breaker tripped or open. Verify that the breaker is closed.
- 3. Power switch connections could be loose. Ensure that the connections are of sound quality.
- 4. Power switch is faulty. Replace the power switch.
- 5. Thermostat is faulty. Replace the thermostat.
- 6. Solenoid wires are loose or broken. Verify that the electrical connections are of sound quality.
- 7. Faulty solenoid coil. Replace the solenoid.
- 8. Steam flow pressure is too low for the unit. Verify that the steam flow is 15-25 PSIG.
- 9. Water flow pressure is too high. Follow the instructions provided in the maintenance section and adjust so that the flow pressure is 20  $\pm$ 5 PSI.
- 10. Heat exchanger is clogged. Replace the heat exchanger.
- 11. Insufficient volume of steam to unit. Check the line size and flow pressure.

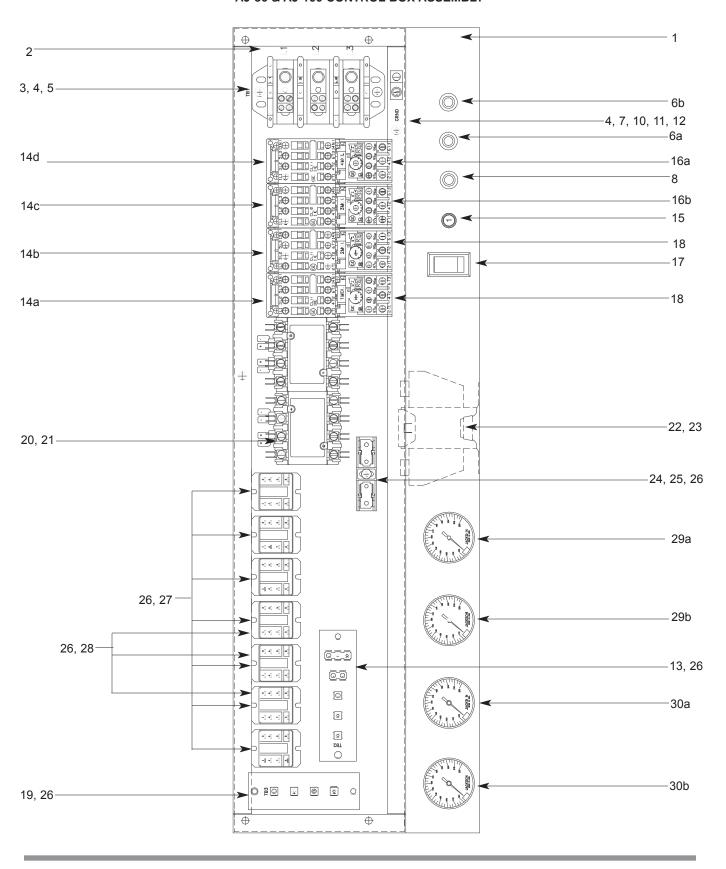
# AJ-64 CONTROL BOX ASSEMBLY



# AJ-64 CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Electrical Box Weldment	05700-041-88-50
2	1	Decal, L1-L2-L3	09905-101-12-66
3	1	Terminal Block	05940-011-48-27
4	6	Lockwasher, #10	05311-273-02-00
5	2	Screw, 10-32 x 3/4" Long Phillips Trusshead	05305-011-62-17
6a	1	Light, Amber (Wash Heater Overload) (Not used on steam or gas models)	05945-111-44-44
6b	1	Light, Amber (Rinse Heater Overload) (Not used on steam or gas models)	05945-111-44-44
7	1	Wire Lug, 2 AWG to 14 AWG	05940-200-76-00
8	1	Light, Red (Power)	05945-111-44-45
9	1	Din Rail	05700-021-72-75
10	3	Screw, 10-32 x 1/2" Long Phillips Trusshead	05305-011-39-36
11	1	Washer, Flat, 1/4"	05311-174-01-00
12	1	Decal, Ground	09905-011-86-86
13	1	Terminal Board	05940-002-78-97
14a	1	Drive Motor Contactor	05945-111-68-38
14b	1	Wash Pump Motor Contactor	05945-111-68-38
14c	1	Recirculating Rinse Pump Motor Contactor	05945-111-68-38
15	1	Circuit Breaker (208 & 230 volt models only)	05925-011-68-34
16a	1	Recirculating Rinse Pump Motor Overload (See motor overloads chart)	N/A
16b	1	Wash Pump Motor Overload (See motor overloads chart)	N/A
17	1	Switch, ON/FILL & OFF/DRAIN	05930-011-49-55
18	1	Drive Motor Overload (See motor overloads chart)	N/A
19	1	Terminal Board	05940-021-89-41
20	2	Heater Contactor (Not available on steam or gas models)	05945-002-24-70
21	2	Screw, 10-32 x 3/8" Long Phillips Trusshead	05305-173-12-00
22	1	Transformer	05950-011-68-35
23	4	Locknut, 10-24 with Nylon Insert	05310-373-01-00
24	1	Fuse Holder (460 volt models only)	05920-011-72-89
25	1	Fuse (460 volt models only)	05920-011-72-88
26	12	Screw, 6-32 x 3/8" Long Phillipshead	05305-171-02-00
27	4	Control Relay, 2 Pole	05945-111-35-19
28	1	Relay, 3 Pole	05945-111-72-51
29	1	Rinse Thermometer	06685-111-68-49
0.0	4	Decal, Rinse 180°F	09905-002-97-62
30	1	Wash Thermometer	06685-111-87-13
0.4	4	Decal, Wash 150°F	09905-002-97-61
31	1	Power Rinse Thermometer	06685-111-87-13
00	4	Decal, Power Rinse 160°F	09905-003-01-31
32	1	Decal, Gauge	09905-021-82-65
Items i	not show	/n·	
		Grommet, 1/2" OD x 3/8" ID	05325-011-46-73
		Bushing, Heyco SB100	05975-210-09-00
		Plug, Heyco 2700 G-875	05975-011-47-81
		Control Box Cover	05700-031-66-88
		Control Box Cover Hinge Weldment	05700-021-68-57
		Control Hinge Rod	05700-011-68-58
		MANUAL/DELIME Switch (Located on rear of contol box)	05930-301-22-18
		MANUAL/DELIME Decal	09905-011-74-61
		Copper Conductors Only Decal	09905-011-47-35
		Control Box Leg	05700-011-71-47
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# AJ-86 & AJ-100 CONTROL BOX ASSEMBLY



# AJ-86 & AJ-100 CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Electrical Box Weldment	05700-041-88-50
2	1	Decal, L1-L2-L3	09905-101-12-66
3	1	Terminal Block	05940-011-48-27
4	6	Lockwasher, #10	05311-273-02-00
5	2	Screw, 10-32 x 3/4" Long Phillips Trusshead	05305-011-62-17
6a	1	Light, Amber (Wash Heater Overload) (Not used on steam or gas models)	05945-111-44-44
6b	1	Light, Amber (Rinse Heater Overload) (Not used on steam or gas models)	05945-111-44-44
7	1	Wire Lug, 2 AWG to 14 AWG	05940-200-76-00
8	1	Light, Red (Power)	05945-111-44-45
9	1	Din Rail	05700-021-94-96
10	3	Screw, 10-32 x 1/2" Long Phillips Trusshead	05305-011-39-36
11	1	Washer, Flat, 1/4"	05311-174-01-00
12	1	Decal, Ground	09905-011-86-86
13	1	Terminal Board	05940-002-78-97
14a	1	Drive Motor Contactor	05945-111-68-38
14b	1	Wash Pump Motor Contactor	05945-111-68-38
14c	1	Recirculating Rinse Pump Motor Contactor	05945-111-68-38
14d	1	Prewash Pump Motor Contactor	05945-111-68-38
15 160	1	Circuit Breaker (208 & 230 volt models only) Recirculating Rinse Pump Motor Overload (See motor overloads chart)	05925-011-68-34
16a 16b	1 1	Wash Pump Motor Overload (See motor overloads chart)	N/A N/A
17	1	Switch, ON/FILL & OFF/DRAIN	05930-011-49-55
18	1	Drive Motor Overload (See motor overloads chart)	N/A
19	1	Terminal Board	05940-021-89-41
20	2	Heater Contactor (Not available on seam models)	05945-002-24-70
21	2	Screw, 10-32 x 3/8" Long Phillips Trusshead	05305-173-12-00
22	1	Transformer	05950-011-68-35
23	4	Locknut, 10-24 with Nylon Insert	05310-373-01-00
24	1	Fuse Holder (460 volt models only)	05920-011-72-89
25	1	Fuse (460 volt models only)	05920-011-72-88
26	12	Screw, 6-32 x 3/8" Long Phillipshead	05305-171-02-00
27	7	Control Relay, 2 Pole (5 for Gas models, 1 not shown)	05945-111-35-19
28	3	Relay, 3 Pole (Gas models only)	05945-111-72-51
29a	1	Rinse Thermometer, 96" (L-R & R-L models)	06685-111-68-49
		Decal, Rinse 180°F	09905-002-97-62
29b	1	Power Rinse Thermometer, 96" (L-R models)	06685-111-68-49
29b	1	Power Rinse Thermometer, 120" (R-L models)	06685-111-87-13
		Decal, Power Rinse 160°F	09905-003-01-31
30a	1	Wash Thermometer, 120" (L-R models)	06685-111-87-13
30a	1	Wash Thermometer, 96" (R-L models)	06685-111-68-49
		Decal, Wash 150°F	09905-002-97-61
30b	1	Prewash Thermometer, 120" (L-R & R-L models)	06685-111-87-13
31	1	Power Rinse Thermometer	06685-111-87-13
00	4	Decal, Power Rinse 160°F	09905-003-01-31
32	1	Decal, Gauge	09905-021-82-65
items i	not shov	vn: Grommet, 1/2" OD x 3/8" ID	05225 011 46 72
		Bushing, Heyco SB100	05325-011-46-73 05975-210-09-00
		Plug, Heyco 2700 G-875	05975-011-47-81
		Control Box Cover	05700-031-66-88
		Control Box Cover Hinge Weldment	05700-031-06-86
		Control Hinge Rod	05700-021-00-57
		MANUAL/DELIME Switch (Located on rear of contol box)	05930-301-22-18
		MANUAL/DELIME Decal	09905-011-74-61
		Copper Conductors Only Decal	09905-011-47-35
		Control Box Leg	05700-011-71-47

# SECTION 5: PARTS SECTION MOTOR OVERLOADS

# AJ-64 SERIES MOTOR OVERLOAD CHART:

	208-230V/60 HZ/1 PHASE	208-230V/60 HZ/3 PHASE	460V/60 HZ/3 PHASE
Drive Motor	Not Applicable	05945-111-68-39	05945-111-69-12
PreWash Motor	Not Applicable	Not Applicable	Not Applicable
Wash Motor	Not Applicable	05945-111-68-40	05945-111-68-41
Power Rinse Motor	Not Applicable	05945-111-68-40	05945-111-68-41

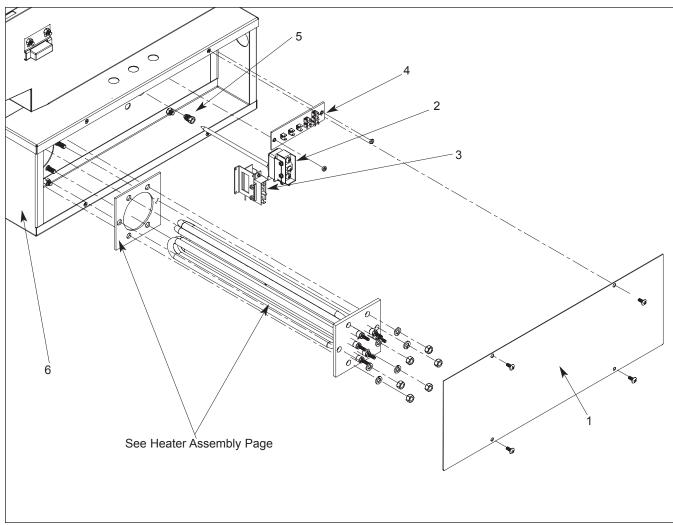
# AJ-86 SERIES MOTOR OVERLOAD CHART:

	208-230V/60 HZ/1 PHASE	208-230V/60 HZ/3 PHASE	460V/60 HZ/3 PHASE
Drive Motor	Not Applicable	05945-111-68-39	05945-111-69-12
PreWash Motor	Not Applicable	05945-111-68-41	05945-111-69-13
Wash Motor	Not Applicable	05945-111-68-40	05945-111-68-41
Power Rinse Motor	Not Applicable	05945-111-68-40	05945-111-68-41

# AJ-100 SERIES MOTOR OVERLOAD CHART:

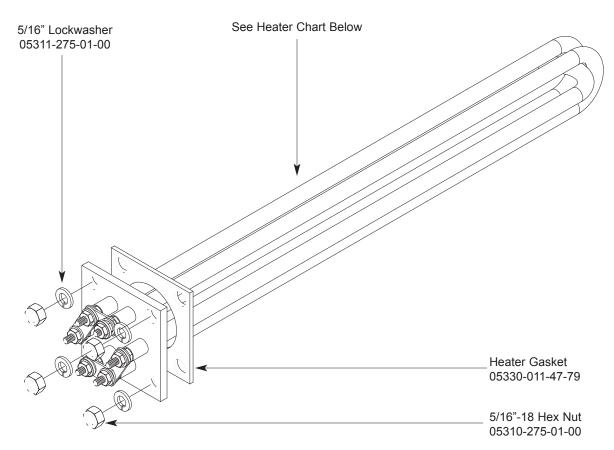
	208-230V/60 HZ/1 PHASE	208-230V/60 HZ/3 PHASE	460V/60 HZ/3 PHASE
Drive Motor	Not Applicable	05945-111-68-39	05945-111-69-12
PreWash Motor	Not Applicable	05945-111-68-40	05945-111-68-41
Wash Motor	Not Applicable	05945-111-68-40	05945-111-68-41
Power Rinse Motor	Not Applicable	05945-111-68-40	05945-111-68-41

# **HEATER BOX ASSEMBLY**



ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Heater Box Cover	05700-031-81-61
2	1	Kit, Thermostat, Wash Regulating (Electrically Heated)	06401-003-18-20
2	1	Kit, Thermostat, Wash Regulating (Steam Heated)	06401-003-18-21
3	1	Thermostat, High Limit	05930-011-49-43
4	1	Terminal Board	05940-002-78-97
5	1	Fitting, 1/4", Imperial Brass	05310-924-02-05
6	1	Heater Box Weldment	05700-002-41-18

# SECTION 5: PARTS SECTION HEATER ASSEMBLY



# **Heater Chart**

Model	<u>Volts</u>	<u>Phase</u>	<u>KW</u>	Part Number
All*	208 230	1 1	10 10	06401-003-12-94 06401-003-12-95
	208	3	10	06401-003-12-94
	230 460	3	10 10	06401-003-12-95 06401-003-12-96

# **Heater Chart**

Model	KW	208V Models	230V Models	460V Models
All*	15	04540-121-68-45	04540-121-68-46	04540-121-68-47

<sup>\* - &</sup>quot;CS" & "CGP" models do not use electric heaters in the wash tank or power rinse tank.

**SERVICE NOTE:** When replacing the tub heaters, it is HIGHLY recommended that you also change out the gasket as well. Once installed, gaskets become compressed and are subjected to extreme temperature changes. Replacing the gasket with a new one when replacing the heater may prevent future leaks.

**SERVICE NOTE:** The nuts used to secure the heater to the tub should be torqued to 16 in-lbs. After tightening, the unit should be allowed to heat up and operate normally for approximately 30 minutes. Secure power to the machine and check the nuts once more to ensure that they are torqued to 16 in-lbs.

# **HEATER ASSEMBLY (CONTINUED)**

The wash tank heater system is electrically connected in the circuit so that they are dependent upon the dishwasher being properly filled with and maintaining a safe water level, two thermostats (mounted in the heater box behind the dress panel), float switch (mounted in the wash tank), and the heater relay (mounted in control box) with the heater being activated by the thermostats.

Once the dishwasher has been filled to the correct level, the heater should operate automatically. Should the tank heat be too high, too low or no indication of temperatures at all, the following checkout should be made.

# Note: The following checkout should be made by either a qualified service person or electrician.

## A- Checkout of the heater system

- 1- If the temperature is too high, adjust thermostat using instructions on the page entitled "Thermostats".
- 2- If temperature is too low, adjust thermostat as above, then:
  - a Turn off power to machine by placing customer's circuit breaker in the "OFF" position. Turn off machine circuit breaker located on right side of control box.
  - b Remove cover from control box on top of dishwasher.
  - c Make sure water temperature is below 140° F.(preferably about 130°F.).
  - d Turn on both circuit breakers. Observe heater relay (R1) while the power switch is turned "ON" and "OFF". If relay contacts move in and out, the heater relay is operating correctly: if not proceed to "C".

## B- If heater relay (R1) closes:

- 1 Check power supply at incoming terminal board L1, L2 & L3. It should be the same voltage as indicated on the machine data plate.
- 2 Check power at connections on heater relay (R1). The voltage should agree with the voltage on the machine data plate. If not, check wires for breaks or bad connections.
- 3 Check power at terminals of heater which should agree with the data plate. If not check wires for breaks or bad connections.
- 4 Temperatures should rise as explained in "C-1", and amperage may be checked according to those instructions. Replace any defective elements.

# C - If heater relay (R1) does not close.

1 - There is an insulated movable insulated movable bar on relay across the top. With an insulated probe, depress this bar and observe the thermometer: the temperature should rise noticeably in a minute or two. If it moves slowly, it would indicate that the element is faulty. If it moves constantly higher at a good rate, elements should be good.

Note: A check with an amp probe at heater relay (R1) terminals should be made to verify the amp draw on each leg. This should be appropriate for the voltage and phase indicated on the data plate

### **HEATER PROTECTION & AUTOMATIC FILL**

This control is activated when the power switch is turned "ON". The primary function is to automatically energize the wash tank heat circuit. It will also cutoff the wash tank heat circuit should the water be accidently drained from the machine with the power switch still "ON". The power switch should always be turned-off before draining the unit.

This water level control consists of two (2) floats that operate when the power switch is turned on and works in conjunction with the thermostats and heater relays.

When the power switch is turned "ON" water starts to enter the dishmachine. When it reaches the proper level the normally open contacts in the water level float switch close activating the heating circuit for tank heat.

If the water level below the correct level while power is still on, the float switch will sense the lack of water and de-activate the heater.

# FRAME WELDMENTS/DRESS PANELS

# **FRAME WELDMENTS**

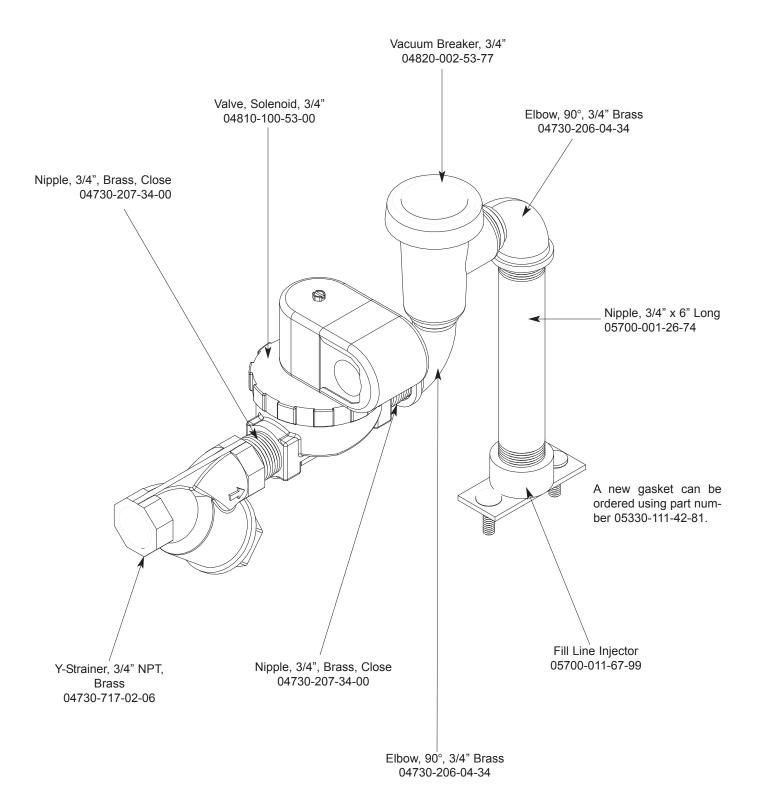
Model	Left to Right Part Number	Right to Left Part Number
AJ-64's	05700-002-73-00	05700-002-73-00
AJ-86's	05700-041-83-65	05700-041-83-65
AJ-86CGP	05700-041-83-65	05700-041-83-65
AJ-100's	05700-041-91-00	05700-041-91-00
AJ-100CGP	05700-041-91-00	05700-041-91-00

Bullet Feet (4 per model) - order using part number 05340-011-71-74.

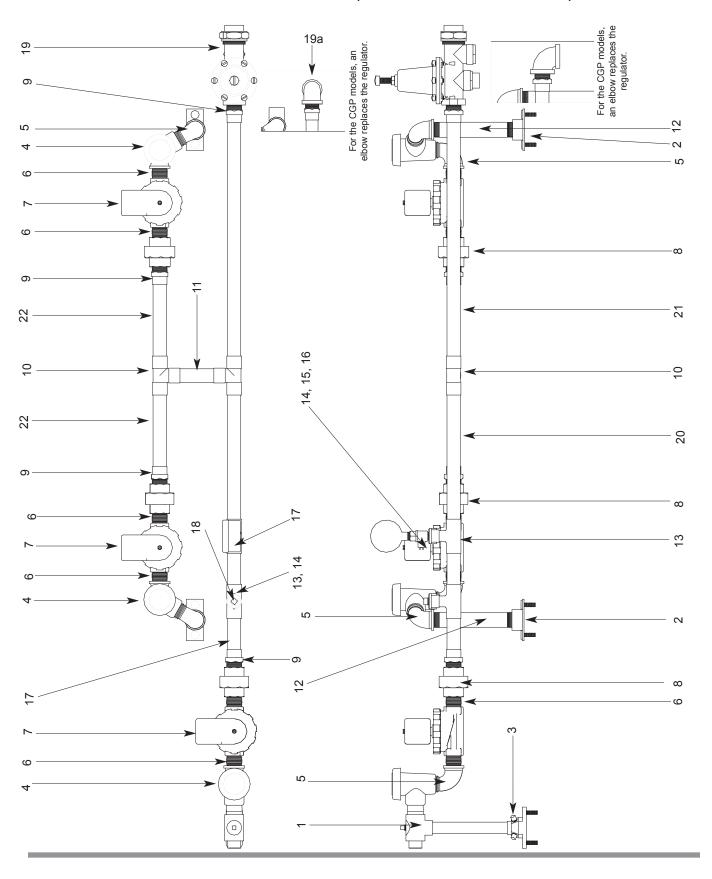
# **FRONT DRESS PANELS**

Model	Left to Right Part Number	Right to Left Part Number
AJ-64's	05700-002-40-41	05700-002-40-41
AJ-86's	05700-031-83-68	05700-041-86-60
AJ-86CGP	05700-002-89-68	05700-041-86-60
AJ-100's	05700-041-94-89	05700-041-91-06
AJ-100CGP	05700-041-94-89	05700-041-91-06

# PREWASH PLUMBING ASSEMBLY



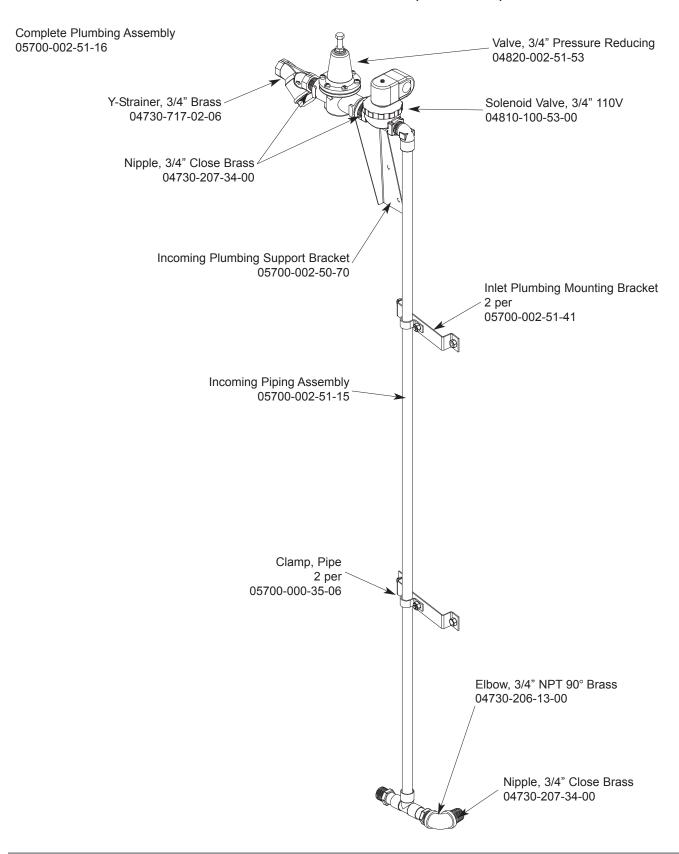
# INCOMING PLUMBING ASSEMBLY (ELECTRIC & GAS HEATED MODELS)



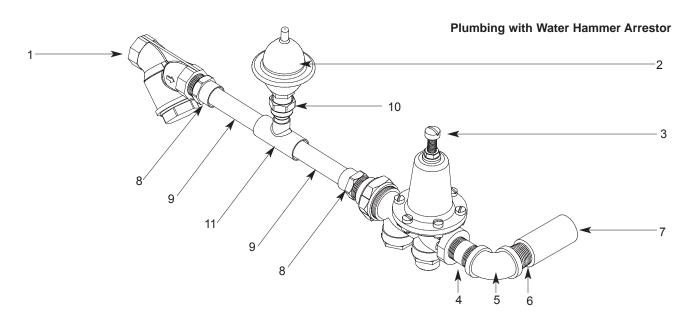
# INCOMING PLUMBING ASSEMBLY(CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Injector, Rinse Weldment (L-R all units)	05700-021-67-98
1	1	Injector, Rinse Weldment (R-L CGP units only)	05700-002-57-87
2	2	Fill Line, Injector	05700-011-67-99
3	3	Plug, 1/8" NPT, Brass	04730-209-07-37
4	3	Vacuum Breaker, 3/4" NPT, Brass	04820-002-53-77
5	5	Elbow, 3/4" NPT, Street, Brass	04730-206-04-34
6	6	Nipple, 3/4" NPT, Close, Brass	04730-207-34-00
7	3	Valve, Solenoid, 3/4" NPT, 110 Volt	04810-100-53-00
8	3	Union, 3/4" NPT, Brass	04730-212-05-00
9	4	Adapter, 3/4" Male	04730-401-11-01
10	2	Tee, Copper, 3/4" CU x CU x CU	04730-411-46-01
11	1	Tube, Copper, 3/4" x 3" Long	05700-000-54-85
12	2	Nipple, 3/4" NPT, Brass, 6" Long	05700-001-26-74
13	2	Tee, Copper, 3/4" x 3/4" x 1/2"	04730-411-03-01
14	2	Adapter, Threaded, 1/4"	04730-401-41-01
15	1	Valve, Ball, Test Cock, 1/4" NPT	04810-011-72-67
16	1	Gauge, 0-100 PSI	06685-111-88-34
	1	Decal, 15-25 PSI	09905-002-97-74
17	2	Tube, 3/4" x 2-13/16" Long	05700-011-72-72
18	1	Plug, 1/4"	04730-209-01-00
19	1	Regulator, Pressure, 3/4" NPT (Not used on CGP models)	06685-011-58-22
19a	1	Elbow, 3/4" 90° Brass (Used on CGP models only)	04730-206-13-00
20	1	Tube, 3/4" x 9" Long	05700-000-75-61
21	1	Tube, 3/4" x 16-1/4" Long	05700-011-31-48
22	2	Tube, 3/4" x 5-1/2" Long	05700-002-61-46

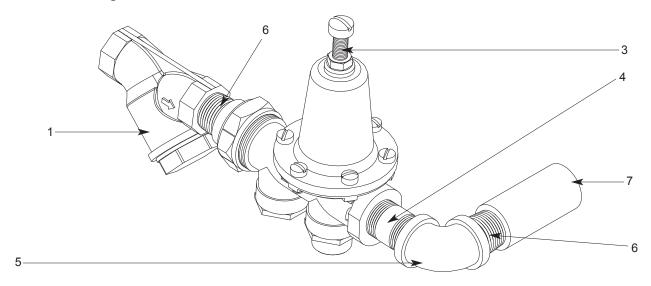
#### RINSE HEADER PLUMBING ASSEMBLY (CGP MODELS)



## EXTERNAL ELECTRIC BOOSTER INCOMING PLUMBING ASSEMBLIES

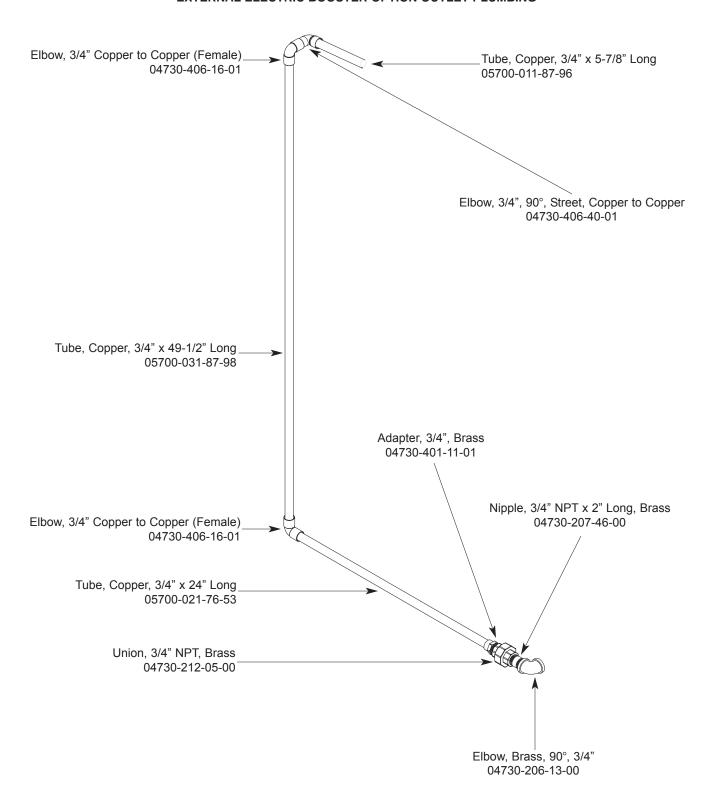


## **Plumbing without Water Hammer Arrestor**



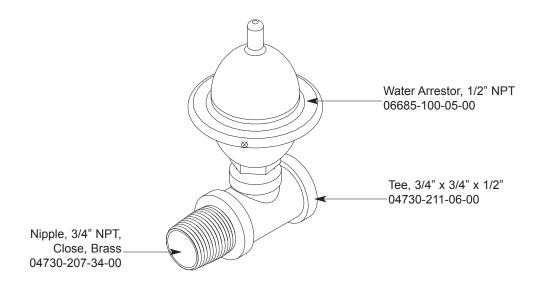
ITEM	QTY	DESCRIPTION	Mfg. No.
1	-	Y-Strainer, 3/4" NPT, Brass	04730-717-02-06
2	-	Arrestor, Water Hammer, 1/2" NPT	06685-100-05-00
3	-	Regulator, Pressure, 3/4" NPT, Brass	06685-011-58-22
4	-	Nipple, 3/4" NPT x 2" Long, Brass	04730-207-46-00
5	-	Elbow, Brass, 90°, 3/4"	04730-206-13-00
6	-	Nipple, 3/4" NPT, Close, Brass	04730-207-34-00
7	-	Coupling, 3/4" FNPT x 3/4" FNPT, Brass	04730-011-87-95
8	-	Adapter, 3/4" Male	04730-401-11-01
9	-	Tube, Copper, 3/4" x 3-7/16" Long	05700-011-72-70
10	-	Adapter, 1/2" NPT x Male	04730-401-07-01
11	-	Tee, Copper, 3/4" x 3/4" x 1/2"	04730-411-03-01

#### **EXTERNAL ELECTRIC BOOSTER OPTION OUTLET PLUMBING**

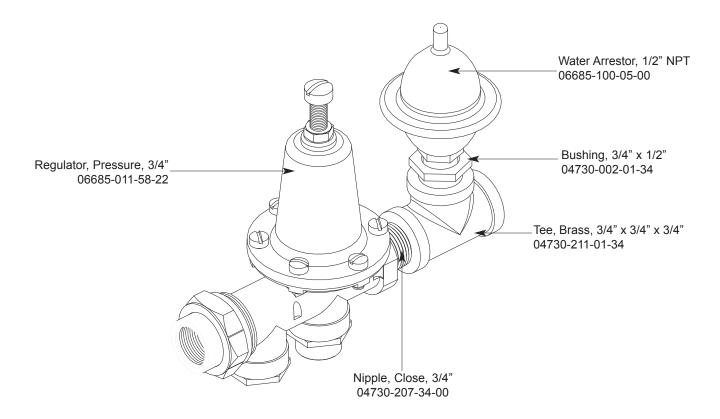


#### WATER HAMMER ARRESTOR OPTION/WATER PRESSURE REGULATOR KIT OPTION

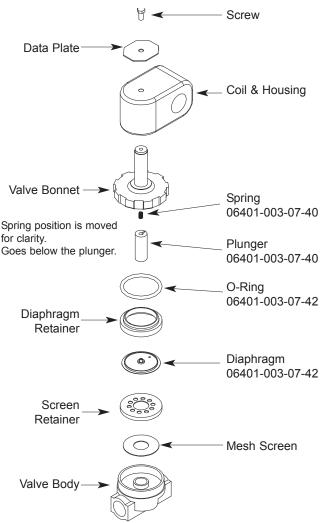
#### WATER HAMMER ARRESTOR OPTION



#### WATER PRESSURE REGULATOR WITH ARRESTOR KIT OPTION



#### RINSE SOLENOID VALVE & VACUUM BREAKER REPAIR PARTS KITS

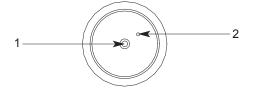


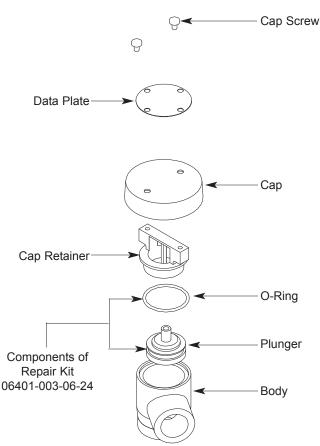
Complete 110 Volt Solenoid Valve Assembly, 3/4" 04810-100-53-00

Coil & Housing only, 3/4" 04810-200-01-18

#### Possible Problems:

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



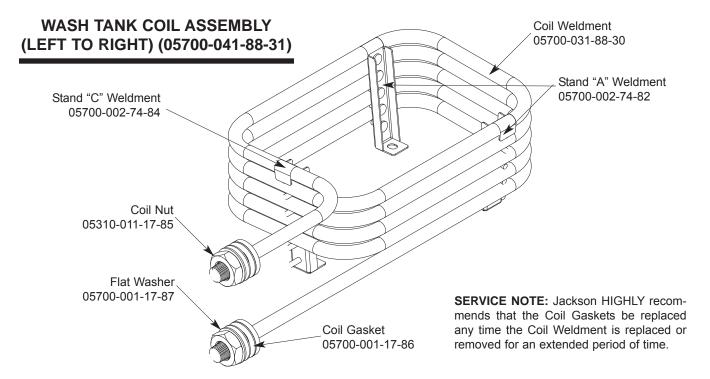


Complete Vacuum Breaker Assembly, 3/4" NPT 04820-002-53-77

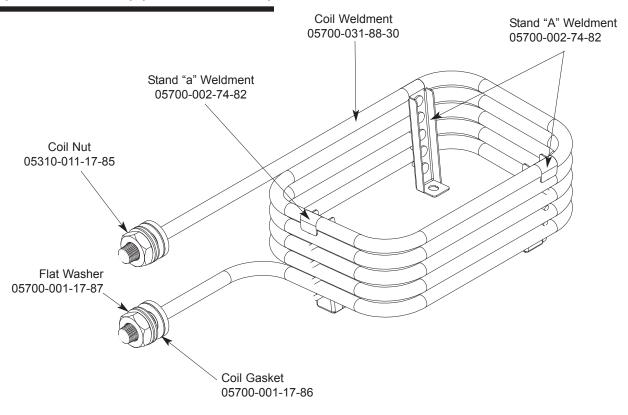
DISASSEMBLY - These valves may be taken apart by unscrewing the bonnet and the enclosing tube assembly from the valve body assembly. After unscrewing, carefully lift off the bonnet and enclosing tube assembly. Don't drop the plunger. The o-ring seal and diaphragm cartridge can now be lifted out. Be careful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

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

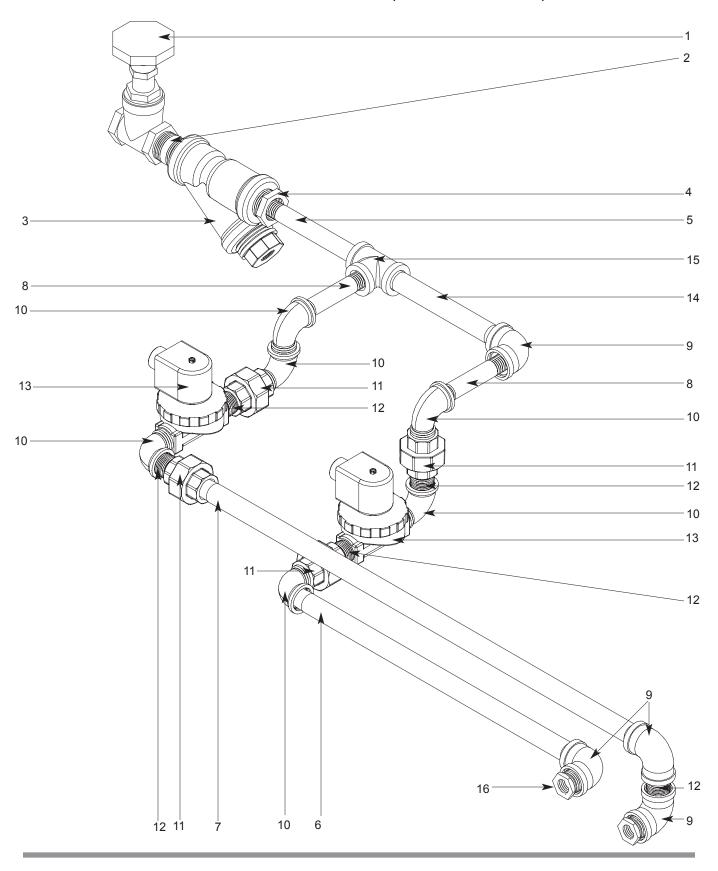
WASH TANK COIL ASSEMBLY



# WASH TANK COIL ASSEMBLY (RIGHT TO LEFT) (05700-002-81-44)



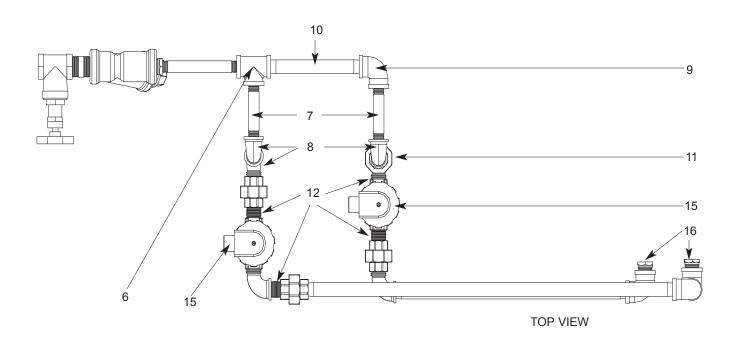
## STEAM INLET PLUMBING ASSEMBLY (LEFT TO RIGHT MODELS)

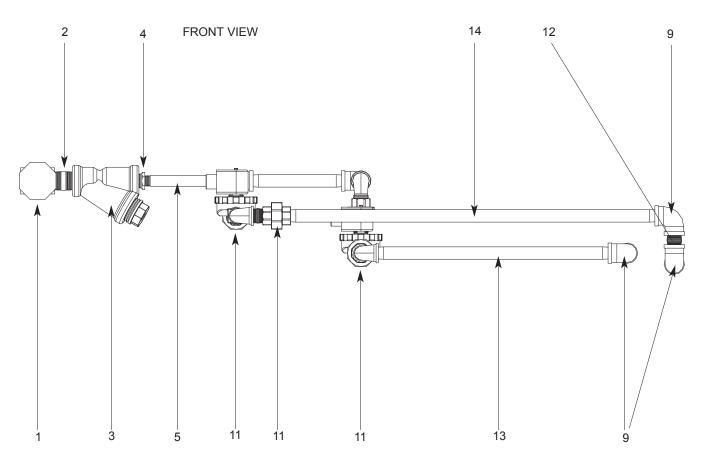


## STEAM INLET PLUMBING ASSEMBLY (LEFT TO RIGHT MODELS) (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Valve, 1" Gate, Steam	04820-011-87-30
2	1	Nipple, 1" NPT, Close, Black Iron	04730-907-08-34
3	1	Y-Strainer, 1" NPT, Black Iron	04730-217-02-32
4	1	Reducer, 1" to 3/4"	04730-011-95-66
5	1	Nipple, 3/4" NPT x 6" Long, Black Iron	04730-907-01-34
6	1	Nipple, 3/4" NPT x 17" Long, Black Iron	05700-002-74-16
7	1	Nipple, 3/4" NPT x 26-1/2" Long, Black Iron	05700-002-74-17
8	2	Nipple, 3/4" NPT x 2" Long, Black Iron	04730-907-02-34
9	4	Elbow, 90°, 3/4" NPT, Black Iron	04730-906-10-34
10	6	Elbow, 90°, 3/4" NPT, Street, Black Iron	04730-011-87-37
11	4	Union, 3/4" NPT, Black Iron	04730-912-01-00
12	5	Nipple, Close, 3/4" NPT, Black Iron	04730-907-04-00
13	2	Valve, Solenoid, Steam, 120V, 3/4" NPT	04820-011-87-39
14	1	Nipple, 3/4" NPT x 7" Long, Black Iron	05700-002-74-15
15	1	Tee, 3/4" NPT x 3/4" NPT x 3/4" NPT, Black Iron	04730-002-74-14
16	2	Reducer, 3/4" NPT to 1/2" NPT, Black Iron	04730-911-02-34

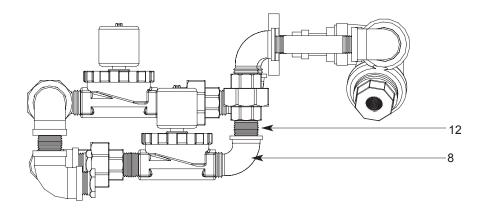
## STEAM INLET PLUMBING ASSEMBLY (RIGHT TO LEFT MODELS)





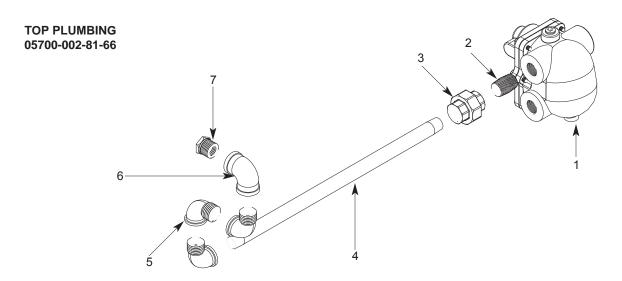
# STEAM INLET PLUMBING ASSEMBLY (RIGHT TO LEFT MODELS)(CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Valve, 1" Gate	04820-011-87-30
2	1	Nipple, 1" NPT, Close, Black Iron	04730-907-08-34
3	1	Y-Strainer, 1" NPT, Black Iron	04730-217-02-32
4	1	Reducer, 1" NPT to 3/4" NPT	04730-011-95-66
5	1	Nipple, 3/4" NPT x 6" Long, Black Iron	04730-907-01-34
6	1	Tee, 3/4" x 3/4" x 3/4", Black Iron	04730-002-74-14
7	2	Nipple, 3/4" NPT x 4" Long, Black Iron	04730-907-02-34
8	6	Elbow, Street, 3/4" NPT, 90°, Black Iron	04730-011-87-37
9	4	Elbow, 3/4" NPT, 90°, Black Iron	04730-906-10-34
10	1	Nipple, 3/4" NPT x 7" Long, Black Iron	05700-002-74-15
11	4	Union, 3/4" NPT, Black Iron	04730-912-01-00
12	5	Nipple, 3/4" NPT, Close, Black Iron	04730-907-01-00
13	1	Nipple, 3/4" NPT x 17" Long, Black Iron	05700-002-74-16
14	1	Nipple, 3/4" NPT x 26-1/2" Long, Black Iron	05700-002-74-17
15	2	Valve, Solenoid, Steam, 3/4" NPT, 120V	04820-011-87-39
16	2	Reducer, 3/4" NPT to 1/2" NPT	04730-911-02-34

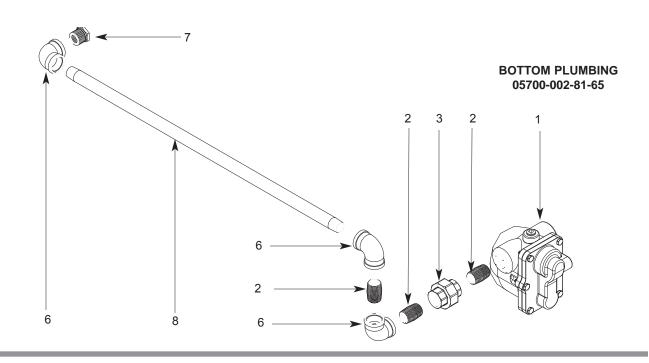


RIGHT SIDE VIEW

STEAM OUTLET PLUMBING (LEFT TO RIGHT)

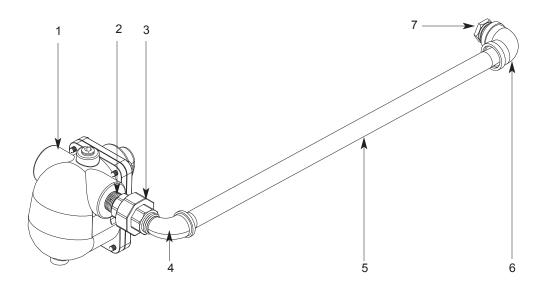


ITEM	QTY	DESCRIPTION	Mfg. No.
1	-	Trap, Steam, 3/4" NPT	06680-500-02-77
2	-	Nipple, Close, 3/4" NPT, Black Iron	04730-907-01-00
3	-	Union, 3/4" NPT, Black Iron	04730-912-01-00
4	-	Nipple, 3/4" x 18" Long, Black Iron	05700-002-74-10
5	-	Elbow, 90° Street, 3/4" NPT, Black Iron	04730-011-87-37
6	-	Elbow, 90°, 3/4" NPT, Black Iron	04730-906-10-34
7	-	Reducer, 3/4" NPT to 1/2" NPT Black Iron	04730-911-02-34
8	-	Nipple, 3/4" NPT x 26-1/2" Long, Black Iron	04730-911-02-34

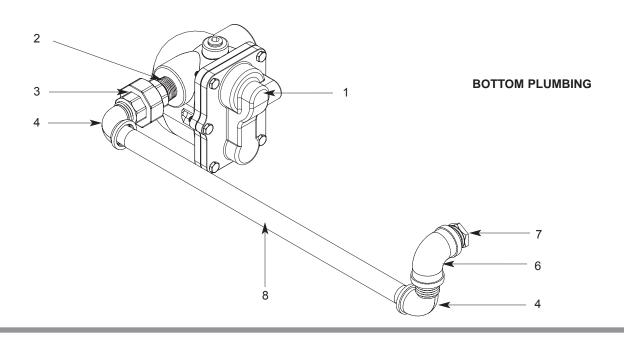


# STEAM OUTLET PLUMBING (RIGHT TO LEFT)

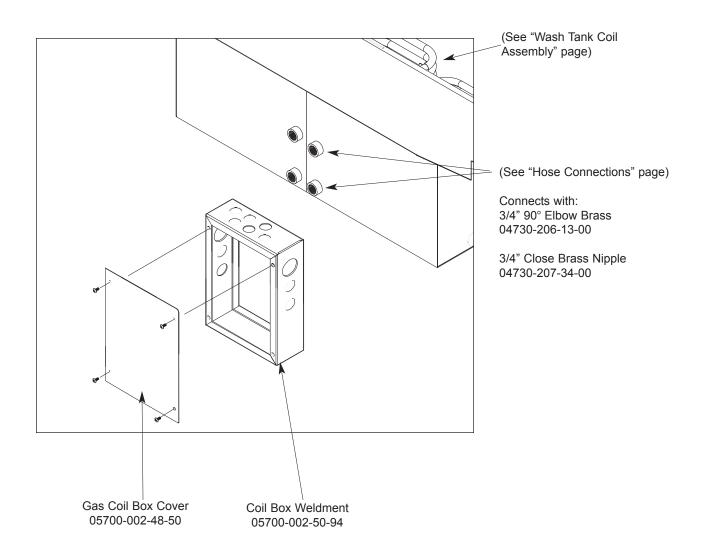
## TOP PLUMBING



ITEM	QTY	DESCRIPTION	Mfg. No.
1	-	Steam Trap	06680-500-02-77
2	-	Nipple, Close, 3/4", Black Iron	04730-907-01-00
3	-	Union, 3/4" NPT, Black Iron	04730-912-01-00
4	-	Elbow, Street, 90°, Black Iron	04730-011-87-37
5	-	Nipple, 3/4" NPT x 22" Long, Black Iron	05700-002-74-08
6	-	Elbow, 90°, 3/4" FNPT, Black Iron	04730-906-10-34
7	-	Reducer, 3/4" NPT x 1/2" NPT	04730-911-02-34
8	_	Nipple, 3/4" NPT x 18" Long, Black Iron	05700-002-74-10



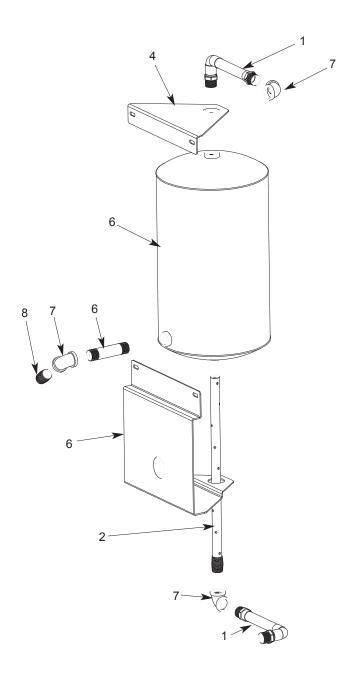
#### AJ-86 GAS COIL ASSEMBLY (CGP MODELS)

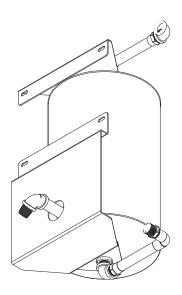


Other items used but not shown.

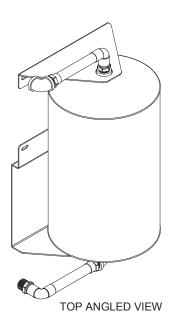
05930-011-49-43
05330-200-02-70
05940-002-78-97
05700-011-81-64
09905-011-84-31
06401-140-00-32
05310-924-02-05
(

# TANK, RINSE BOOSTER (CGP MODELS ONLY)



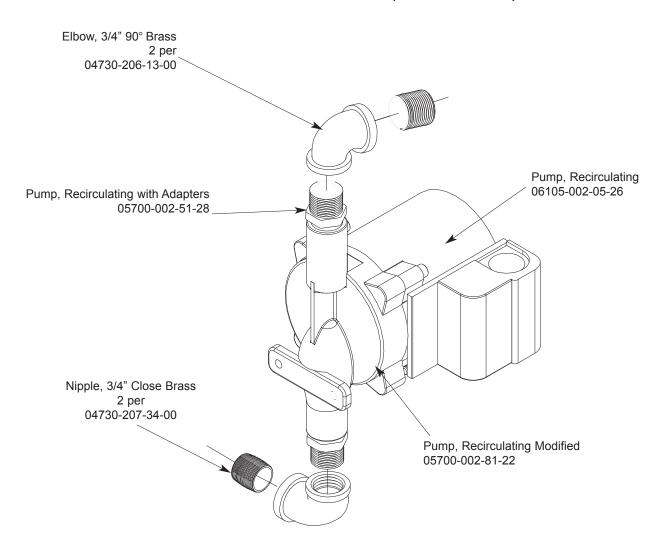


BOTTOM ANGLED VIEW

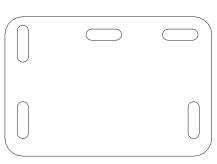


ITEM	QTY	DESCRIPTION	Mfg. No.
1	2	Plumbing Assembly, Inlet/Discharge, Rinse Tank	05700-002-51-24
2	1	Tube, Dispersion Weldment	05700-002-46-16
3	1	Tank, GP Rinse	05700-002-45-05
4	1	Bracket, Upper Rinse Tank	05700-002-67-13
5	1	Bracket, Lower Rinse Tank	05700-002-67-14
6	1	Nipple, 3/4" NPT x 4" Long	04730-207-05-00
7	3	Elbow, 3/4" NPT, 90° Brass	04730-206-13-00
8	1	Nipple, 3/4" NPT x Closed Brass	04730-207-34-00

#### RECIRCULATING PUMP ASSEMBLY (CGP MODELS ONLY)

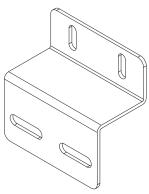


Used only on AJ-86CGP left to right units.



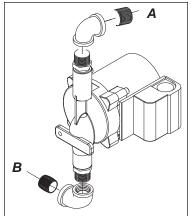
Mounting Bracket 05700-002-25-74

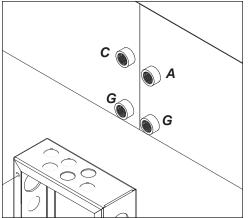
Used on AJ-64CGP, AJ-86CGP, AJ-100CGP units right to left units and the AJ-64CGP left to right unit.

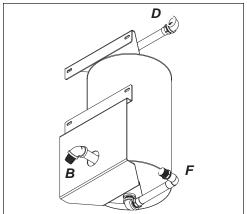


Mounting Bracket 05700-002-23-61

#### **HOSE CONNECTIONS (CGP MODELS ONLY)**



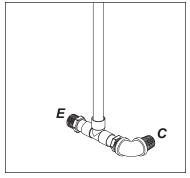




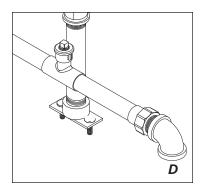
Recirculating Pump Assembly

Gas Coil Weldment

Rinse Booster Tank



Rinse Header Plumbing Assembly



Wash/Fill Plumbing Assembly

#### **HOSE ASSEMBLIES**

## AJ-86CGP (L-R & R-L) AJ-100CGP (L-R)

\*Each hose assembly includes 2, 3/4" Pushlock Fittings part number 04730-011-94-00.

 A - Hose, Recirculating Discharge
 05700-002-52-74
 05700-002-52-76

 B - Hose, Recirculating Pump Suction
 05700-002-52-75
 05700-002-51-38

 C - Hose, Wash Coil Assembly
 05700-002-52-76
 04720-011-94-10 (66")

 D - Hose, Wash/Fill Supply
 05700-003-03-97
 05700-003-03-99

E - Hose connection to existing gas booster outlet fitting.

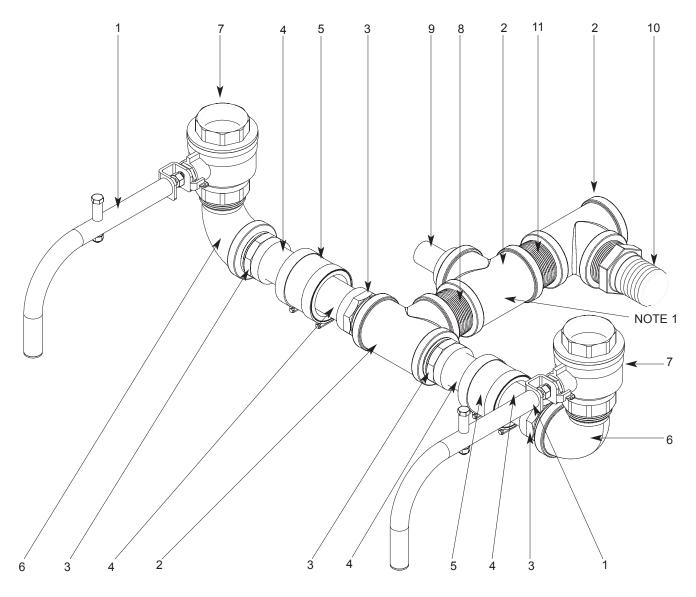
F - Hose connection to existing gas booster inlet fitting.

G - Hose, Coil Recirculating 05700-002-17-71 05700-002-17-71

Gas Booster Connection Kit 05700-002-51-73 includes: 18 Feet of 3/4" Hose

4 - 3/4" Push Lock Fittings

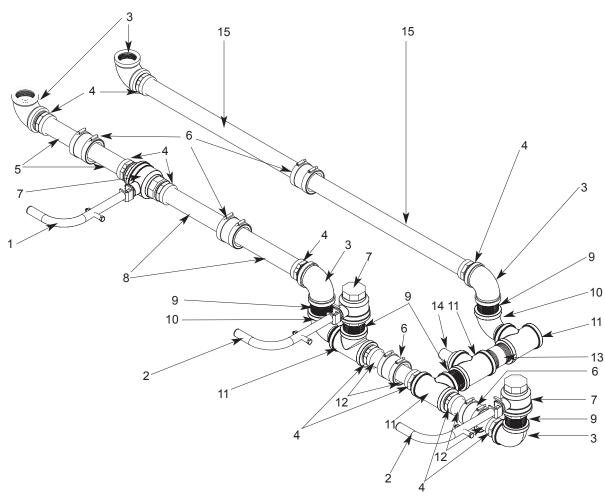
## AJ-64 DRAIN PLUMBING ASSEMBLY



ITEM	QTY	DESCRIPTION	Mfg. No.
1	2	Ball Valve Handle Assembly	05700-021-84-74
	1	Spacer (Not Shown)	05700-002-87-05
2	3	Tee, Brass, 1-1/2" x 1-1/2" x 1-1/2"	04730-011-69-93
3	4	Adapter, 1-1/2"	04730-401-25-01
4	4	Tube, Copper, 1-1/2" OD x 2" Long	05700-011-87-16
5	2	Connector, No-Hub, 1-1/2"	04720-604-06-00
6	2	Elbow, 1-1/2", Street, Brass, 90°	04730-206-32-00
7	2	Valve, Ball, 1-1/2" NPT	04820-111-71-46
8	1	Nipple, 1-1/2" NPT, Brass, Close	04730-207-40-00
9	1	Rinse Nipple Weldment	05700-021-84-61
10	1	Fitting, Barbed, 1-1/2" NPT x 1-1/2"	04730-011-69-92
11	1	Nipple, Brass, 1-1/2" x 3" Long	04730-011-87-04

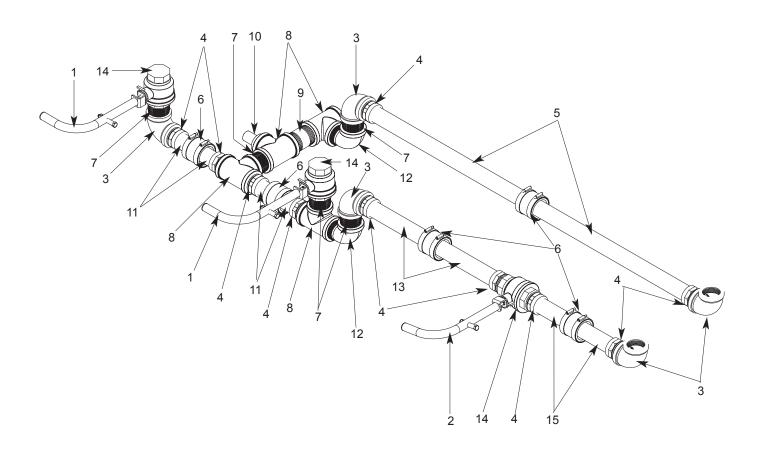
NOTE 1: Component is shown for installation in a Right-to-Left model; component is rotated 180 degrees for Left-to-Right units.

# AJ-86 & AJ-100 DRAIN PLUMBING ASSEMBLY (LEFT TO RIGHT MODELS)



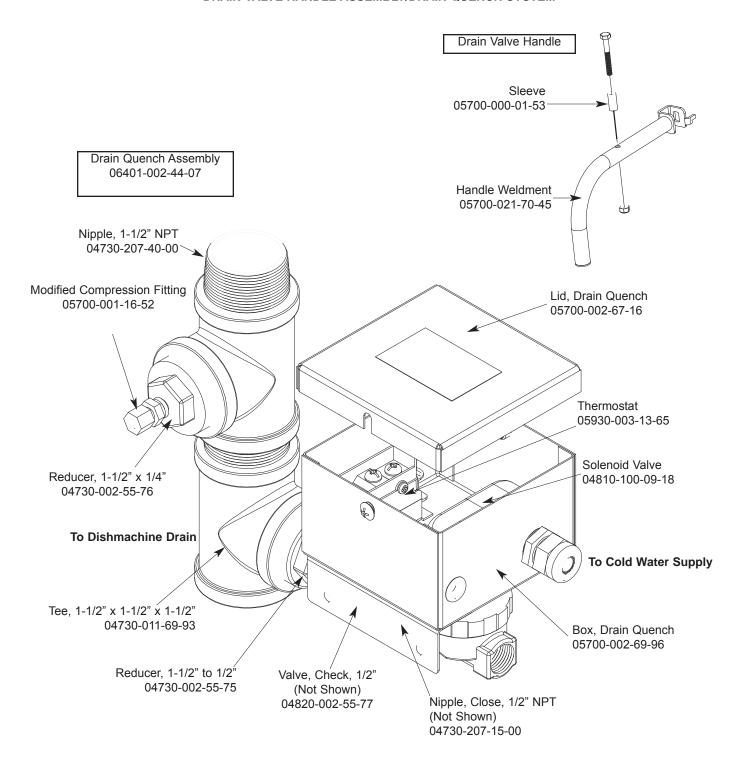
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Ball Valve Handle	05700-021-84-74
		Spacer (Not Shown)	05700-002-87-05
2	2	Ball Valve Handle	05700-021-83-53
		Spacer (Not Shown)	05700-002-87-05
3	5	Elbow, 1-1/2" FNPT, 90° Brass	04730-011-73-77
4	10	Adapter, 1-1/2"	04730-401-25-01
5	2	Tube, Copper, 1-1/2" OD x 4-7/16" Long (AJ-86 Models)	05700-011-84-22
	2	Tube, Copper, 1-1/2" OD x 5-1/4" Long (AJ-100 Models)	05700-002-79-12
6	5	Connector, No-Hub, 1-1/2"	04720-604-06-00
7	3	Ball Valve, 1-1/2"	04820-011-71-46
8	2	Tube, Copper, 1-1/2" OD x 7-3/4" Long (AJ-86 Models)	05700-021-84-24
	2	Tube, Copper, 1-1/2" OD x 13-3/4" Long (AJ-100 Models)	05700-021-88-17
9	5	Nipple, 1-1/2" NPT, Brass, Close	04730-207-40-00
10	2	Elbow, 1-1/2" NPT, Brass, Street	04730-206-32-00
11	4	Tee, Brass, 1-1/2" NPT	04730-011-69-93
12	4	Tube, Copper, 1-1/2" OD x 2" Long	05700-011-87-16
13	1	Nipple, Brass, 1-1/2" NPT x 3" Long	04730-011-87-04
14	1	Rinse Nipple Weldment	05700-021-84-61
15	2	Tube, Copper, 1-1/2" OD x 20-1/8" Long (AJ-86 Models)	05700-021-84-29
	2	Tube, Copper, 1-1/2" OD x 27-1/2" Long (AJ-100 Models)	05700-021-84-28

# AJ-86 & AJ-100 DRAIN PLUMBING ASSEMBLY (RIGHT TO LEFT MODELS)



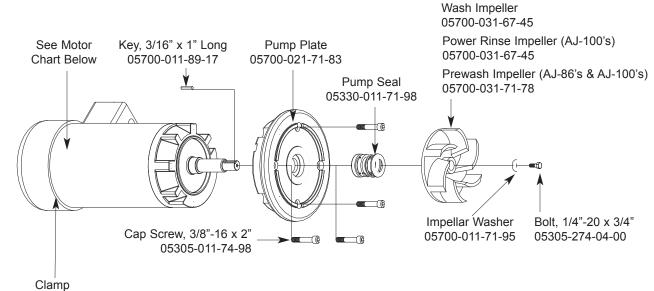
ITEM	QTY	DESCRIPTION	Mfg. No.
1	2	Ball Valve Handle Assembly	05700-021-83-53
		Spacer (Not Shown)	05700-002-87-05
2	1	Ball Valve Handle Assembly	05700-021-84-74
		Spacer (Not Shown)	05700-002-87-05
3	5	Elbow, 1-1/2" FNPT, 90°, Brass	04730-011-73-77
4	10	Adapter, 1-1/2" NPT	04730-401-25-01
5	2	Tube, 1-1/2" x 20-1/8" Long (AJ-86 Models)	05700-021-84-29
	2	Tube, Copper, 1-1/2" x 27-1/2" Long (AJ-100 Models)	05700-021-84-28
6	5	Connector, No Hub, 1-1/2"	04720-604-06-00
7	5	Nipple, 1-1/2" NPT, Brass, Close	04730-207-40-00
8	4	Tee, 1-1/2" NPT x 1-1/2" NPT x 1-1/2" NPT	04730-011-69-93
9	1	Nipple, 1-1/2" NPT x 3 Long, Brass	04730-011-87-04
10	1	Rinse Nipple Weldment	05700-021-84-61
11	4	Tube, Copper, 1-1/2" x 2" Long	05700-011-87-16
12	2	Elbow, 1-1/2" NPT, 90°, Brass, Street	04730-206-32-00
13	2	Tube, Copper, 1-1/2" x 7-3/4" Long (AJ-86 Models)	05700-021-84-24
	2	Tube, Copper, 1-1/2" x 13-3/4" Long (AJ-100 Models)	05700-021-88-17
14	3	Valve, Ball, 1-1/2" NPT	04820-011-71-46
15	2	Tube, Copper, 1-1/2" x 4-7/16" Long (AJ-86 Models)	05700-011-84-22
	2	Tube, Copper, 1-1/2" x 5-1/4" Long (AJ-100 Models)	05700-002-79-12

#### DRAIN VALVE HANDLE ASSEMBLY/DRAIN QUENCH SYSTEM



From the existing drain, attach the two additional Tees using the 1-1/2" NPT Close Nipples. Tighten the Reducers into the Tees as shown above. Attach the Modified Compression Fitting into the 1-1/2" to 1/4" Reducer. Position the bulb of the thermostat so that it rests approximately 1/4" from the bottom of the Tee. Tighten the Modified Compression Fitting as required. Attach to the incoming cold water line. Use pipe dope or thread tape as required to prevent any leaks.

#### **MOTOR ASSEMBLIES**



#### **WASH MOTOR CHART**

<u>Volts</u>	<u>Phase</u>	<u>Hz</u>	Part Number
208 - 230	1	60	06105-021-70-57
200 - 230	3	60	06105-121-70-58
460	3	60	06105-121-70-58

#### **PREWASH MOTOR CHART**

Upper Support Bracket — 05700-021-73-68	*
Nut, 1/4"-20 Serrated 05310-011-66-49	
Lower Support Bracket 05700-021-73-71	

(Not Shown) 04730-002-32-15

0 0
Motor Mounting Gasket

05330-011-71-62

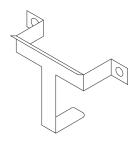
Model(s) AJ-86's	Volts 208 230 208 230 460	Phase 1 1 3 3 3	Hz 60 60 60 60 60	Part Number 06105-121-70-55 06105-121-70-55 06105-121-70-56 06105-121-70-56 06105-121-70-56
AJ-100's	208 230 208 230 460	1 1 3 3 3	60 60 60 60	06105-121-70-57 06105-121-70-57 06105-121-70-58 06105-121-70-58 06105-121-70-58

#### **POWER RINSE MOTOR CHART**

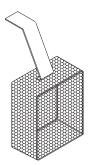
Model(s)	<u>Volts</u>	<u>Phase</u>	<u>Hz</u>	Part Number
AJ-100's	208	1	60	06105-121-70-57
	230	1	60	06105-121-70-57
	208	3	60	06105-121-70-58
	230	3	60	06105-121-70-58
	460	3	60	06105-121-70-58

#### PREWASH & WASH PUMP WELDMENT

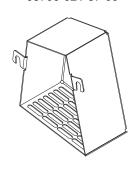
Prewash Strainer Bracket 05700-021-74-94



Prewash Intake Strainer Weldment 05700-021-74-96

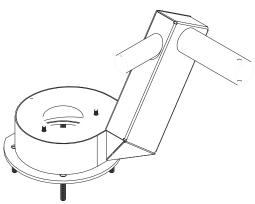


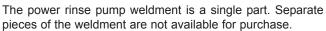
Intake Suction Scoop Weldment 05700-021-87-60

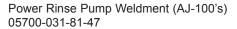


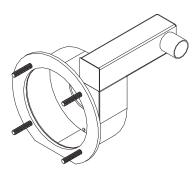
The pump weldment is secured to the pump plate (through the actual tub wall) using the following fasteners:

Nut, Hex, 3/8"-16 Washer, Flat, 3/8" Lockwasher, Split, 3/8" 05310-276-01-00 05311-176-01-00 05311-276-01-00



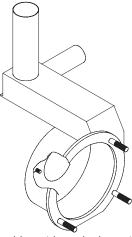




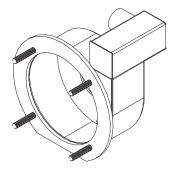


The prewash pump weldment is a single part. Separate pieces of the weldment are not available for purchase.

Prewash Pump Weldment AJ-86/AJ-100 Left to Right models: 05700-002-10-62



The wash pump weldment is a single part. Separate pieces of the weldment are not available for purchase. The weldment is used for the wash pump in all models covered in this manual. The weldment may be ordered using part number 05700-041-68-88.

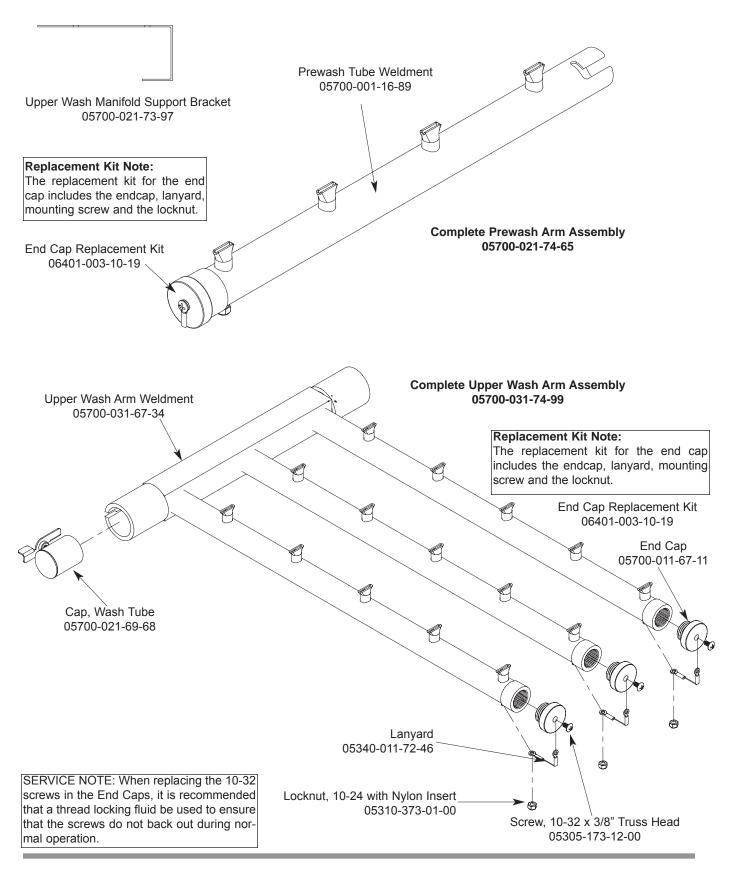


The prewash pump weldment is a single part. Separate pieces of the weldment are not available for purchase.

Prewash Pump Weldment

AJ-86/AJ-100 Right to Left models: 05700-002-11-96

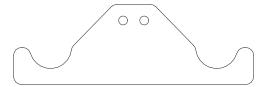
#### PREWASH & UPPER WASH ARM ASSEMBLIES



#### LOWER WASH ARM ASSEMBLY

Lower Wash Arm Support Bracket 05700-011-71-20 Secured with Locknut, 1/4"-20 with Nylon Insert 05310-374-01-00

05310-373-01-00

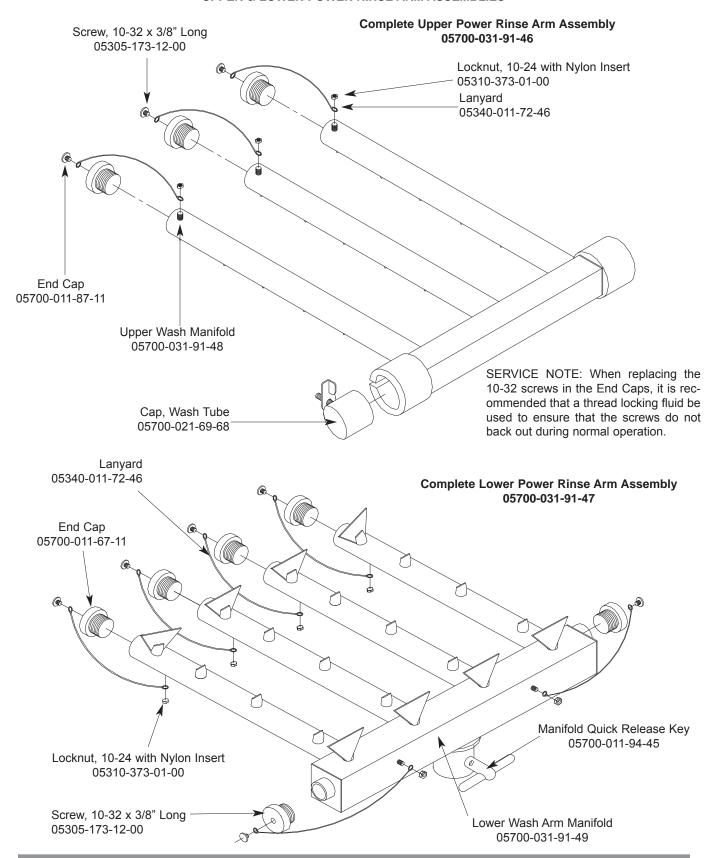


Screw, 10-32 x 3/8" Truss Head 05305-173-12-00 End Cap 6 per 05700-011-67-11 Lanyard 6 per Manifold Quick-Release Key 05340-011-72-46 05700-011-94-45 Lower Wash Arm Manifold Weldment 05700-031-67-29 Locknut, 10-24 with Nylon Insert

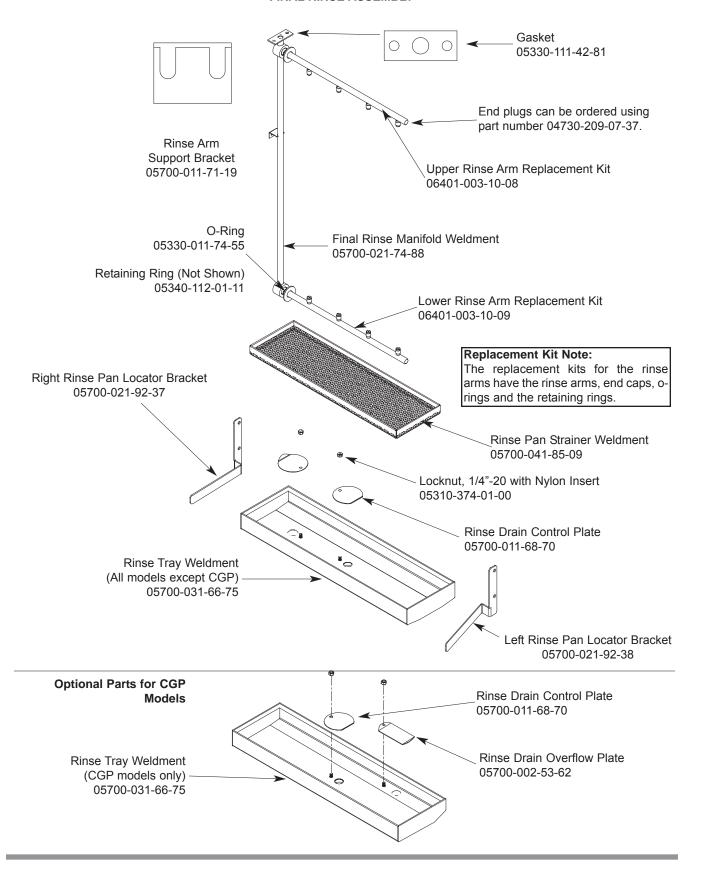
Complete Lower Wash Arm Assembly 05700-031-74-66

SERVICE NOTE: When replacing the 10-32 screws in the End Caps, it is recommended that a thread locking fluid be used to ensure that the screws do not back out during normal operation.

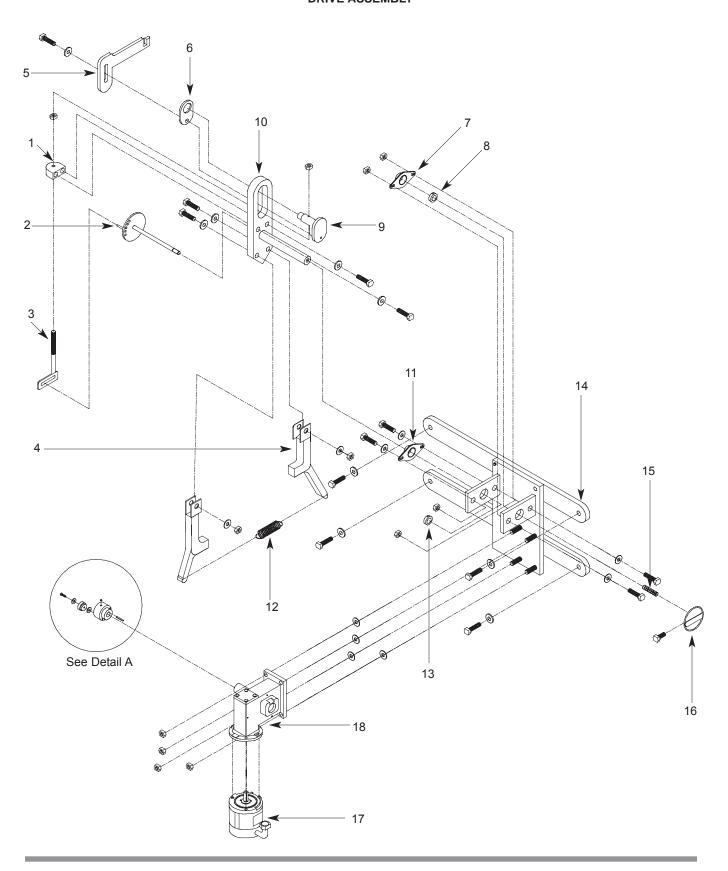
#### **UPPER & LOWER POWER RINSE ARM ASSEMBLIES**



#### **FINAL RINSE ASSEMBLY**

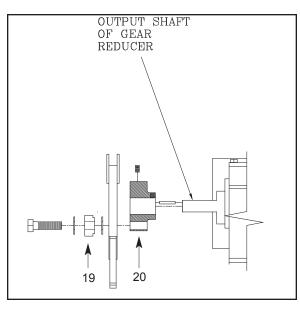


# SECTION 5: PARTS SECTION DRIVE ASSEMBLY

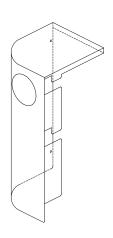


#### **DRIVE ASSEMBLY (CONTINUED)**

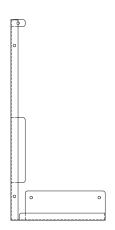
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Drive Plate and Rod Weldment	05700-021-67-44
		Replacement Kit with Expansion Legs	06401-021-86-80
		Replacement Kit with Expansion Legs/Adjuster Crank	06401-011-94-54
2	1	Adjuster Crank Assembly	05700-021-69-95
3	1	Skotch Yoke Weldment Replacement Kit	06401-003-08-48
4	2	Coupling & Expansion Leg Weldment	09515-003-58-12
5	1	Pawl Bar Drive Linkage Casting	09515-021-87-73
6	1	Spacer Plate	05700-011-67-58
7	2	Pillow Block Replacment Kit	06401-003-08-50
8	2	Shaft Collar	05700-011-89-18
9	1	Drive Socket	05700-021-67-39
10	1	Drive Plate	05700-021-67-42
11	2	Pillow Block	03120-021-71-87
12	1	Drive Spring	05315-011-83-51
13	2	Shaft Collar	05700-011-89-18
14	1	Drive Motor Mounting Bracket	05700-031-73-56
15	1	Adjuster Spring	05315-011-71-90
16	1	Adjusting Handle Weldment	05700-021-72-28
17	1	Drive Motor Replacement Kits	
	1	Drive Motor (208-230 Volt, 60 Hz, Single Phase Models)	06401-003-08-42
		Drive Motor (208-230 Volt, 60 Hz, Three Phase Models)	06401-003-08-40
18	1	Gear Drive	06105-011-71-88
19	1	Roller Bearing	03120-011-71-81
20	1	Drive Hub	05700-011-67-97







Front Drive Motor Cover Replacement Kit 06401-003-11-64

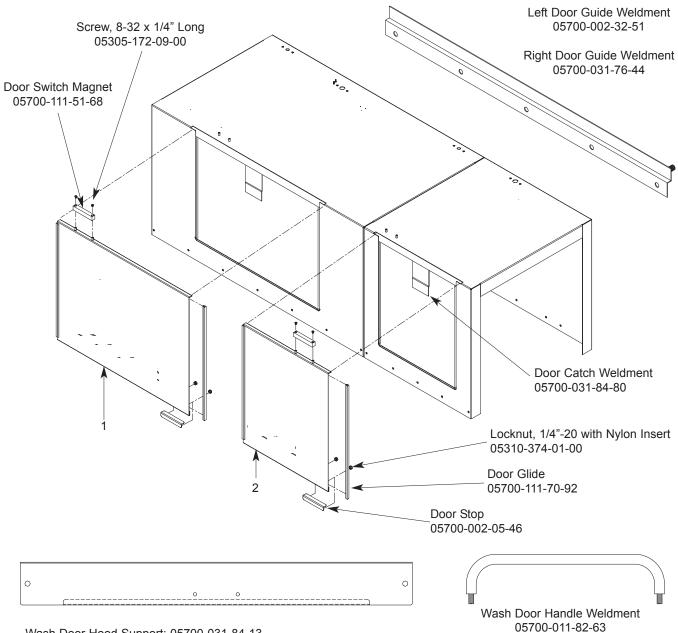


Rear Drive Motor Cover Replacment Kit 06401-003-10-18

#### Replacement Kits Notes:

The replacement kits for the drive motor covers come with the weldments and the mounting hardware.

#### **DOOR ASSEMBLIES**

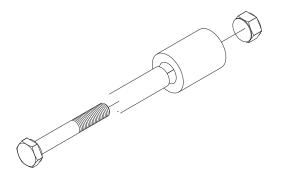


Wash Door Hood Support: 05700-031-84-13
Prewash Door Hood Support: 05700-031-84-14

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Wash Door Weldment	05700-031-83-39
1	1	Wash Door Weldment (No Emboss)	05700-003-13-53
2	1	Prewash Door Weldment (Left to Right Model)	05700-031-95-05
2	1	Prewash Door Weldment (Right to Left Model)	05700-031-95-07
2	1	Prewash Door Weldment - No Emboss (Left to Right Model)	05700-003-13-42
2	1	Prewash Door Weldment - No Emboss (Right to Left Model)	05700-003-13-40
		Wash Door Stiffener (Not Shown)	05700-031-83-43
		Prewash Door Stiffener (Not Shown)	05700-031-83-57

Prewash Door Handle Weldment 05700-011-80-45

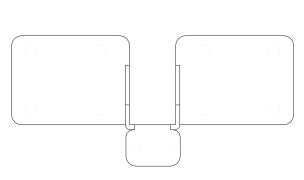
#### PAWL BAR MISCELLANEOUS COMPONENTS



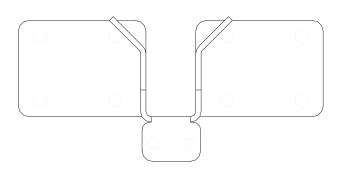
Pawl Bar Roller Replacement Kit 06401-003-11-80

#### Replacement Kit Notes:

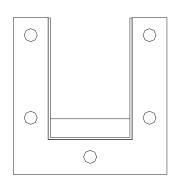
The replacement kit for the pawl bar roller comes with the roller, roller shaft, hardware and locknut as shown.



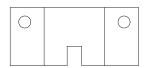
Pawl Bar Bracket (without tabs) Weldment 05700-031-92-36



Pawl Bar Bracket (with studs) Weldment 05700-031-84-68



Pawl Bar Gutter Weldment Replacement Kit 06401-003-09-95

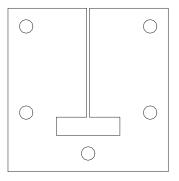


Top Guide Block

**Service Note:** It is highly recommended that when changing out one guide block, that the other be changed out as well, along with the gasket.

### Replacement Kits Notes:

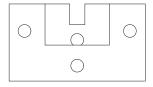
The pawl bar gutter weldment replacement kit contains the weldment, a gasket and the mounting hardware. The guide block kit contains both blocks and a gasket.



Guide Block Replacment Kit 06401-003-10-15

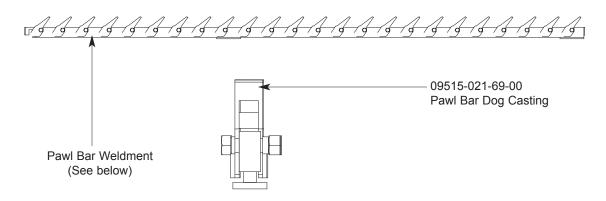
Bottom Guide Block



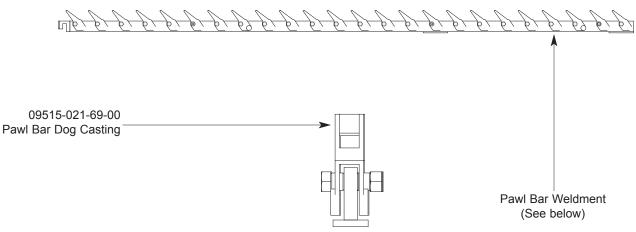


**PAWL BAR ASSEMBLIES** 

## PAWL BAR ASSEMBLY, LEFT TO RIGHT OPERATION



## PAWL BAR ASSEMBLY, RIGHT TO LEFT OPERATION



#### **PAWL BAR ASSEMBLIES:**

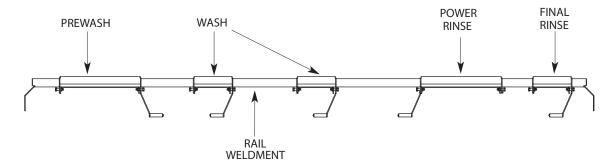
Mod	<u>lel</u>	Left to Right Pawl Bar Weldment	Right to Left Pawl Bar Weldment	Pawl B Dogs	Bar <u>Complete Assembly</u>	Prison Package
AJ-6	64	05700-031-81-03	05700-031-81-03	18	06401-131-81-02	06401-231-81-02
AJ-8	36	05700-041-83-67	05700-002-81-34	24	06401-131-83-75 (L-R) 06401-231-83-75 (R-L)	06401-331-83-75
AJ-8 With	36 i Side Loade	N/A er	05700-003-13-63	24	N/A (L-R) 05700-003-13-64 (R-L)	N/A N/A
AJ-1	100	05700-041-91-13	05700-041-91-13	28	06401-141-91-05	06401-241-91-05

# PAWL BAR WELDMENT AJ-86 RIGHT TO LEFT WITH A SIDE LOADER

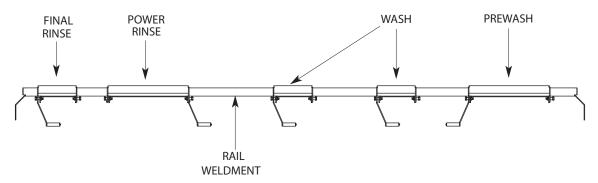


#### **RACK RAIL ASSEMBLIES**

Left to Right Assembly (AJ-86 Model shown for reference)



Right to Left Assembly (AJ-86 Model shown for reference)



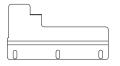
## **LEFT TO RIGHT:**

COMPONENT	AJ-64 MODELS	AJ-86 MODELS	AJ-100 MODELS
Prewash Actuator	Not Applicable	05700-021-76-97	05700-021-75-68
Wash Actuator	05700-021-72-39	05700-021-72-39	05700-021-72-39
Power Rinse Actuator	05700-002-91-09	05700-002-91-09	05700-002-91-09
Final Rinse Actuator	05700-021-72-39	05700-021-72-39	05700-021-72-39
Rail Weldment	05700-002-74-57	05700-031-83-96	05700-041-94-91
Complete Assembly	05700-002-74-55	05700-041-83-72	05700-041-94-90

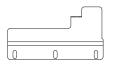
#### **RIGHT TO LEFT:**

COMPONENT	AJ-64 MODELS	AJ-86 MODELS	AJ-100 MODELS
Prewash Actuator	Not Applicable	05700-021-76-97	05700-021-76-96
Wash Actuator	05700-021-72-39	05700-021-72-39	05700-002-91-10
Power Rinse Actuator	05700-021-72-39	05700-022-91-09	05700-021-72-39
Final Rinse Actuator	05700-021-72-39	05700-021-72-39	05700-021-72-39
Rail Weldment	05700-002-74-58	05700-041-91-21	05700-041-91-03
Complete Assembly	05700-002-74-56	05700-041-91-20	05700-041-91-04

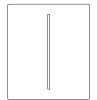
#### **MISCELLANEOUS PARTS AND WELDMENTS**



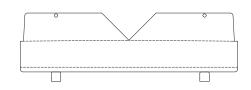
Plate, Left Water Directional 05700-021-79-27



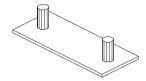
Plate, Right Water Directional 05700-021-79-23



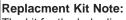
Run Off Sheet Weldment 05700-021-71-39



Splash Shield Weldment 05700-031-85-16



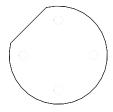
Hole Direction Plate Replacment Kit 06401-003-10-00



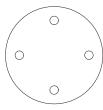
The kit for the hole direction plate comes with the plate, a new gasket and the mounting hardware.



Pipe Clamp 05700-000-35-05



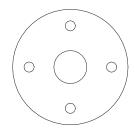
Rinse Drain Plate Replacment Kit (CGP Models Only) 06401-003-10-07



Rinse Drain Plug Replacement Kit 06401-003-10-06



Rinse Drain Weldment Replacement Kit 06401-003-10-05

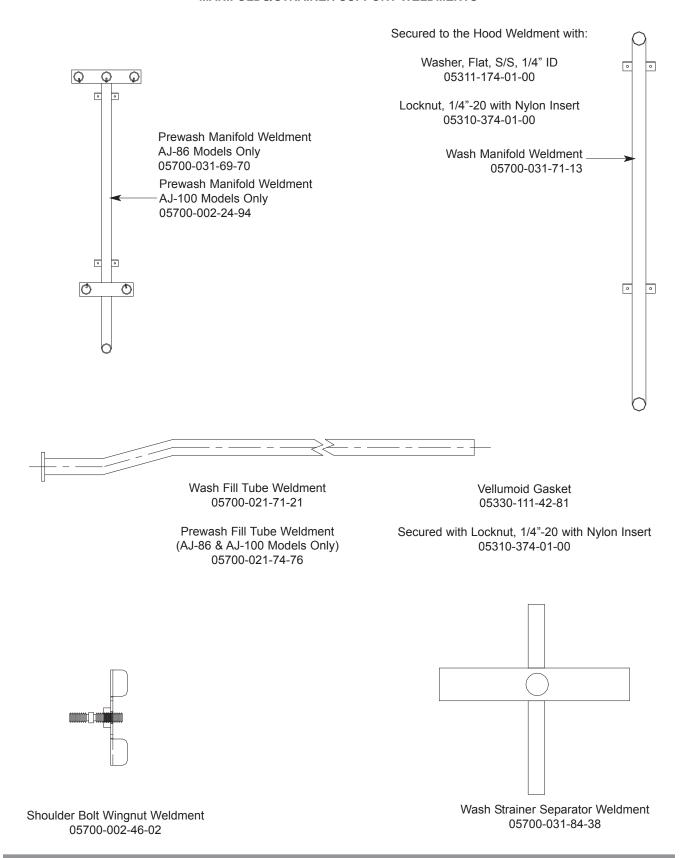


Rinse Drain Plate Gasket 05330-011-72-27

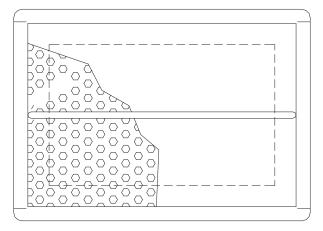
## Replacement Kits Notes:

The kits for the drain weldments and drain plugs come with the weldments/parts, a new gasket and the mounting hardware.

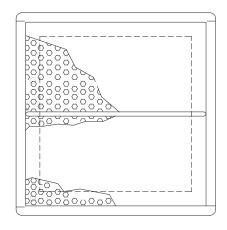
#### MANIFOLDS/STRAINER SUPPORT WELDMENTS



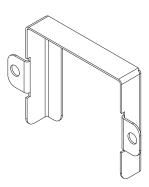
# SECTION 5: PARTS SECTION STRAINERS



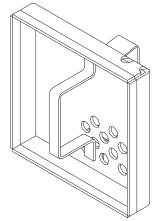
Front Strainer Weldment 05700-021-85-10



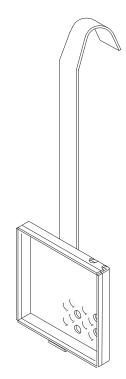
Back Strainer Weldment 05700-021-85-11



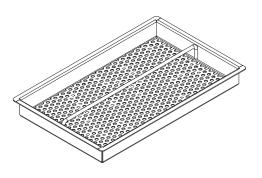
Overflow Strainer Support 05700-001-96-48



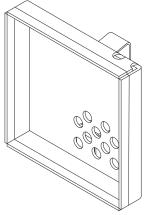
Drain Guard Strainer Weldment 05700-002-09-15



Wash Intake Strainer Weldment (CGP Models) 05700-002-51-52

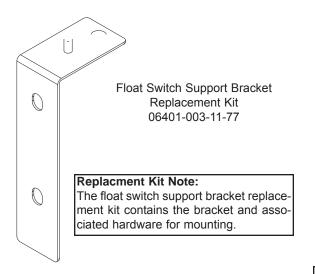


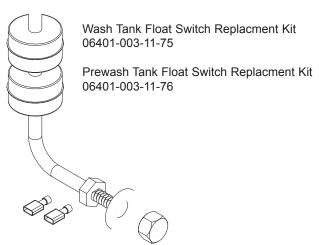
Tub Strainer Weldment (CGP Models) 05700-002-03-21



Screen Strainer with Handle Weldment 05700-002-09-04

#### FLOAT SWITCH COMPONENTS/SCRAP BASKETS



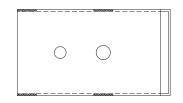


# Replacment Kit Note:

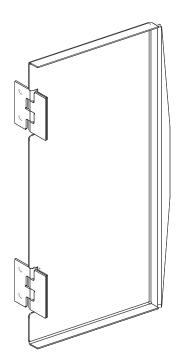
The float switch replacement kits contain the float switch with associated terminals, the flat washer and the nut.

#### Service Agent Note:

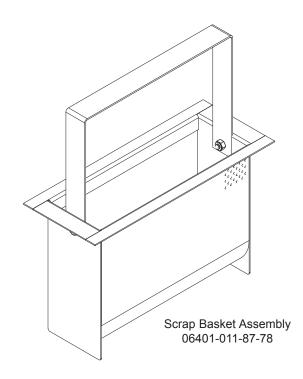
Remember than when reinstalling the float switch that the flat washer goes inside against the tub wall while the nut is on the outside of the tub.



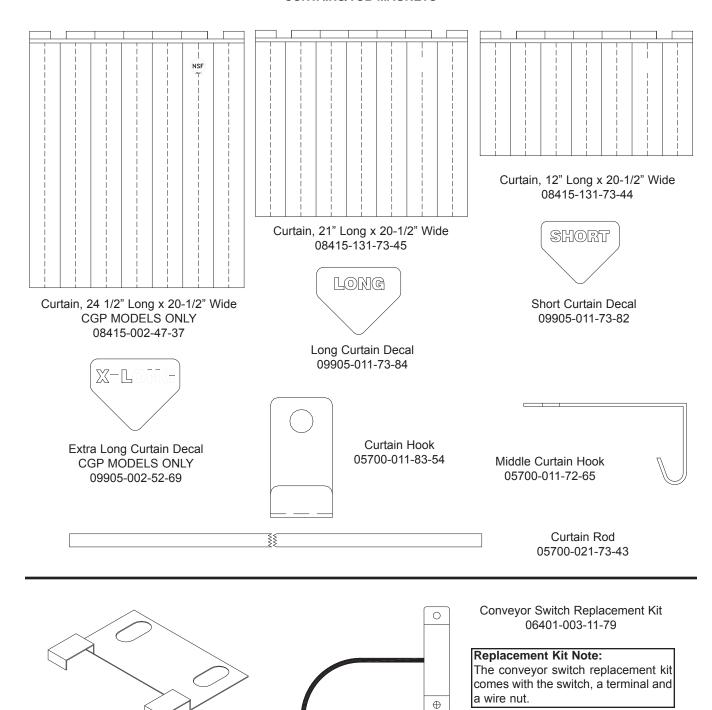
Float Switch Cover 05700-021-75-71



Scrap Basket Lid Weldment 05700-002-56-55



#### **CURTAINS/TUB MAGNETS**

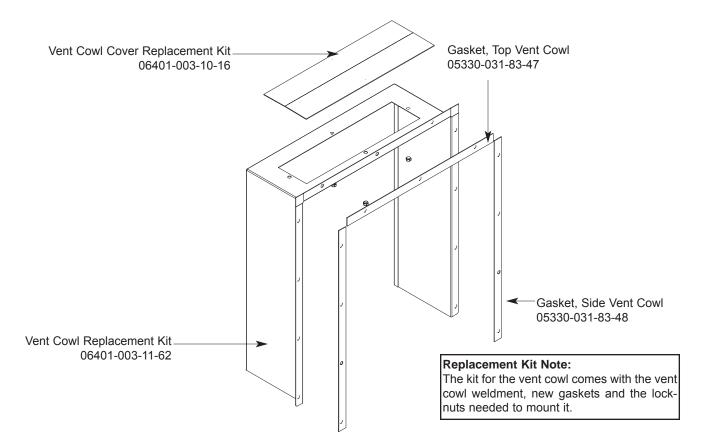


#### Service Note:

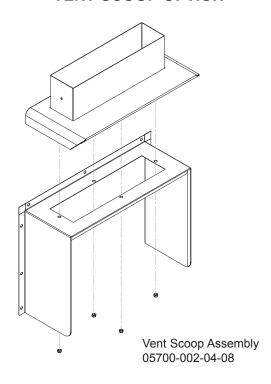
Limit Switch Bracket 05700-021-71-18

The cord for the conveyor switch needs to be cut to length in the field and have the pink terminal applied there.

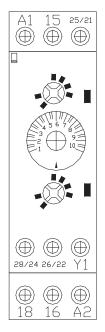
#### **VENT COWL ASSEMBLY/VENT SCOOP OPTION**



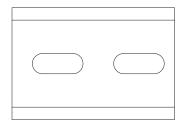
#### **VENT SCOOP OPTION**



#### **EXHAUST FAN CONTROL/TABLE LIMIT SWITCH OPTIONS**



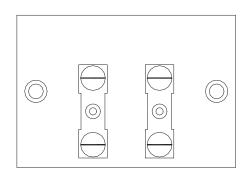
Delay Timer 05945-011-65-44



2" Din Rail 05700-002-36-09



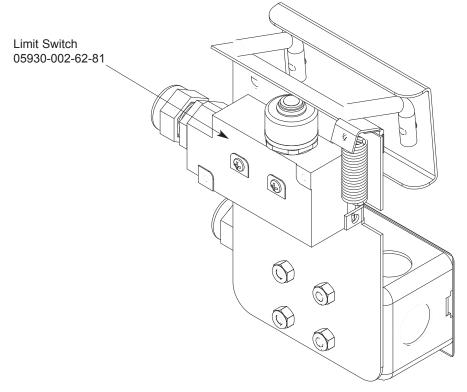
Decal, Fan Load 09905-003-32-20



Terminal Board 05940-011-84-41

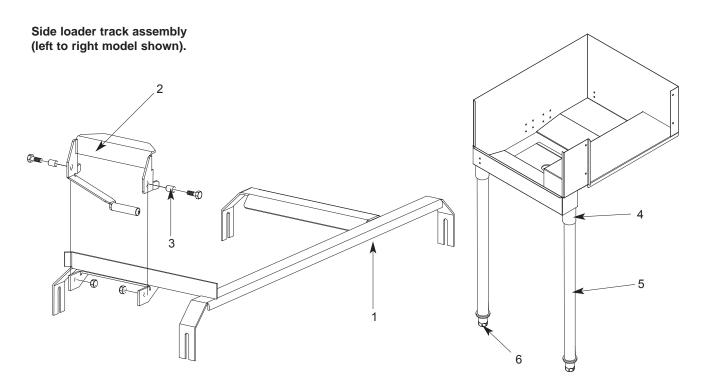
Kit, Exhaust Fan - Electric & Steam Models 05700-031-90-53

Kit, Exhaust Fan - Gas Models 05700-003-14-59



Striker Plate Limit Switch Assembly 05700-002-62-94

#### SIDE LOADER TRACK ASSEMBLY/LEG REPLACEMENTS/STRAINER



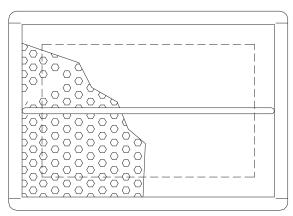
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Track Weldment (Left to Right) 24"	05700-031-78-98
	1	Track Weldment (Right to Left) 24"	05700-031-95-20
	1	Track Weldment (Left to Right) 30"	05700-003-04-57
	1	Track Weldment (Right to Left) 30"	05700-003-04-58
2	1	Actuator Switch Replacement Kit	06401-003-10-64
3	2	Spacer	05700-011-71-44
4	1	Leg Socket Replacement Kit	06401-003-09-79
5	1	Leg Support Replacement Kit	06401-003-09-80
6	1	Bullet Foot	05340-108-01-03

#### Replacement Kits Notes:

The actuator switch replacement kit comes with the actuator weldment, mounting hardware and (2) spacers.

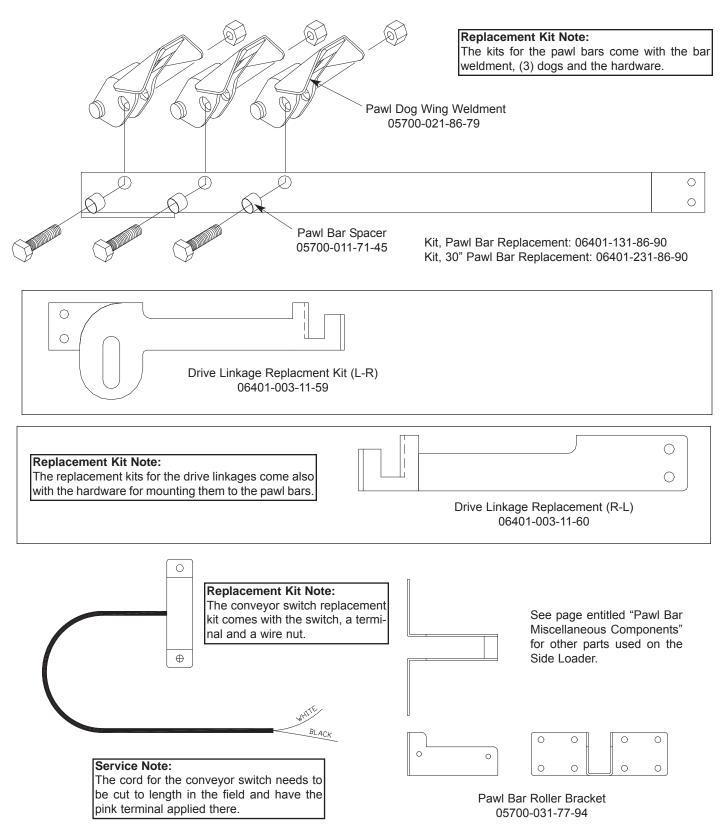
The leg socket replacement kit has the leg socket, mounting hardware and set screw.

The leg support replacement kit has the leg and the bullet foot included.



Front Strainer Weldment 05700-021-85-10

#### SIDE LOADER PAWL BAR ASSEMBLIES/PAWL BAR BRACKET/MAGNET

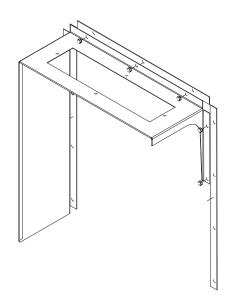


#### SIDE LOADER VENT COWL OPTION

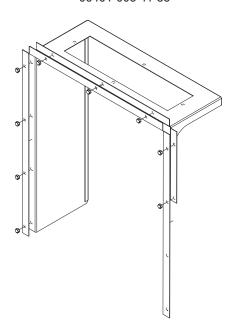
#### Service Note:

One of the side gaskets that come in the kit will need to be cut to length in order to fit properly on the unit when replaced.

Vent Cowl Replacement Kit (Left to Right) 06401-003-11-81



Vent Cowl Replacement Kit (Right to Left) 06401-003-11-83



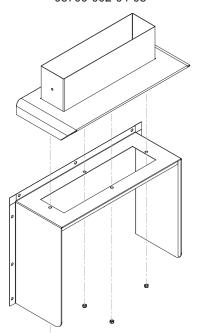
Vent Cowl Gasket, Top: 05330-031-83-47

Vent Cowl Gasket, Side: 05330-031-83-48

#### Replacement Kit Note:

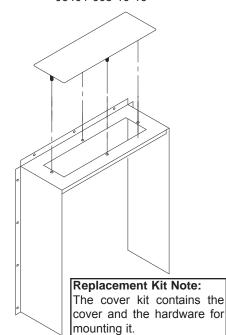
The replacement kit(s) for the vent cowls come with the cowls, the gaskets and mounting hardware.

**VENT SCOOP OPTION** Vent Scoop Assembly 05700-002-04-08

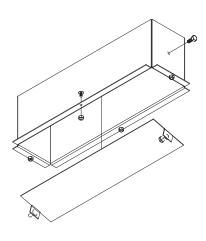


#### STANDARD ASSEMBLY

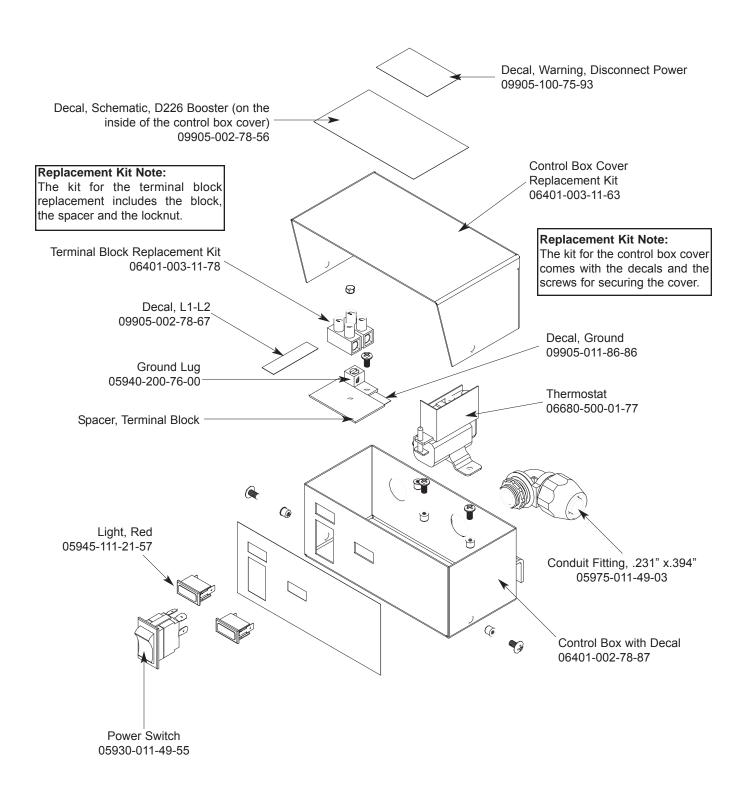
Vent Cowl Cover Replacement Kit 06401-003-10-16



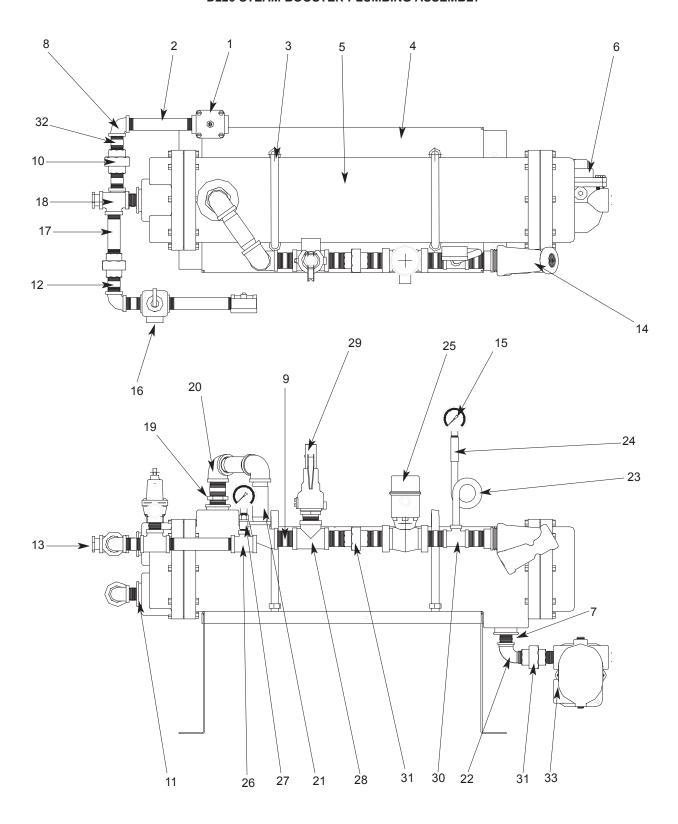
Vent Cowl Assembly for Hooded Side Loader Option 05700-003-15-66



# SECTION 5: PARTS SECTION D226 STEAM BOOSTER CONTROL BOX ASSEMBLY



# D226 STEAM BOOSTER PLUMBING ASSEMBLY



# D226 STEAM BOOSTER PLUMBING ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Water Pressure Regulator, 3/4"	04820-100-01-06
2	2	Nipple, Brass, 3/4" NPT x 6" Long	05700-001-26-74
3	2	U-Bolt, 6", 5/8"-11 Thread	05306-458-01-04
4	1	Platform Weldment	05700-002-78-02
5	1	Heat Exchanger	04420-100-01-05
6	1	Steam Trap, 3/4"	06680-500-02-77
7	1	Bushing, 2" NPT x 3/4" NPT, Black Iron	04730-902-06-34
8	2	Elbow, 3/4" NPT, Brass	04730-206-13-00
9	6	Nipple, 1" NPT, Close, Black Iron	04730-907-08-34
10	2	Union, 3/4" NPT, Brass	04730-212-05-00
11	2	Bushing, 2" NPT x 3/4" NPT, Brass	04730-202-18-00
12	4	Nipple, 3/4" NPT x 1-3/8" Long	04730-207-34-00
13	1	Bushing, Hex 3/4" M x 1/2" F, Brass	04730-002-56-27
14	1	Y-Strainer, 1" NPT, Black Iron	04730-217-02-32
15	2	Pressure Gauge	06685-111-88-34
16	1	Steam Relief Valve	04820-100-07-06
17	2	Nipple, 3/4" NPT x 4" Long, Brass	04730-207-05-00
18	2	Tee, 3/4" NPT x 3/4" NPT x 3/4" NPT, Brass	04730-211-01-34
19	1	Bushing, 2" NPT x 1" NPT, Black Iron	04730-002-94-51
20	3	Elbow, 90°, 1" NPT, Black Iron	04730-906-03-34
21	2	Nipple, 1" NPT x 4" Long, Black Iron	04730-907-09-34
22	1	Elbow, 90°, Street, 3/4" NPT, Black Iron	04730-011-87-37
23	1	Nipple, Pigtail, 1/4" NPT	04730-907-14-34
24	1	Coupling, 1/4" NPT x 1/4" NPT	04730-904-01-34
25	1	Steam Solenoid Valve, 240VA	04820-100-29-34
25	1	Steam Solenoid Valve, 200VA	04820-002-93-66
25	1	Steam Solenoid Valve (ASCO)	04820-002-90-26
26	1	Tee, 3/4" NPT x 3/4" NPT x 1/4" NPT, Brass	04730-211-04-00
27	1	Valve, Test Cock, 1/4" NPT	04810-011-72-67
28	1	Tee, 1" NPT x 1" NPT x 1" NPT, Black Iron	04730-911-01-34
29	1	Valve, Safety Relief 1" NPT	04820-100-01-35
30	1	Tee, 1" NPT x 1" NPT x 1/4" NPT, Black Iron	04730-911-01-00
31	2	Union, 3/4" NPT, Black Iron	04730-912-01-00
32	2	Nipple, 3/4" NPT x 2" Long, Brass	04730-207-46-00
33	2	Nipple, 3/4" NPT, Close, Black Iron	04730-907-01-00

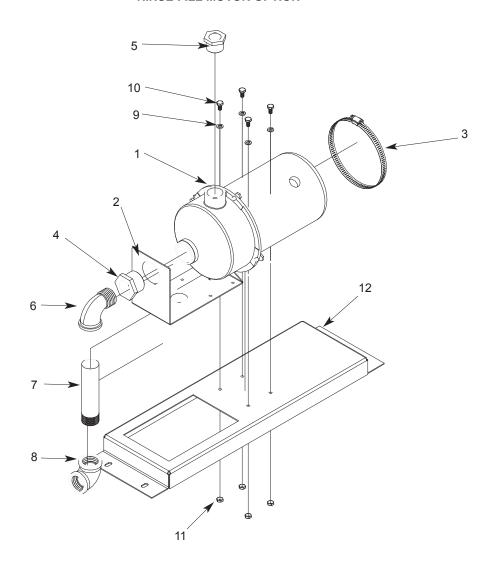
#### **GO\*BOX COMPONENTS**

A GO\*BOX is a kit of the most needed parts for a particular model or model familly to successfully effect a repair in the first call 90% or more of the time.

The following components may be ordered together using part number 06401-002-14-99.

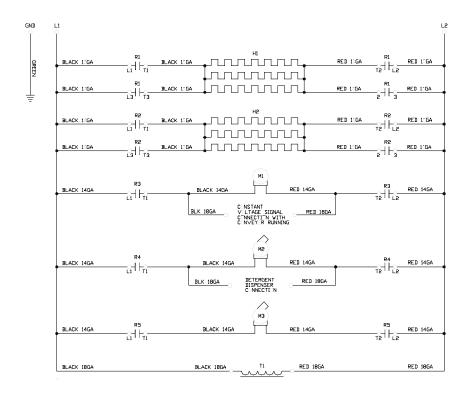
QTY	DESCRIPTION	Mfg. No.
1	Drive Motor Contactor	05945-111-68-38
1	Contactor, Wash Heater, 3 ph, 3 pole	05945-002-24-70
1	Contactor, Wash Heater, 1 ph, 4 pole	05945-111-68-37
2	Final Rinse Arm End Cap	05700-011-35-92
1	Float Switch, Dual, Wash & Prewash	06680-121-70-71
1	Gasket, Pawl Bar Gutter	05330-011-68-55
1	Gauge, Pressure	06685-111-88-34
6	Glide, Door Edge	05700-111-70-92
2	Magnet, Door Reed Switch	05930-111-51-68
2	O Ring, Prewash Manifold	05330-400-12-08
2	O Ring, Wash Manifold	05330-011-74-56
1	Overload, Drive Motor	05945-111-68-39
1	Overload, Wash Motor	05945-111-68-40
1	Relay,120v, 3 PDT	05945-111-72-51
1	Relay,120v,50/60Hz 3A Control	05945-111-35-19
1	Repair Kit, 3/4" Vacuum Breaker	04820-001-60-57
4	Roller, Pawl Bar	05700-011-68-16
1	Seal Kit for Wash and Prewash pump	05330-011-71-98
2	Solenoid Valve, Fill & Rinse	04810-100-53-00
2	Switch, Power	05930-011-49-55
2	Switch, Reed, Actuator (NC)	05930-111-68-44
1	Switch, Reed, Door (NO)	05930-111-68-86
1	Thermometer, 48" Capillary	06685-111-68-48
1	Thermometer, 96" Capillary	06685-111-68-49
2	Thermostat, Wash High Limit	05930-121-71-36
2	Thermostat, Wash Regulating	05930-121-67-72
1	Transformer,150VA	05950-011-68-35
1	Valve, Ball 1 1/2" NPT	04820-111-71-46

# RINSE FILL MOTOR OPTION

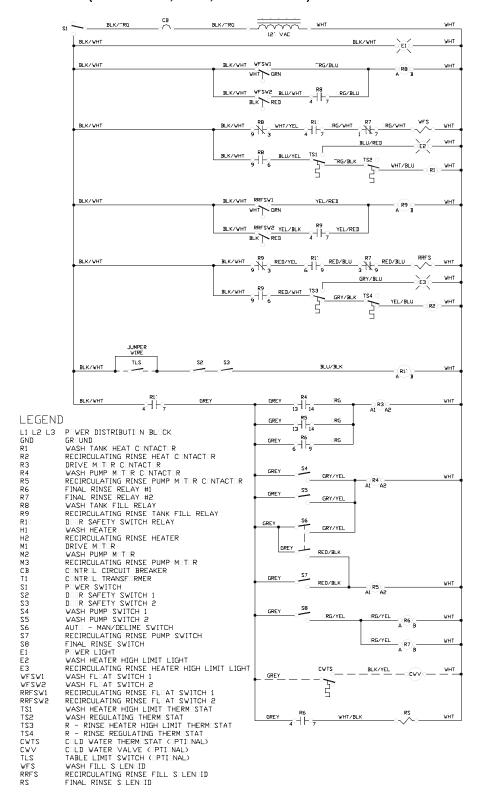


ITEM	QTY	DESCRIPTION	Mfg. No.
	1	Rinse Fill Motor Assembly	05700-002-40-25
1	1	Motor	06105-002-72-71
2	1	Bracket, Pump Mounting	05700-002-63-59
3	1	Clamp, Hose 5 5/8" to 6"	04730-011-34-90
4	1	Reducer Bushing, 1 1/4" to 1"	04730-002-73-62
5	1	Reducer Bushing 1" to 3/4"	04730-011-65-14
6	1	Elbow, 90 Deg., 1" Street	04730-002-11-99
7	1	Nipple, 1" NPT x 6" Long Brass	04730-002-12-00
8	1	Elbow, 90 Deg. Brass Female	04730-002-12-55
9	4	Lockwasher, 1/4"	05311-274-01-00
10	4	Bolt, 1/4"-20 x 1/2" Long	05305-274-02-00
11	4	Nut, Hex S/S 1/4"-20	05310-274-01-00
12	1	Rinse Motor Mounting Bracket	05700-002-38-90

# AJ-64CE (208-230 VOLT, 60 HZ, SINGLE PHASE) PRIMARY SIDE

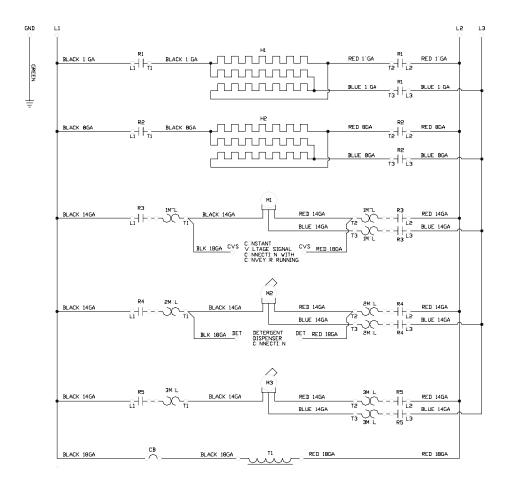


#### AJ-64CE (208-230 VOLT, 60 HZ, SINGLE PHASE) SECONDARY SIDE

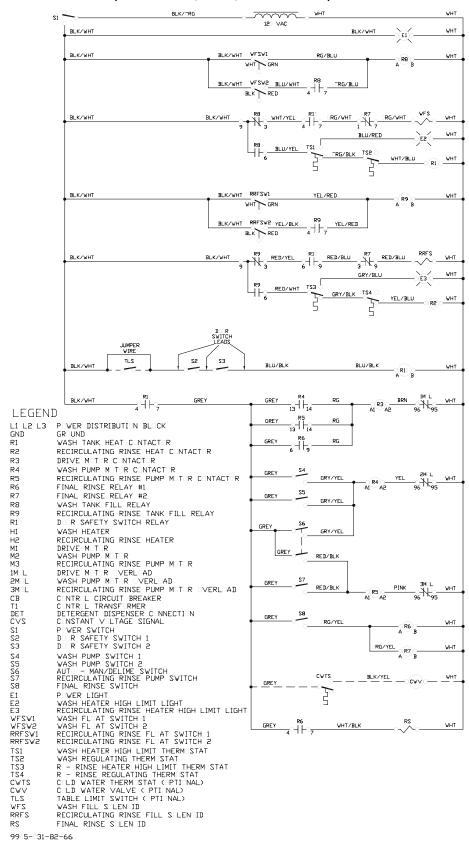


9905-002-38-71

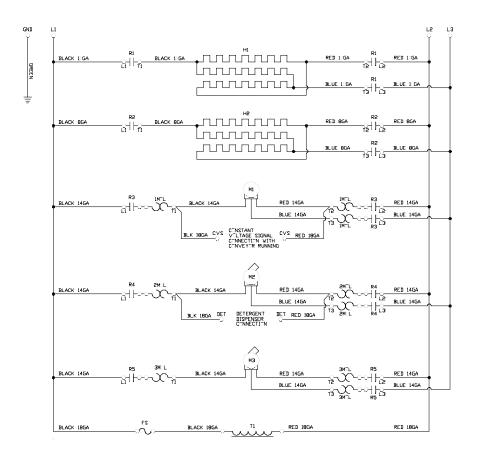
#### AJ-64CE (208-230 VOLT, 60 HZ, THREE PHASE) PRIMARY SIDE



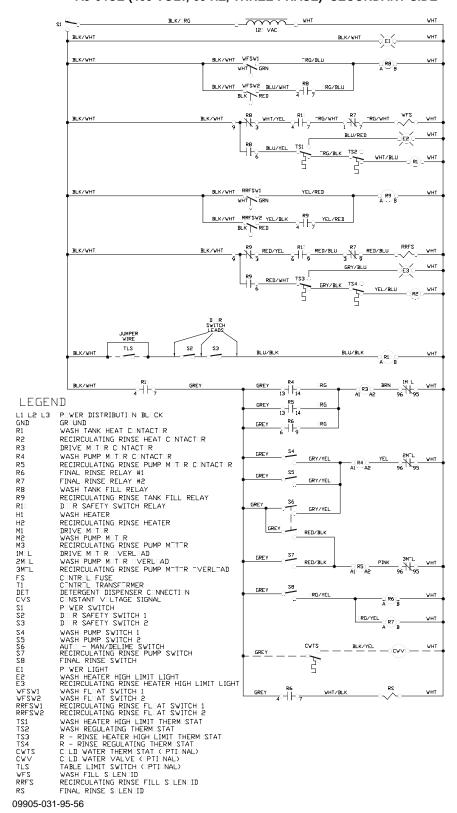
#### AJ-64CE (208-230 VOLT, 60 HZ, THREE PHASE) SECONDARY SIDE



#### AJ-64CE (460 VOLT, 60 HZ, THREE PHASE) PRIMARY SIDE

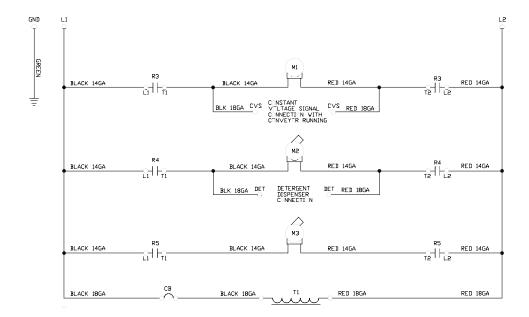


# SECTION 6: ELECTRICAL SCHEMATICS AJ-64CE (460 VOLT, 60 HZ, THREE PHASE) SECONDARY SIDE

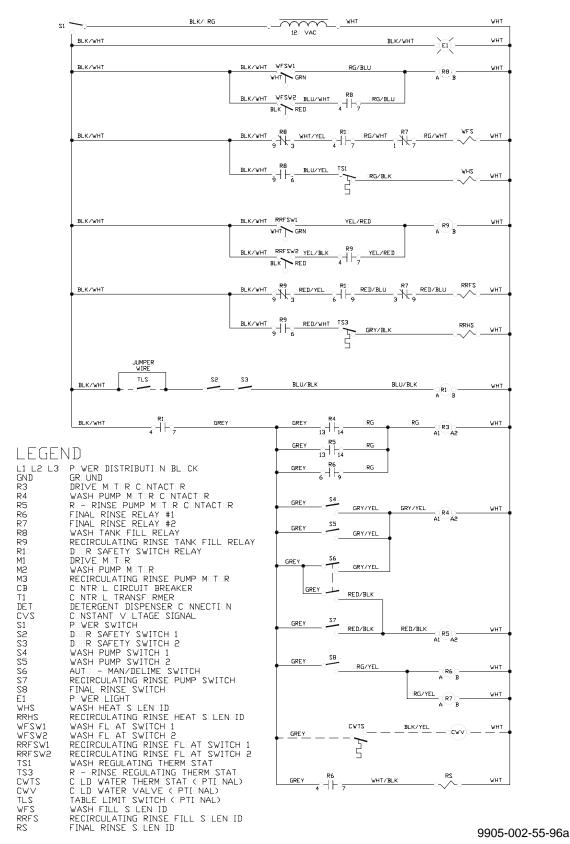


AJ-64 Conveyor Series Technical Manual 7610-003-30-93 Issued: 05-02-2006 Revised: N/A

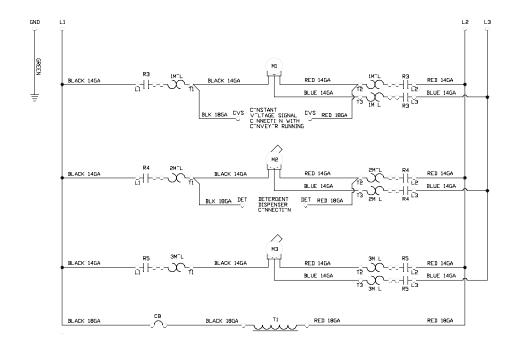
#### AJ-64CS (208-230 VOLT, 60 HZ, SINGLE PHASE) PRIMARY SIDE



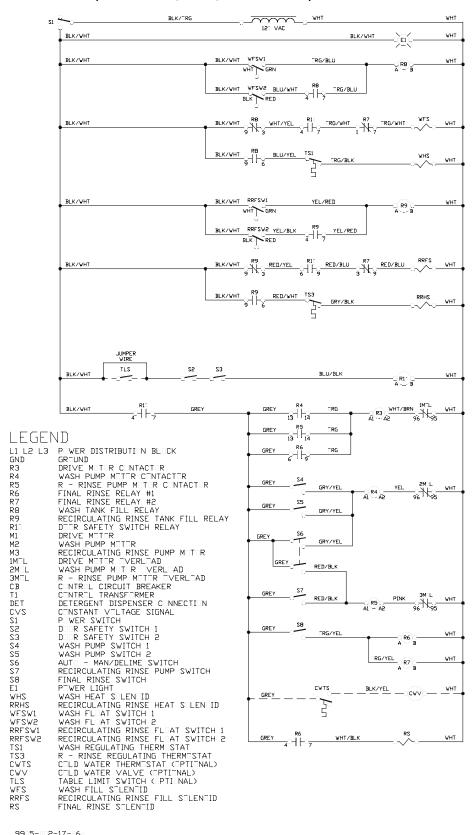
#### AJ-64CS (208-230 VOLT, 60 HZ, SINGLE PHASE) SECONDARY SIDE



# AJ-64CS (208-230 VOLT, 60 HZ, THREE PHASE) PRIMARY SIDE

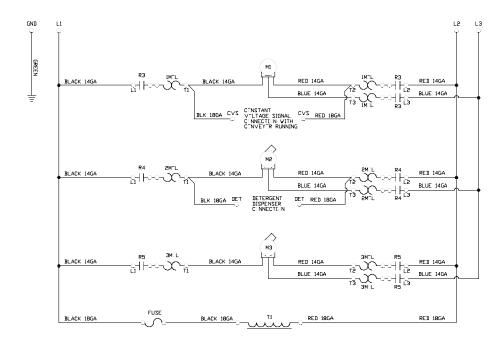


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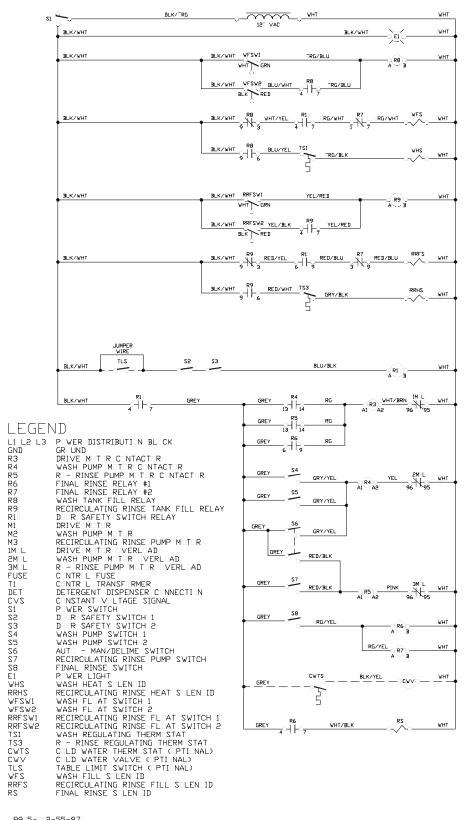


9905-002-17-06

# SECTION 6: ELECTRICAL SCHEMATICS AJ-64CS (460 VOLT, 60 HZ, THREE PHASE) PRIMARY SIDE

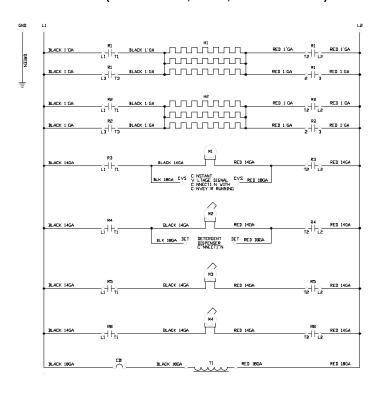


# **SECTION 6: ELECTRICAL SCHEMATICS** AJ-64CS (460 VOLT, 60 HZ, THREE PHASE) SECONDARY SIDE

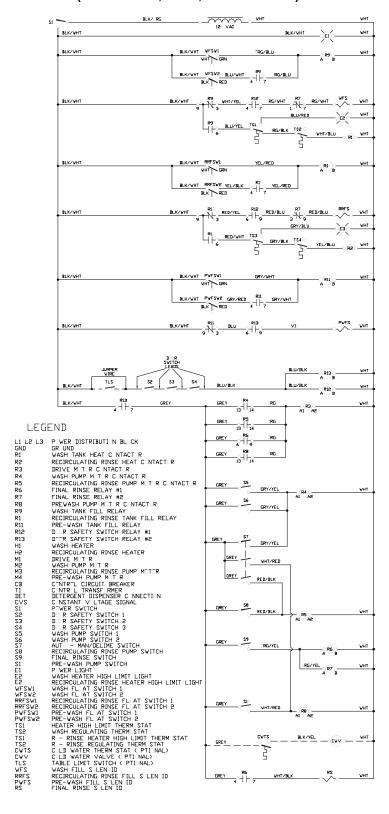


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#### AJ-86CE & AJ-100CE (208-230 VOLT, 60 HZ, SINGLE PHASE) PRIMARY SIDE

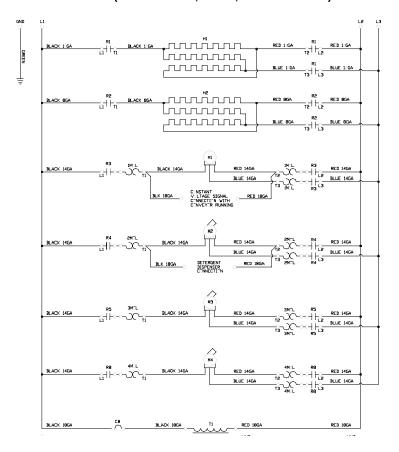


#### AJ-86CE & AJ-100CE (208-230 VOLT, 60 HZ, SINGLE PHASE) SECONDARY SIDE

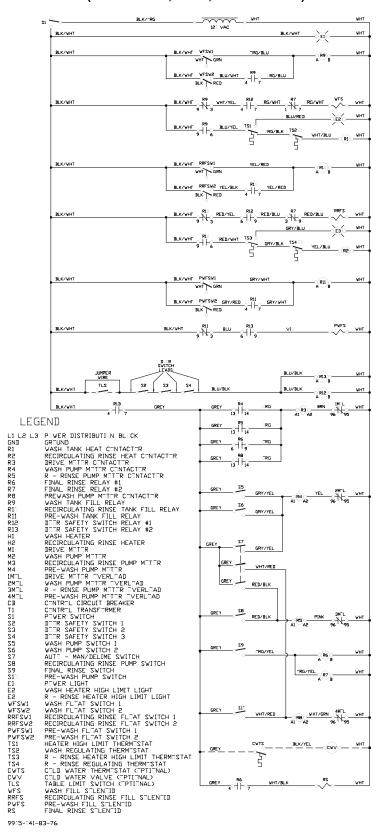


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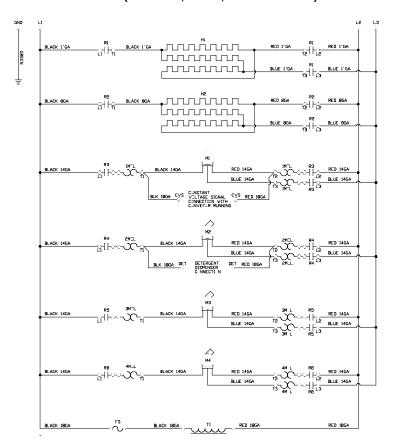
#### AJ-86CE & AJ-100CE (208-230 VOLT, 60 HZ, THREE PHASE) PRIMARY SIDE



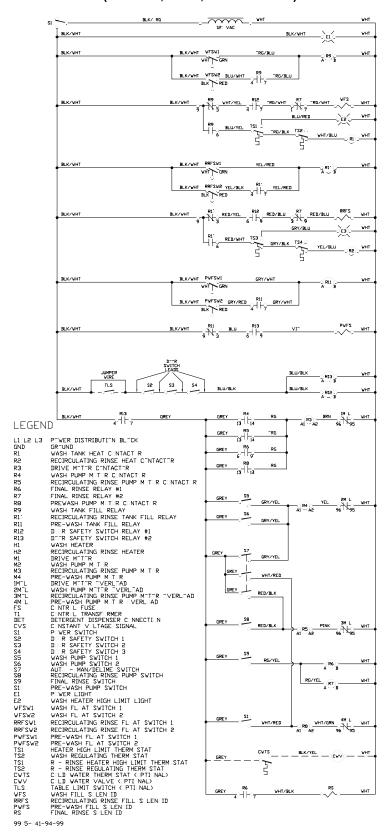
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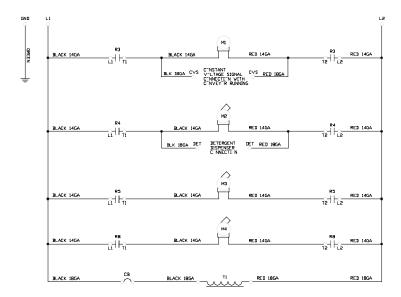
# AJ-86CE & AJ-100CE (460 VOLT, 60 HZ, THREE PHASE) PRIMARY SIDE



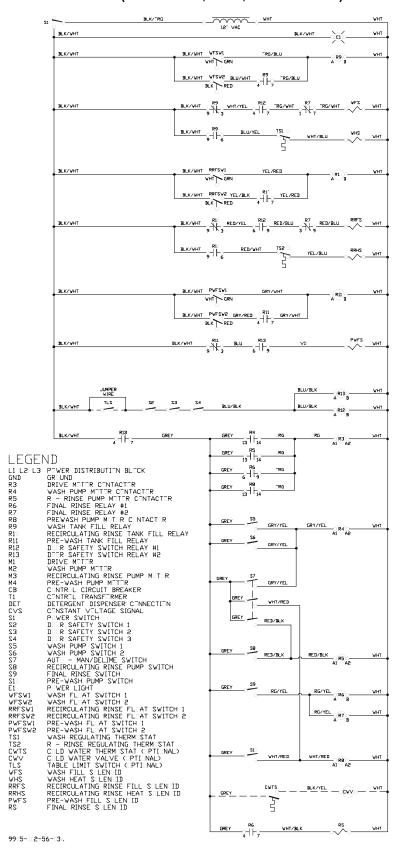
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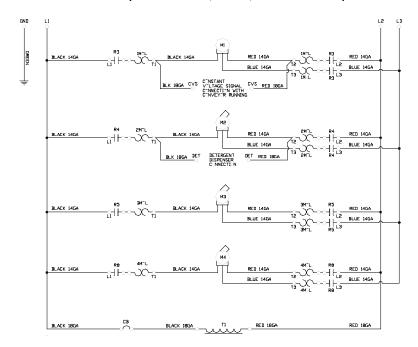
# AJ-86CS & AJ-100CS (208-230 VOLT, 60 HZ, SINGLE PHASE) PRIMARY SIDE



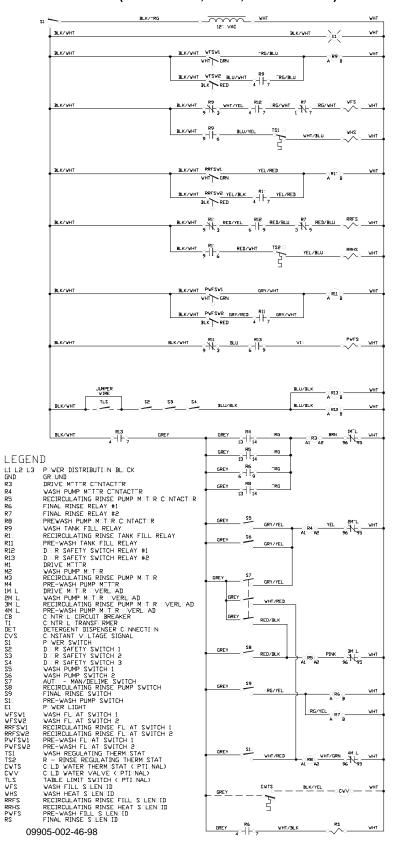
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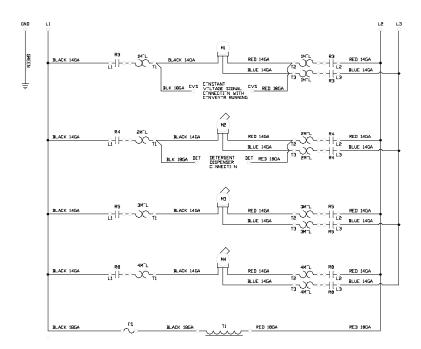
# AJ-86CS & AJ-100CS (208-230 VOLT, 60 HZ, THREE PHASE) PRIMARY SIDE



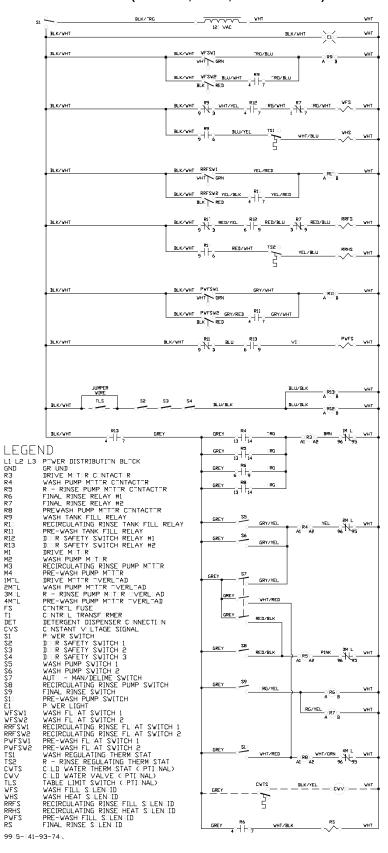
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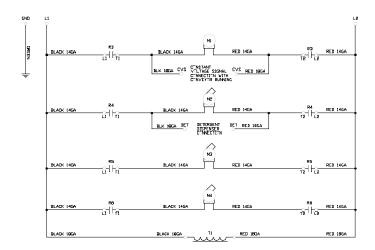
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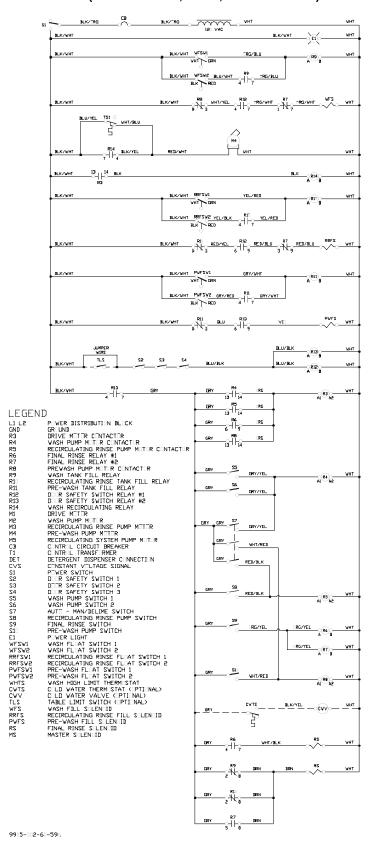
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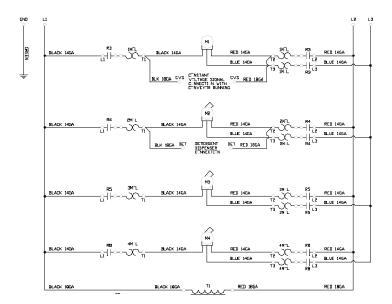
#### AJ-86CGP & AJ-100CGP (208-230 VOLTS, 60 HZ, SINGLE PHASE) PRIMARY SIDE



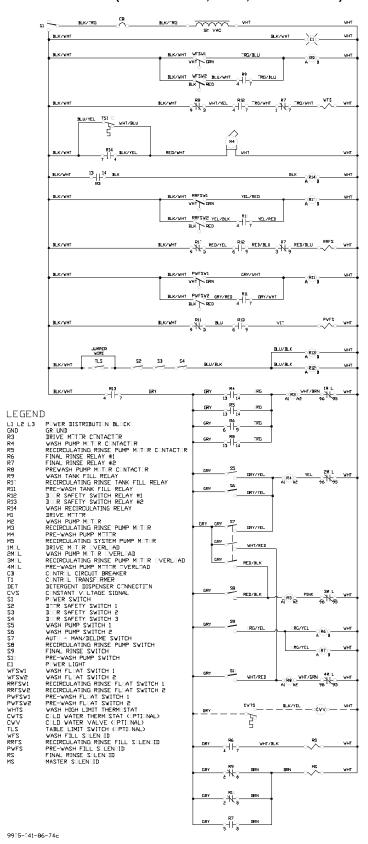
#### AJ-86CGP & AJ-100CGP (208-230 VOLTS, 60 HZ, SINGLE PHASE) SECONDARY SIDE



#### AJ-86CGP & AJ-100CGP (208-230 VOLTS, 60 HZ, THREE PHASE) PRIMARY SIDE

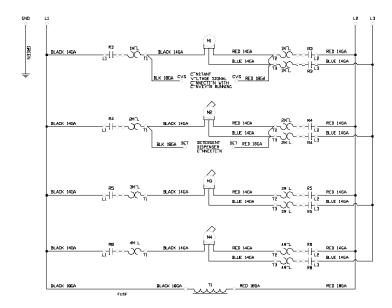


#### AJ-86CGP & AJ-100CGP (208-230 VOLTS, 60 HZ, THREE PHASE) SECONDARY SIDE

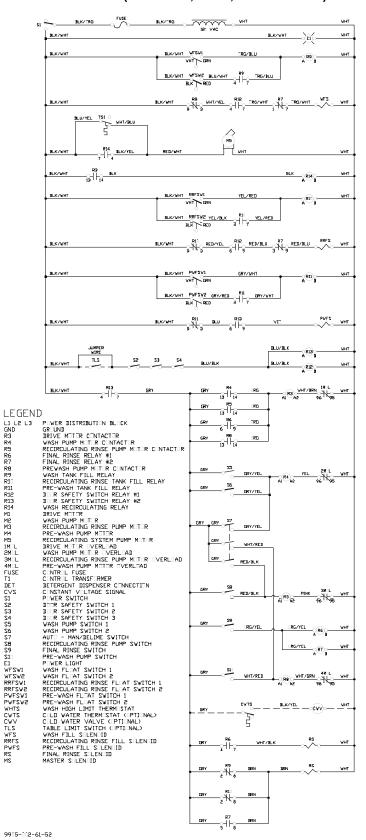


AJ-64 Conveyor Series Technical Manual 7610-003-30-93 Issued: 05-02-2006 Revised: N/A

## AJ-86CGP & AJ-100CGP (460 VOLTS, 60 HZ, THREE PHASE) PRIMARY SIDE

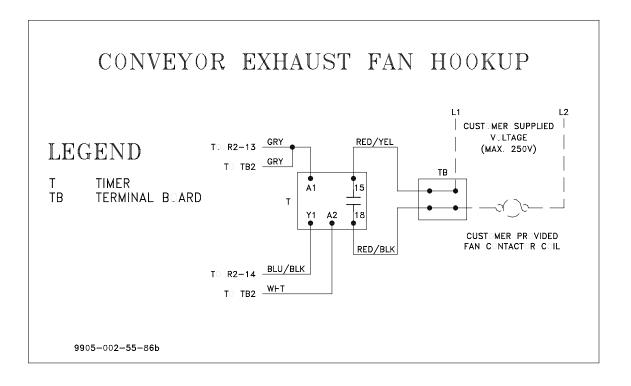


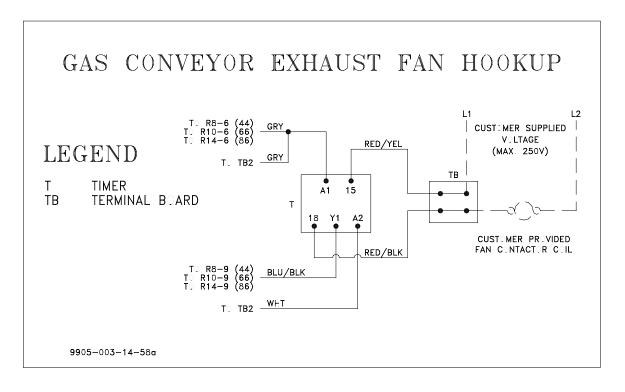
#### AJ-86CGP & AJ-100CGP (460 VOLTS, 60 HZ, THREE PHASE) SECONDARY SIDE



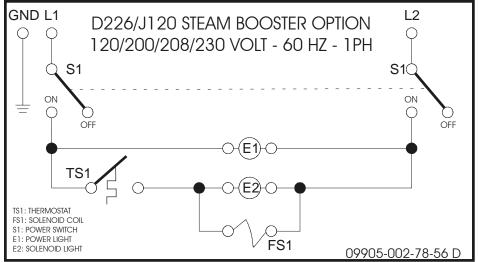
AJ-64 Conveyor Series Technical Manual 7610-003-30-93 Issued: 05-02-2006 Revised: N/A

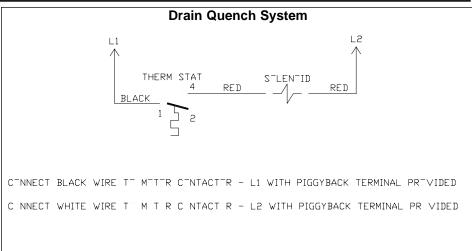
# SECTION 6: ELECTRICAL SCHEMATICS CONVEYOR EXHAUST FAN HOOKUP

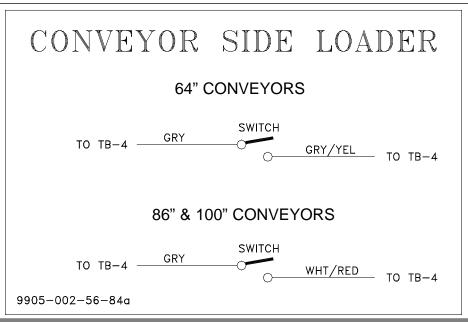




# SECTION 6: ELECTRICAL SCHEMATICS D226 STEAM BOOSTER/DRAIN QUENCH SYSTEM/SIDE LOADER







# SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### ALABAMA TO FLORIDA

#### **ALABAMA**

## JONES-McLEOD APPLIANCE SVC

1616 7TH AVE. NORTH BIRMINGHAM, AL 35203 (205) 251-0159 800-821-1150 FAX: (205) 322-1440 service@jones-mcleod.com

## JONES-McLEOD APPLIANCE

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

#### **ALASKA**

## RESTAURANT APPLIANCE SERVICE

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

#### **ARIZONA**

## AUTHORIZED COMMERCIAL FOOD EQMT. SVC

4832 SOUTH 35TH STREET PHOENIX, AZ 85040 (602) 234-2443 800-824-8875 FAX: (602) 232-5862 acsboss@aol.com

#### GCS SERVICE INC.

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

#### **ARKANSAS**

#### **BROMLEY PARTS & SVC**

10TH AND RINGO P.O. BOX 1688 LITTLE ROCK, AR 72202 (501) 374-0281 800-482-9269 FAX: (501) 374-8352 service@bromleyparts.com parts@bromleyparts.com

#### GCS SERVICE,INC.

3717 CHERRY ROAD MEMPHIS, TN 38118 (901) 366-4587 800-262-9155 FAX: (901) 366-4588

#### **CALIFORNIA**

## BARKERS FOOD MACHINERY SERVICES

5367 SECOND STREET IRWINDALE, CA 91706 (626) 960-9390 800-258-6999 FAX: (626) 337-4541 service@barkers.com

#### GCS SERVICE INC.

LOS ANGELES, CA (213) 683-2090 800-327-1433 FAX: (213) 683-2099

#### GCS SERVICE INC.

SANTA ANA, CA (714) 542-1798 800-540-0719 FAX: (714) 542-4787

#### GCS SERVICE INC.

S. SAN FRANCISCO, CA (650) 635-0720 800-969-4427 FAX: (650) 871-4019

## COMMERCIAL APPLIANCE SERVICE, INC.

6507 PACIFIC AVENUE, SUITE 102 STOCKTON, CA 95207 (916) 567-0203

(800) 464-2222 (916) 567-0266 FAX

#### GCS SERVICE INC.

SAN DIEGO, CA (858) 549-8411 800-422-7278 FAX: (858) 549-2323

#### INDUSTRIAL ELECTRIC SVC.

5662 ENGINEER DRIVE HUNTINGTON BEACH, CA 92649 (714) 379-7100 (800-457-3783 FAX: (714) 379-7109

#### P & D APPLIANCE SVC

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

#### P & D APPLIANCE

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

## COMMERCIAL APPLIANCE SERVICE, INC.

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

#### **COLORADO**

#### GCS SERVICE INC.

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

#### HAWKINS COMMERCIAL APPLIANCE SERVICE 3000 S. WYANDOT ST.

ENGLEWOOD, CO 80110 (303) 781-5548 (800) 624-2117 FAX: (303) 761-5561 johns@hawkinscommercial.com

#### METRO APPLIANCE SERVICE

1640 S BROADWAY DENVER, CO 80210 (303) 778-1126 800-525-3532 FAX: (303) 778-0268 metroappls@aol.com

#### CONNECTICUT

#### GCS SERVICE INC.

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

#### SUPERIOR KITCHEN SER-VICE INC.

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

#### **DELAWARE**

## FOOD SERVICE EQMT.

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

#### GCS SERVICE INC.

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

#### **ELMER SCHULTZ SERVICE**

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

#### **EMR SERVICE DIVISION**

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

#### **FLORIDA**

## COMMERCIAL APPLIANCE SERVICE

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

#### GCS SERVICE INC

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

#### **GCS SERVICE INC**

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

## NASS PARTS AND SERVICE, INC.

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

#### **GCS SERVICE INC**

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

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS ——

#### FLORIDA TO MARYLAND

## JONES-McLEOD APPLIANCE SVC

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

## NASS PARTS AND SERVICE,

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

## NASS PARTS AND SERVICE, INC.

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

#### **GEORGIA**

#### **GCS SERVICE INC**

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

## HERITAGE FOODSERVICE GROUP OF ATLANTA

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

## WHALEY FOODSERVICE REPAIRS

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

#### PIERCE PARTS & SERVICE

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

#### **HAWAII**

## FOOD EQMT. PARTS & SERVICE CO.

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

#### **IDAHO**

## RESTAURANT APPLIANCE SVC.

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

#### **RON'S SERVICE**

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

#### **ILLINOIS**

#### **CONES REPAIR SVC.**

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

#### EICHENAUER SERVICES INC.

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### **GENERAL PARTS, INC.**

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

#### **INDIANA**

#### GCS SERVICE INC.

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

B622 LA PAS TRAIL INDIANAPOLIS, IN 46268 (317) 290-8060 (800) 410-9794 (317) 290-8085 FAX

#### IOWA GOODWIN TUCKER GROUP

#### 2900 DELAWARE AVENUE

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

#### **CONES REPAIR SVC.**

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

#### **KANSAS**

#### GCS SERVICE INC.

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

#### **GENERAL PARTS, INC.**

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

#### **KENTUCKY**

#### **CERTIFIED SERVICE CENTER**

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

## CERTIFIED SERVICE CENTER RAMCO BUSINESS PARK

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

#### CERTIFIED SERVICE CENTER

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### **LOUISIANA**

#### HERITAGE SERVICE GROUP

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

#### MAINE

#### GCS SERVICE INC.

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

#### MASSACHUSETTS RESTAU-RANT SUPPLY

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

#### PINE TREE FOOD EQUIP-MENT

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

#### **MARYLAND**

#### **EMR SERVICE DIVISION**

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

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### MARYLAND TO NEW YORK

#### **EMR SERVICE DIVISION**

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

#### **EMR SERVICE DIVISION**

5316 Sunnyside Ave.
Beltsville, MD 20715
(301) 931-7000
800-348-2365
FAX: (301) 931-3060
baltparts@emrco.com
GCS SERVICE INC.
SILVER SPRING, MD
(301) 585-7550 (DC)
(410) 792-0338 (BALT)
(800) 638-7278
FAX: (301) 495-4410

#### **MASSACHUSETTS**

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

#### MASSACHUSETTS RESTAU-RANT SUPPLY

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### SUPERIOR KITCHEN SER-VICE INC.

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

#### **MICHIGAN**

#### GCS SERVICE INC.

LIVONIA, MI (248) 426-9500 800-772-2936 FAX: (248) 426-7555

## JACKSON SERVICE COMPA-

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

#### GCS SERVICE INC.

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

#### **MINNESOTA**

#### GCS SERVICE INC.

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

#### **GENERAL PARTS, INC.**

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

#### MISSISSIPPI

#### GCS SERVICE INC.

JACKSON, MS (601) 956-7800 800-274-5954 FAX: (601) 956-1200

#### GCS SERVICE INC.

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

#### MISSOURI

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

FAX: (816) 920-7387

#### GCS SERVICE INC.

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

## KAEMMERLIN PARTS & SVC.

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

#### GENERAL PARTS, INC.

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

#### **MONTANA**

## RESTAURANT APPLIANCE SVC.

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

#### NEBRASKA

#### **GOODWIN - TUCKER GROUP**

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

#### NEVADA

## HI TECH COMMERCIAL SER-

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

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

#### GCS SERVICE INC.

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

#### **NEW HAMPSHIRE**

#### GCS SERVICE INC.

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

#### ACE SERVICE CO.

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

#### MASSACHUSETTS RESTAU-RANT SUPPLY

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

#### **NEW JERSEY**

#### JAY HILL REPAIRS

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### **ELMER SCHULTZ SERVICES**

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

#### **NEW YORK**

## APPLIANCE INSTALLATION AND SERVICE CORP.

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

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS —

#### **NEW YORK TO PENNSYLVANIA**

#### B.E.S.T. INC.

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

#### **DUFFY'S EQUIPMENT SVC.**

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

#### **NORTHERN PARTS & SVC.**

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

#### GCS SERVICE INC.

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

#### **ALL SERVICE KITCHEN**

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

#### **ALL ISLAND REPAIRS**

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

#### **NORTH CAROLINA**

#### **AUTHORIZED APPLIANCE**

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

#### **AUTHORIZED APPLIANCE**

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

#### AUTHORIZED APPLIANCE SERVICECENTER

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

## AUTHORIZED APPLIANCE SERVICECENTER

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

#### WHALEY FOODSERVICE

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

## WHALEY FOODSERVICE REPAIRS

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

## WHALEY FOODSERVICE REPAIRS

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

## WHALEY FOODSERVICE REPAIRS

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

#### **NORTH DAKOTA**

#### GCS SERVICE INC.

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

#### **GENERAL PARTS, INC.**

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

#### OHIO

#### **CERTIFIED SERVICE CENTER**

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

#### CERTIFIED SERVICE CENTER 171J-K NORTH HAMILTON RD.

COLUMBUS, OH 43213 (614) 751-3769 (866) 862-1252 FAX: (614) 751-5792 jadkins@certifiedsc.com

#### **CERTIFIED SERVICE CENTER**

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

## COMMERCIAL PARTS & SVC. OF COLUMBUS

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

#### GCS SERVICE INC.

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

## ELECTRICAL APPLIANCE REPAIR SVC.

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

#### **OKLAHOMA**

#### HAGAR RESTAURANT EQMT.

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

#### **OREGON**

#### **RON'S SERVICE**

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

#### **PENNSYLVANIA**

## A.I.S. COMMERCIAL PARTS & SERVICE

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

#### **ELMER SCHULTZ SVC.**

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

## K & D PARTS AND SERVICE

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

#### **CLARK SERVICE & PARTS**

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

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS ——

#### RHODE ISLAND TO WISCONSIN

#### RHODE ISLAND

#### GCS SERVICE INC.

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

#### SUPERIOR KITCHEN SER-VICE INC.

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

#### **SOUTH CAROLINA**

## AUTHORIZED APPLIANCE SERVICECENTER

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

## AUTHORIZED APPLIANCE SERVICECENTER

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

## WHALEY FOODSERVICE REPAIRS

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

## WHALEY FOODSERVICE REPAIRS

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

## WHALEY FOODSERVICE REPAIRS

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

## WHALEY FOODSERVICE REPAIRS

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

#### **SOUTH DAKOTA**

#### GCS SERVICE INC.

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

#### GENERAL PARTS, INC.

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

#### **TENNESSEE**

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### **TEXAS**

## ARMSTRONG REPAIR CEN-

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

## COMMERCIAL KITCHEN REPAIR CO.

1377 N BRAZOS

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### **GCS/STOVE PARTS**

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

#### **UTAH**

## LA MONICA'S RESTAURANT EQMT. SVC.

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

#### **VERMONT**

#### **NORTHERN PARTS & SVC.**

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

#### GCS SERVICE INC.

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

#### VIRGINIA

#### DAUBERS, INC.

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### GCS SERVICE INC.

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

#### WASHINGTON

#### GCS SERVICE INC.

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

## RESTAURANT APPLIANCE SERVICE

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

#### **WEST VIRGINIA**

#### STATEWIDE SERVICE, INC.

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

#### **WISCONSIN**

## APPLIANCE SERVICE CENTER. INC.

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

## APPLIANCE SERVICE CENTER. INC.

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

## APPLIANCE SERVICE CENTER

786 MORRIS AVE GREEN BAY, WI 54304 (920) 496-9993 800-236-0871 FAX: (920) 496-9927 ascfox@execpc.com

#### SECTION 7: JACKSON MAINTENANCE & REPAIR CENTERS

#### WISCONSIN TO WYOMING/INTERNATIONAL

#### **GENERAL PARTS, INC.**

W223 N735 SARATOGA DRIVE WAUKESHA, WI 53186 (262) 650-6666 (800) 279-9946 (262) 650-6660 FAX

#### WYOMING

## HAWKINS COMMERCIAL APPLIANCE SERVICE

3000 S. WYANDOT ST. ENGLEWOOD, CO 80110 (303) 781-5548 (800) 624-2117 FAX: (303) 761-5561 johns@hawkinscommercial.com

#### **METRO APPLIANCE SERVICE**

1640 S BROADWAY DENVER, CO 80210 (303) 778-1126 800-525-3532 FAX: (303) 778-0268 metroappls@aol.com

#### INTERNATIONAL

#### **GLOBAL PARTS AND SUPPLY**

7758 NW 72ND ST MIAMI, FL 33166 (305) 885-6353

#### H.D. SHELDON AND CO

19 UNION SQUARE, WEST NEW YORK, NY 10003 (212) 627-1759 (212) 924-6920

#### CANADA

#### THE GARLAND GROUP

1177 KAMATO ROAD MISSISSAUGA, ONTARIO L4W 1X4 (905) 206-8380 SALES (905) 624-1419 FAX: (905) 624-1851 SERVICE 800-427-6668 FAX: 800-361-7745

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