# INSTALLATION/OPERATION \& TECHNICAL MANUAL 

FOR JACKSON MODELS:

| AJ-64CE | AJ-86CE | AJ-100CE |
| :--- | :--- | :--- |
| AJ-64CS | AJ-86CGP | AJ-100 CGP |
| AJ-64CGP | AJ-86CS |  |

AND ASSOCIATED OPTION PACKAGES INCLUDING:

SIDE LOADER
D226 EXTERNAL STEAM BOOSTER


Warewashing Systems
Jackson WWS ,INC.
P.O. Box 1060

## 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.


CALU1-888-800-5672 TO REG ISTER TH IS PRO DUC T! FAIIURE TO DO SO W $\mathbb{I L V O} \mathbb{D}$ THE W ARRANTY!

L工AM E AL 1-888-800-5672 PARA REG ISIRAR ESTE PRO DUC TO! ALNO HAC ERIO LA G ARANTIA SERA ANULADA!
S.V.P. APPETER 1-888-800-5672 PO UR ENREG ISIRER C E PRO DUII, LA G ARANTE SERA ANNULEE PO UR TO UT PRO DUITNO N - ENREG ISIREE

| REVISION | REVISION <br> DATE | MADE <br> BY | APPLICABLE <br> ECN | DETAILS |
| :---: | :---: | :---: | :---: | :--- |

## 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:

$\qquad$
Serial No.: $\qquad$
Installation Date: $\qquad$
Service Rep. Name: $\qquad$
Phone No.: $\qquad$

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 1-888-8005672. Please remember that technical support is available for service personnel only.

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## SECTION 1: SPECIFICATION INFORMATION

# SECTION 1: SPECIFICATION INFORMATION OPERATING CHARACTERISTICS 

| RACKS PER HOUR: |  |
| :---: | :---: |
| AJ-64-86-100CE/CS/CGP | 287 |
| DISHES OR GLASSES PER HOUR: |  |
| AJ-64-86-100CE/CS/CGP | 7200 |
| PREWASH TANK CAPACITY (GALLONS): |  |
| AJ-86CE/CS/CGP | 16 |
| AJ-100CE/CS/CGP | 16 |
| WASH TANK CAPACITY (GALLONS): |  |
| AJ-64-86-100CE/CS/CGP | 15.4 |
| POWER RINSE TANK CAPACITY (GALLONS): |  |
| AJ-86CE/CS/CGP | 15.4 |
| AJ-100CE/CS/CGP | 15.4 |
| PREWASH PUMP CAPACITY (GPM): |  |
| AJ-86CE/CS/CGP | 120 |
| AJ-100CE/CS/CGP | 270 |
| WASH PUMP CAPACITY |  |
| GALLONS PER MINUTE (ALL MODELS): | 270 |
| POWER RINSE PUMP CAPACITY |  |
| GALLONS PER MINUTE (ALL MODELS): | 270 |
| VENTING REQUIREMENTS (CFM)(100\% CAP.): |  |
| INPUT END | 200 |
| OUTPUT END | 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) | $150^{\circ} \mathrm{F}$ |
| POWER RINSE (MINIMUM) | $160^{\circ} \mathrm{F}$ |
| FINAL RINSE (MINIMUM) | $180^{\circ} \mathrm{F}$ |
| FLOW PRESSURE (PSI) | $20 \pm 5$ |

## SECTION 1: SPECIFICATION INFORMATION <br> ELECTRICAL REQUIREMENTS

## AJ-64CE MODELS

| VOLTS | PH | HZ | TOTAL AMPS | TYPICAL 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 <br> TOTAL |
| :--- | :--- | :--- | :--- | :--- |
| $\frac{\text { VOLTS }}{208}$ | $\frac{\text { PH }}{1}$ | $\frac{\text { HZ }}{\text { ELECTRICAL }}$ |  |  |

## AJ-86CE MODELS

|  |  |  |  |  | TYPICAL <br> TOTAL |
| :--- | :--- | :--- | :--- | :--- | :--- |
| VLECTRICAL |  |  |  |  |  |

## AJ-86CGP MODELS



## AJ-86CS MODELS

TYPICAL
TOTAL ELECTRICAL

| VOLTS | PH | HZ | TOTAL AMPS | ELECTRIC 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 |

## SECTION 1: SPECIFICATION INFORMATION

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

## AJ-100CE MODELS

| VOLTS | PH | HZ | TOTAL AMPS | TYPICAL <br> ELECTRICAL <br> 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

| VOLTS | PH | HZ | TOTAL | TYPICAL ELECTRICAL 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

|  |  |  |  | TYPICAL <br> TOTAL |
| :--- | :--- | :--- | :--- | :--- |
| $\frac{\text { VOLTS }}{208}$ | $\frac{\text { PH }}{1}$ | $\frac{H Z}{60}$ | $\frac{\text { AMPS }}{28 \mathrm{~A}}$ | $\frac{\text { CIRCUIT }}{35 \mathrm{AMP}}$ |
| 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)
208-230
FREQUENCY (HZ)
60 SINGLE

WATER REQUIREMENTS:
INCOMING WATER TEMPERATURE (MINIMUM) $110^{\circ} \mathrm{F}$
FLOW PRESSURE (PSI)
$20 \pm 5$
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 (PSI) 250
SHELLSIDE HYDROSTATIC TEST PRESSURE (PSI)
188
MAXIMUM OPERATING TEMPERATURE $295^{\circ} \mathrm{F}$
MAXIMUM SHELLSIDE STEAM PRESSURE (PSI) 125

*     - 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):
STEAM RELIEF VALVE SET PRESSURE (PSI): 50

Right to Left
Legend to Drawing
A - Machine water inlet $3 / 4$ " NPT,

B Electrical connection
C - Drain connection 1-1/2" NP
C - Drain connection 1-1/2" NPT
D - Vent collar - Optional
D - Vent collar - Optional
E - Vent cowl standard
Note: All vertical dimensions are
+/- 1/2" from floor due to adjustable bullet feet.

## $\stackrel{H}{l}_{84[2134 \mathrm{~mm}]}^{\text {With Doors Open }}$


Left Side


## Right to Left

Legend to Drawing
A - Machine water inlet $3 / 4^{\prime \prime}$ NPT, $110^{\circ} \mathrm{F}-140^{\circ} \mathrm{F}$
A - Machine water inlet $3 / 4^{\prime \prime}$ NPT, $110^{\circ} \mathrm{F}-140^{\circ} \mathrm{F}$
Hi-temp, $140^{\circ} \mathrm{F}$ Low-temp minimum
C - Drain connection 1-1/2" NPT
D - Vent collar - Optional
E - Vent cowl standard
F - $3 / 4^{\prime \prime}$ NPT $180^{\circ} \mathrm{F}$ Water Inlet for
E-Vent cowl standard
F - 3/4" NPT $180^{\circ} \mathrm{F}$ Water Inlet for wash tank fill, final rinse, \& tank heating. From gas booster heater. Interconnecting hose
provided by manufacturer. G-3/4"NPT $140^{\circ} \mathrm{F}$ Water inlet for H-3/4" NPT $180^{\circ}$ F Water Outlet connection to line on dishmachine.
Connection manufacturer.
$J-3 / 4^{\prime \prime}$ NPT Gas Connection
$\mathrm{K}-4^{\prime \prime}$ OD Vent pipe connection. Flue to
be installed to meet local codes by
Note: All vertical dimensions are $+/-1 / 2^{\prime \prime}$ from
floor due to adjustable bullet feet.




$16 \frac{1}{[ }[415 \mathrm{~mm}]=\quad=-16_{4}^{3}[425 \mathrm{~mm}]$ 21 [ 5333 mm$]$
 $\begin{array}{ccc}\text { Recommended Table Fabrication } & \begin{array}{c}\text { Note: Tub Will Accept } \\ \text { a Table Flange } \\ \text { Rack Rail }\end{array} \\ \text { Up to 24 7/8" } \\ {[632 \mathrm{~mm}]}\end{array}$ Left to Right

Legend
A - Machine water inlet $3 / 4^{\prime \prime}$ NPT, $180^{\circ}$
Hi-temp, $140^{\circ}$ F Low-temp minimum B - Electrical connection C - Drain connecion

E - Vent cowl standard
F - Prewash water inlet 3/4" NPT
$110^{\circ} \mathrm{F}-140^{\circ} \mathrm{F}$
$\mathrm{G}-\mathrm{Cold}$ water the
Note: All vertical dimensions are $+/-1 / 2^{\prime \prime}$ from
floor due to adjustable bullet feet.

Left to Right


$\underset{\text { Rack Rail }}{\text { Recommended Table Fabrication }}$


Prewash Plan View Section
with Cold Water Thermostat




Use Silicone Sealer
Between Table and
Tub Lip of Machine to
Prevent Leakage $\square$ [mшє9L] $0 \varepsilon \rightarrow$

## 





$[m \omega \angle L Z]]_{\square}^{z_{8}} \rightarrow 0$

Right to Left
Legend to Drawing
A - Machine water inlet $3 / 4^{\prime \prime}$ NPT, $110^{\circ} \mathrm{F}-140^{\circ} \mathrm{F}$ A - Machine water inlet $3 / 4^{\prime \prime} \mathrm{NPT}, 110^{\circ} \mathrm{F}$
Hi-temp, $140^{\circ} \mathrm{F}$ Low-temp minimum
B - Electrical connection

C - Electrin connection 1-1/2" NPT
D - Vent collar - Optional
E - Vent cowl standard
F-3/4" NPT $180^{\circ} \mathrm{F}$ Water Inlet for wash tank
fill, final rinse, \& tank heating. From gas
fill, final rinse, \& tank heating. From gas
booster heater. Interconnecting hose
provided by manufacturer.
provided by manufacturer.
$\mathrm{G}-3 / 4^{\prime \prime}$ NPT $140^{\circ} \mathrm{F}$ Water inlet for
$\mathrm{G}-34^{\prime 2}$ booster heater.
$\mathrm{H}-3 / 4^{\prime \prime}$ NPT $180^{\circ} \mathrm{F}$ Wate
$\mathrm{H}-3 / 4^{\prime \prime}$ NPT $180^{\circ} \mathrm{F}$ Water Outlet
connection to line on dishmachine. connection to line on dishmachine.
Connection hose provided by
$\mathrm{J}-3 / 4^{\prime \prime}$ NPT Gas Connection
$\mathrm{K}-4$ " OD Vent pipe connection. Flue to
$\mathrm{K}-4^{\prime \prime}$ OD Vent pipe connection. Flue to
be installed to meet local codes by
be installed to meet local codes by
installing contractor.

- Prewash water inlet 3/4" NPT
M - Cold water thermostat plumbing
Note: All vertical dimensions are $+/-1 / 2^{\prime \prime}$ from
floor due to adjustable bullet feet.
${ }^{84}$ [2134mm]
With Doors Open





AJ-100 ELECTRIC - RIGHT TO LEFT


> Right to Left Legend A - Machine water inlet $3 / 4^{\prime \prime}$ NPT, $180^{\circ} \mathrm{F}$ Hi-temp, $140^{\circ} \mathrm{F}$ Low-temp minimum B - Electrical connection C - Drain connection $1-1 / 2^{\prime \prime}$ NPT D - Vent collar - Optional E - Vent cowl standard F - Prewash water inlet $3 / 4^{\prime \prime}$ NPT $110^{\circ} \mathrm{F}-140^{\circ} \mathrm{F}$ G - Cold water thermostat plumbing connection $3 / 4^{\prime \prime}$ NPT - Optional

Note: All vertical dimensions are
$+/-1 / 2^{\prime \prime}$ from floor due to
$84[2134 \mathrm{~mm}]$
With Doors Open


## SECTION 1: SPECIFICATION INFORMATION

AJ-100 GAS - LEFT TO RIGHT

Right to Left
Legend to Drawing
A-Machine wati
Minet $3 / 44^{4}$ NPT, $110^{\circ} \mathrm{F}-140^{\circ} \mathrm{F}$


F-3/4" NPT $180^{\circ} \mathrm{F}$ Water Inlet for wash tank
$-3 / 4$
fill, final rinse, \& tank heating. From gas
booster heater, Interconnecting hose
booster heater. Interconnecting hose
provided by manufacturer. $\mathrm{G}-3 / 4^{\prime \prime}$ NPT $140^{\circ} \mathrm{F}$ Water inlet for
gas booster heater. H $-3 / 4$ " NPT $180^{\circ} \mathrm{F}$ Water Outlet
connection to line on dishmachine. connection to line on dishmachine.
Connection hose provided by manufacturer.
$J-3 / 4^{\prime \prime}$ NPT Gas Connection $J-3 / 4 "$ NPT Gas Connection
$\mathrm{K}-4^{\prime \prime}$ OD Vent pipe connection. Flue to be installed to meet local codes by L - Prewash water inlet $3 / 4^{\prime \prime}$ NPT
$110^{\circ} \mathrm{F}-140^{\circ} \mathrm{F}$ M - Cold water thermostat plumbing Note: All vertical dimensions are $+/-1 / 2^{\prime \prime}$ from 4" $(102 \mathrm{~mm})$ wide $\times 16$ " $(406 \mathrm{~mm})$
long cutout in Vent Cowl/Splash Shield. Shipped with Cover Plate.






## SECTION 1: SPECIFICATION INFORMATION

SIDE LOADER INSTALLATION DIMENSIONS

| 23" SIDE LOADER DIMENSIONS |  |
| :---: | :---: |
| $\frac{\text { MODEL }}{}$ | DIMENSIONS |
| AJ-64 | $95^{\prime \prime}$ |
| AJ-86 | $117^{\prime \prime}$ |
| AJ-100 | $131 "$ |
|  |  |
| 30" SIDE LOADER DIMENSIONS |  |
| MODEL | DIMENSIONS |
| AJ-64 | $102 "$ |
| AJ-86 | $124 "$ |
| AJ-100 | $138 "$ |
|  |  |



## SECTION 1: SPECIFICATION INFORMATION

D226 STEAM BOOSTER DIMENSIONS


NOTE: All dimensions are in inches and are for reference only.


## SECTION 1: SPECIFICATION INFORMATION



Steam Booster Piping - Double Tank Machine

## SECTION 1: SPECIFICATION INFORMATION

Electric Booster Dimensions (Typical)


Gas Booster Dimensions
(Typical)


RIGHT SIDE VIEW


REAR VIEW

## SECTION 2:

INSTALLATION/OPERATION INSTRUCTIONS

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

## A 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 $75-1 / 2^{\prime \prime}$ to $76-1 / 2^{\prime \prime}$.


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


Incoming Plumbing Assembly 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.
(Optional)
If the water level is too low or too high, check the incoming water pressure. It should be $20 \pm 5 \mathrm{PSI}$. 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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS <br> 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 per-
 sonnel of any problems and of the location of the service breaker. Replace the control box cover and tighten down the screws.

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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS 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".


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


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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

CURTAIN INSTALLATION DIAGRAMS

Please refer to the chart for placement of the curtains.


## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

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 $90^{\circ}$. 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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

D226 STEAM BOOSTER INSTALLATION \& OPERATION INSTRUCTIONS

## CONCEALED DAMAGE OR MISSING PARTS:

A
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 prepunched 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 $110^{\circ} \mathrm{F}$ to approximately $180^{\circ} \mathrm{F}$ 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 $180^{\circ} \mathrm{F}$ and is extremely hot during operations.
Advise personnel of the dangers associated with touching booster components as burns or severe injury can occur.

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

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

 D226 STEAM BOOSTER INSTALLATION \& OPERATION INSTRUCTIONS (CONTINUED)
## ELECTRICAL:

AWARNING: 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:

A
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.


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.
I. 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):

AWARNING: The D226 Booster is designed to heat water to a minimum of $180^{\circ} \mathrm{F}$ 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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS <br> gas conveyor hose installation



Cut the hose at the location where the hose is even with the yellow plastic stop.

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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS gas conveyor hose installation (CONtinued)

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



## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

 dishmachine operating instructionsPREPARATION: 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.

A
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 workday 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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS <br> 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.

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS

DETERGENT CONTROL

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

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

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

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

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

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

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

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

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

## SECTION 2: INSTALLATION/OPERATION INSTRUCTIONS <br> 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.


TABLE LIMIT SWITCH THROUGH ROD HOLES TABLE -

$\varnothing 0.75-$
$\varnothing 0.25-$
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.

## SECTION 3: PREVENTATIVE MAINTENANCE

## SECTION 3: PREVENTATIVE MAINTENANCE <br> 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.

## SECTION 3: PREVENTATIVE MAINTENANCE <br> D226 MAINTENANCE

AWARNING: 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.

## SECTION 3: PREVENTATIVE MAINTENANCE <br> 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 | $-30-15^{\circ} \mathrm{F}$ | 16-50F | 51-95 ${ }^{\circ} \mathrm{F}$ | 51-95 ${ }^{\circ} \mathrm{F}$ | 96-131 ${ }^{\circ} \mathrm{F}$ | 96-131 ${ }^{\circ} \mathrm{F}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Final Stage Worm Speed ${ }^{1}$ | up to 2000 FPM | up to 2000 FPM | up to 450 FPM | above 450 FPM | up to 450 FPM | above 450 FPM |
| ISO Viscosity Grade | 220 | 460 | 680 | 460 | 680 | $460{ }^{1}$ |
| AGMA Lubricant No. | 5 S | \#7 Compounded | \#8 Compounded | \#7 Compounded | 8S | 7 S |
| 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 | $\begin{aligned} & \text { Syncon R \& O } \\ & 220 \end{aligned}$ | Inca Oil 460 | Inca Oil 680 | Inca Oil 460 | N/A | $\begin{aligned} & \text { Syncon R \& O } \\ & 460 \end{aligned}$ |
| Exxon (Esso) | Teresstic SHP220 | Spartan EP 460 | Spartan EP 680 | Spartan EP 460 | Teresstic SHP 680 | $\begin{aligned} & \text { Teresstic SHP } \\ & 460 \end{aligned}$ |
| 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 |

(1) 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).

# SECTION 3: PREVENTATIVE MAINTENANCE 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 $51-95^{\circ} \mathrm{F}$, 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 $225^{\circ} \mathrm{F}$ 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 $200^{\circ} \mathrm{F}$ 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 | $\mathbf{5}$ | $\mathbf{7 . 5}$ | $\mathbf{1 0}$ | $\mathbf{1 5}$ | $\mathbf{2 0}$ | $\mathbf{2 5}$ | $\mathbf{3 0}$ | $\mathbf{4 0}$ | $\mathbf{5 0}$ | $\mathbf{6 0}$ | $\mathbf{8 0}$ | $\mathbf{1 0 0}$ |
| 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

AWARNING: 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 $20 \pm 5 \mathrm{PSI}$.
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 $20 \pm 5 \mathrm{PSI}$.
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 specifictions:

## ITEMS

| Relays | $16 \ln / \mathrm{lbs}$ |
| :--- | :--- |
| Heater Contactor | $35 \ln / \mathrm{lbs}$ |
| Heater Nuts | $16 \ln / \mathrm{lbs}$ |
| Terminal Block | $50 \ln / \mathrm{lbs}$ |

## SECTION 4: TROUBLESHOOTING

D226 TROUBLESHOOTING SECTION

AWARNING: 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 $20 \pm 5 \mathrm{PSI}$.
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 $20 \pm 5 \mathrm{PSI}$.
10. Heat exchanger is clogged. Replace the heat exchanger.
11. Insufficient volume of steam to unit. Check the line size and flow pressure.

## SECTION 5: PARTS SECTION

## AJ-64 CONTROL BOX ASSEMBLY



## SECTION 5: PARTS SECTION AJ-64 CONTROL BOX ASSEMBLY (CONTINUED)

| ITEM | QTY | DESCRIPTION |
| :---: | :---: | :---: |
| 1 | 1 | Electrical Box Weldment |
| 2 | 1 | Decal, L1-L2-L3 |
| 3 | 1 | Terminal Block |
| 4 | 6 | Lockwasher, \#10 |
| 5 | 2 | Screw, 10-32 x 3/4" Long Phillips Trusshead |
| 6a | 1 | Light, Amber (Wash Heater Overload) (Not used on steam or gas models) |
| 6b | 1 | Light, Amber (Rinse Heater Overload) (Not used on steam or gas models) |
| 7 | 1 | Wire Lug, 2 AWG to 14 AWG |
| 8 | 1 | Light, Red (Power) |
| 9 | 1 | Din Rail |
| 10 | 3 | Screw, 10-32 x 1/2" Long Phillips Trusshead |
| 11 | 1 | Washer, Flat, 1/4" |
| 12 | 1 | Decal, Ground |
| 13 | 1 | Terminal Board |
| 14a | 1 | Drive Motor Contactor |
| 14b | 1 | Wash Pump Motor Contactor |
| 14c | 1 | Recirculating Rinse Pump Motor Contactor |
| 15 | 1 | Circuit Breaker (208 \& 230 volt models only) |
| 16a | 1 | Recirculating Rinse Pump Motor Overload (See motor overloads chart) |
| 16b | 1 | Wash Pump Motor Overload (See motor overloads chart) |
| 17 | 1 | Switch, ON/FILL \& OFF/DRAIN |
| 18 | 1 | Drive Motor Overload (See motor overloads chart) |
| 19 | 1 | Terminal Board |
| 20 | 2 | Heater Contactor (Not available on steam or gas models) |
| 21 | 2 | Screw, 10-32 x 3/8" Long Phillips Trusshead |
| 22 | 1 | Transformer |
| 23 | 4 | Locknut, 10-24 with Nylon Insert |
| 24 | 1 | Fuse Holder (460 volt models only) |
| 25 | 1 | Fuse (460 volt models only) |
| 26 | 12 | Screw, 6-32 x 3/8" Long Phillipshead |
| 27 | 4 | Control Relay, 2 Pole |
| 28 | 1 | Relay, 3 Pole |
| 29 | 1 | Rinse Thermometer Decal, Rinse $180^{\circ} \mathrm{F}$ |
| 30 | 1 | Wash Thermometer Decal, Wash $150^{\circ} \mathrm{F}$ |
| 31 | 1 | Power Rinse Thermometer Decal, Power Rinse $160^{\circ} \mathrm{F}$ |
| 32 | 1 | Decal, Gauge |

Mfg. No.
05700-041-88-50
09905-101-12-66
05940-011-48-27
05311-273-02-00
05305-011-62-17
05945-111-44-44
05945-111-44-44
05940-200-76-00
05945-111-44-45
05700-021-72-75
05305-011-39-36
05311-174-01-00
09905-011-86-86
05940-002-78-97
05945-111-68-38
05945-111-68-38
05945-111-68-38
05925-011-68-34
N/A
N/A
05930-011-49-55
N/A
05940-021-89-41
05945-002-24-70
05305-173-12-00
05950-011-68-35
05310-373-01-00
05920-011-72-89
05920-011-72-88
05305-171-02-00
05945-111-35-19
05945-111-72-51
06685-111-68-49
09905-002-97-62
06685-111-87-13
09905-002-97-61
06685-111-87-13
09905-003-01-31
09905-021-82-65

## Items not shown:

| Grommet, $1 / 2^{\prime \prime}$ 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 | $05700-011-71-47$ |



## SECTION 5: PARTS SECTION

## 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 | 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 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 $\times$ 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) Decal, Rinse $180^{\circ} \mathrm{F}$ | 06685-111-68-49 |
|  |  |  | 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) Decal, Power Rinse $160^{\circ} \mathrm{F}$ | 06685-111-87-13 |
|  |  |  | 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 $150^{\circ} \mathrm{F}$ | 09905-002-97-61 |
| 30b | 1 | Prewash Thermometer, 120" (L-R \& R-L models) | 06685-111-87-13 |
| $31$ | 1 | Power Rinse Thermometer Decal, Power Rinse $160^{\circ} \mathrm{F}$ | 06685-111-87-13 |
|  |  |  | 09905-003-01-31 |
| Decal, Power Rinse $160^{\circ} \mathrm{F}$ <br> 321 Decal, Gauge |  |  | 09905-021-82-65 |
| Items not shown: |  |  |  |
| 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 |

## SECTION 5: PARTS SECTION <br> MOTOR OVERLOADS

## AJ-64 SERIES MOTOR OVERLOAD CHART:

|  | 208-230V/60 HZ/1 PHASE | 208-230V/60 HZ/3 PHASE | $460 \mathrm{~V} / 60 \mathrm{HZ} / 3$ 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:

|  | $\underline{208-230 \mathrm{~V} / 60 \mathrm{HZ} / 1 \text { PHASE }}$ |  | $\underline{208-230 \mathrm{~V} / 60 \mathrm{HZ} / 3 \text { PHASE }}$ |  | $\underline{460 \mathrm{~V} / 60 \mathrm{HZ} / 3 \mathrm{PHASE}}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 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:

|  | $\underline{208-230 V / 60 ~ H Z / 1 ~ P H A S E}$ |  | $\underline{208-230 \mathrm{~V} / 60 \mathrm{HZ} / 3 \text { PHASE }}$ |  | $\underline{460 \mathrm{~V} / 60 \mathrm{HZ} / 3 \mathrm{PHASE}}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 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 |  | $05945-111-68-40$ | $05945-111-68-41$ |  |

## SECTION 5: PARTS SECTION

HEATER BOX ASSEMBLY



*     - "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.

## SECTION 5: PARTS SECTION

## 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 $140^{\circ} \mathrm{F}$.(preferably about $130^{\circ} \mathrm{F}$.).
$d$ - 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.

## SECTION 5: PARTS SECTION

## 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 |  |
| :--- | :--- | :--- |
| AJ-64's | $05700-002-40-41$ |  |
| AJ-86's | $05700-031-83-68$ | $05700-002-40-41$ |
| AJ-86CGP | $05700-002-89-68$ | $05700-041-86-60$ |
| AJ-100's | $05700-041-94-89$ | $05700-041-86-60$ |
| AJ-100CGP | $05700-041-94-89$ | $05700-041-91-06$ |

## SECTION 5: PARTS SECTION

PREWASH PLUMBING ASSEMBLY


## SECTION 5: PARTS SECTION

INCOMING PLUMBING ASSEMBLY (ELECTRIC \& GAS HEATED MODELS)


## SECTION 5: PARTS SECTION INCOMING PLUMBING ASSEMBLY(CONTINUED)

| ITEM | QTY |
| :--- | :--- |
| 1 | 1 |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 3 |
| 5 | 5 |
| 6 | 6 |
| 7 | 3 |
| 8 | 3 |
| 9 | 4 |
| 10 | 2 |
| 11 | 1 |
| 12 | 2 |
| 13 | 2 |
| 14 | 2 |
| 15 | 1 |
| 16 | 1 |
|  | 1 |
| 17 | 2 |
| 18 | 1 |
| 19 | 1 |
| $19 a$ | 1 |
| 20 | 1 |
| 21 | 1 |
| 22 | 2 |


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

## SECTION 5: PARTS SECTION RINSE HEADER PLUMBING ASSEMBLY (CGP MODELS)

Complete Plumbing Assembly 05700-002-51-16



## 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, $90^{\circ}, 3 / 4$ " | 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, $3 / 4$ " $\times 3 / 4$ " $\times 1 / 2^{\prime \prime}$ | 04730-411-03-01 |

## SECTION 5: PARTS SECTION EXTERNAL ELECTRIC BOOSTER OPTION OUTLET PLUMBING




WATER PRESSURE REGULATOR WITH ARRESTOR KIT OPTION


## SECTION 5: PARTS SECTION

RINSE SOLENOID VALVE \& VACUUM BREAKER REPAIR PARTS KITS


Possible Problems:

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


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

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

## SECTION 5: PARTS SECTION

WASH TANK COIL ASSEMBLY


Flat Washer 05700-001-17-87

SERVICE NOTE: Jackson HIGHLY recommends that the Coil Gaskets be replaced any time the Coil Weldment is replaced or removed for an extended period of time.

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



## SECTION 5: PARTS SECTION

## 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, $90^{\circ}, 3 / 4$ " NPT, Black Iron | 04730-906-10-34 |
| 10 | 6 | Elbow, $90^{\circ}, 3 / 4$ " 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 $7^{\prime \prime}$ 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 |



## SECTION 5: PARTS SECTION

## 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 |  |
| 5 | 1 | Nipple, 3/4" NPT x 6" Long, Black Iron | $04730-011-95-66$ |
| 6 | 1 | Tee, 3/4" x 3/4" x 3/4", Black Iron | $04730-907-01-34$ |
| 7 | 2 | Nipple, 3/4" NPT x 4" Long, Black Iron | $04730-002-74-14$ |
| 8 | 6 | Elbow, Street, 3/4" NPT, 90 |  |
| 9 | 4 | Elbow, Black Iron | $04730-907-02-34$ |
| 10 | 1 | Nipple, 3/4" NPT x 7 " Black Lrong, Black Iron | $04730-011-87-37$ |
| 11 | 4 | Union, 3/4" NPT, Black Iron | $04730-906-10-34$ |
| 12 | 5 | Nipple, 3/4" NPT, Close, Black Iron | $05700-002-74-15$ |
| 13 | 1 | Nipple, 3/4" NPT x 17" Long, Black Iron | $04730-912-01-00$ |
| 14 | 1 | Nipple, 3/4" NPT x 26-1/2" Long, Black Iron | $04730-907-01-00$ |
| 15 | 2 | Valve, Solenoid, Steam, 3/4" NPT, 120V | $05700-002-74-16$ |
| 16 | 2 | Reducer, 3/4" NPT to 1/2" NPT | $05700-002-74-17$ |
|  |  |  |  |



RIGHT SIDE VIEW

## SECTION 5: PARTS SECTION <br> STEAM OUTLET PLUMBING (LEFT TO RIGHT)



| ITEM | QTY | DESCRIPTION |
| :--- | :--- | :--- |
| 1 | - | Trap, Steam, 3/4" NPT |
| 2 | - | Nipple, Close, 3/4" NPT, Black Iron |
| 3 | - | Union, 3/4" NPT, Black Iron |
| 4 | - | Nipple, 3/4" x 18" Long, Black Iron |
| 5 | - | Elbow, $90^{\circ}$ Street, 3/4" NPT, Black Iron |
| 6 | - | Elbow, $90^{\circ}, 3 / 4 "$ NPT, Black Iron |
| 7 | - | Reducer, 3/4" NPT to 1/2" NPT Black Iron |
| 8 | - | Nipple, 3/4" NPT x 26-1/2" Long, Black Iron |

Mfg. No.
06680-500-02-77
04730-907-01-00
04730-912-01-00
05700-002-74-10
04730-011-87-37
04730-906-10-34
04730-911-02-34
04730-911-02-34


## SECTION 5: PARTS SECTION <br> STEAM OUTLET PLUMBING (RIGHT TO LEFT)

## TOP PLUMBING



| ITEM | QTY | DESCRIPTION |
| :--- | :--- | :--- |
| 1 | - | Steam Trap |
| 2 | - | Nipple, Close, 3/4", Black Iron |
| 3 | - | Union, 3/4" NPT, Black Iron |
| 4 | - | Elbow, Street, $90^{\circ}$, Black Iron |
| 5 | - | Nipple, 3/4" NPT x 22" Long, Black Iron |
| 6 | - | Elbow, $90^{\circ}, 3 / 4^{\prime \prime}$ FNPT, Black Iron |
| 7 | - | Reducer, 3/4" NPT x 1/2" NPT |
| 8 | - | Nipple, 3/4" NPT x 18" Long, Black Iron |

Mfg. No.
06680-500-02-77
04730-907-01-00
04730-912-01-00
04730-011-87-37
05700-002-74-08
04730-906-10-34
04730-911-02-34
05700-002-74-10


## SECTION 5: PARTS SECTION

 AJ-86 GAS COIL ASSEMBLY (CGP MODELS)

Other items used but not shown.

| ITEM | QTY | DESCRIPTION | Mfg. No. |
| :--- | :--- | :--- | :--- |
| 1 | 1 | Thermostat, High Limit | $05930-011-49-43$ |
| 2 | 1 | Gasket | $05330-200-02-70$ |
| 3 | 1 | Terminal Board | $05940-002-78-97$ |
| 4 | 1 | Thermostat Bracket | $05700-011-81-64$ |
| 5 | 1 | Decal, Thermostat Regulating | $09905-011-84-31$ |
| 6 | 1 | Thermostat, Wash Regulating | $06401-140-00-32$ |
| 7 | 1 | Fitting, $1 / 4 "$, Imperial Brass | $05310-924-02-05$ |

## SECTION 5: PARTS SECTION TANK, RINSE BOOSTER (CGP MODELS ONLY)



ITEM QTY
1 2
2

DESCRIPTION
Plumbing Assembly, Inlet/Discharge, Rinse Tank
Tube, Dispersion Weldment
Tank, GP Rinse
Bracket, Upper Rinse Tank Bracket, Lower Rinse Tank Nipple, 3/4" NPT x 4" Long Elbow, 3/4" NPT, $90^{\circ}$ Brass Nipple, 3/4" NPT x Closed Brass

Mfg. No.
05700-002-51-24
05700-002-46-16
05700-002-45-05
05700-002-67-13
05700-002-67-14
04730-207-05-00
04730-206-13-00
04730-207-34-00

## SECTION 5: PARTS SECTION RECIRCULATING PUMP ASSEMBLY (CGP MODELS ONLY)



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

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


Mounting Bracket
05700-002-25-74


Mounting Bracket
05700-002-23-61


Recirculating Pump Assembly


Rinse Header Plumbing Assembly


Gas Coil Weldment


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
B - Hose, Recirculating Pump Suction
C - Hose, Wash Coil Assembly
D - Hose, Wash/Fill Supply
05700-002-52-74
05700-002-52-76

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


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

## SECTION 5: PARTS SECTION

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


## SECTION 5: PARTS SECTION

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


| ITEM | QTY |
| :--- | :--- |
| 1 | 2 |

2 Tube, 1-1/2" x 20-1/8" Long (AJ-86 Models)
2 Tube, Copper, 1-1/2" x 27-1/2" Long (AJ-100 Models)
5 Connector, No Hub, 1-1/2"
5 Nipple, 1-1/2" NPT, Brass, Close
Tee, 1-1/2" NPT x 1-1/2" NPT x 1-1/2" NPT
Nipple, 1-1/2" NPT x 3 Long, Brass
Rinse Nipple Weldment
Tube, Copper, 1-1/2" x 2" Long
Elbow, 1-1/2" NPT, $90^{\circ}$, Brass, Street
Tube, Copper, 1-1/2" x 7-3/4" Long (AJ-86 Models)
Tube, Copper, 1-1/2" x 13-3/4" Long (AJ-100 Models)
Valve, Ball, 1-1/2" NPT
Tube, Copper, 1-1/2" x 4-7/16" Long (AJ-86 Models)
Tube, Copper, 1-1/2" $\times 5-1 / 4^{\prime \prime}$ Long (AJ-100 Models)

Mfg. No.
05700-021-83-53
05700-002-87-05
05700-021-84-74
05700-002-87-05
04730-011-73-77
04730-401-25-01
05700-021-84-29
05700-021-84-28
04720-604-06-00
04730-207-40-00
04730-011-69-93
04730-011-87-04
05700-021-84-61
05700-011-87-16
04730-206-32-00
05700-021-84-24
05700-021-88-17
04820-011-71-46
05700-011-84-22
05700-002-79-12


From the existing drain, attach the two additional Tees using the $1-1 / 2^{\prime \prime}$ NPT Close Nipples. Tighten the Reducers into the Tees as shown above. Attach the Modified Compression Fitting into the $1-1 / 2^{\prime \prime}$ to $1 / 4^{\prime \prime}$ Reducer. Position the bulb of the thermostat so that it rests approximately $1 / 4^{\prime \prime}$ 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.

| Upper Support Bracket$05700-021-73-68$ | Model(s) | Volts | Phase | $\underline{\mathrm{Hz}}$ | Part Number |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | AJ-86's | 208 | 1 | 60 | 06105-121-70-55 |
|  |  | 230 | 1 | 60 | 06105-121-70-55 |
|  |  | 208 | 3 | 60 | 06105-121-70-56 |
|  |  | 230 | 3 | 60 | 06105-121-70-56 |
|  |  | 460 | 3 | 60 | 06105-121-70-56 |
| Nut, 1/4"-20 Serrated$05310-011-66-49$ | 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 |
| Lower Support Bracket 05700-021-73-71 | POWER RINSE MOTOR CHART |  |  |  |  |
|  | Model(s) | Volts | Phase | $\underline{\mathrm{Hz}}$ | 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 |

## WASH MOTOR CHART

| $\frac{\text { Volts }}{208-230}$ | $\frac{\text { Phase }}{1}$ |  | $\underline{\mathrm{~Hz}}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| 20 |  | Part Number <br> $06105-021-70-57$ <br> $460-230$ | 3 | 60 |
| $06105-121-70-58$ |  |  |  |  |
| 460 | 3 | 60 | $06105-121-70-58$ |  |

PREWASH MOTOR CHART

## SECTION 5: PARTS SECTION

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:


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

Power Rinse Pump Weldment (AJ-100's)
05700-031-81-47


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

## SECTION 5: PARTS SECTION <br> PREWASH \& UPPER WASH ARM ASSEMBLIES



Upper Wash Manifold Support Bracket 05700-021-73-97

## Replacement Kit Note:

The replacement kit for the end cap includes the endcap, lanyard, mounting screw and the locknut.


## SECTION 5: PARTS SECTION

LOWER WASH ARM ASSEMBLY


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.

## SECTION 5: PARTS SECTION

 UPPER \& LOWER POWER RINSE ARM ASSEMBLIES


## SECTION 5: PARTS SECTION

 DRIVE ASSEMBLY

## SECTION 5: PARTS SECTION DRIVE ASSEMBLY (CONTINUED)

| ITEM | QTY |
| :--- | :--- |
| 1 | 1 |

## DESCRIPTION

Drive Plate and Rod Weldment
Replacement Kit with Expansion Legs
Replacement Kit with Expansion Legs/Adjuster Crank
Adjuster Crank Assembly
Skotch Yoke Weldment Replacement Kit
Coupling \& Expansion Leg Weldment
Pawl Bar Drive Linkage Casting
Spacer Plate
Pillow Block Replacment Kit
Shaft Collar
Drive Socket
Drive Plate
Pillow Block
Drive Spring
Shaft Collar
Drive Motor Mounting Bracket
Adjuster Spring
Adjusting Handle Weldment
1 Drive Motor Replacement Kits
1 Drive Motor (208-230 Volt, 60 Hz, Single Phase Models)
Drive Motor (208-230 Volt, 60 Hz, Three Phase Models)
181 Gear Drive
$19 \quad 1 \quad$ Roller Bearing
201 Drive Hub

Mfg. No.
05700-021-67-44
06401-021-86-80
06401-011-94-54
05700-021-69-95
06401-003-08-48
09515-003-58-12
09515-021-87-73
05700-011-67-58
06401-003-08-50
05700-011-89-18
05700-021-67-39
05700-021-67-42
03120-021-71-87
05315-011-83-51
05700-011-89-18
05700-031-73-56
05315-011-71-90
05700-021-72-28
06401-003-08-42
06401-003-08-40
06105-011-71-88
03120-011-71-81
05700-011-67-97


Detail A


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

## Replacement Kits Notes:

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

## SECTION 5: PARTS SECTION

DOOR ASSEMBLIES


# SECTION 5: PARTS SECTION 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 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.


Pawl Bar Gutter Gasket 05330-011-68-55 06401-003-10-15

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.


## PAWL BAR ASSEMBLY, RIGHT TO LEFT OPERATION



PAWL BAR ASSEMBLIES:

| Model | Left to Right Pawl Bar Weldment | Right to Left <br> Pawl Bar Weldment | Pawl Bar |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dogs | Complete Assembly | Prison Package |
| AJ-64 | 05700-031-81-03 | 05700-031-81-03 | 18 | 06401-131-81-02 | 06401-231-81-02 |
| AJ-86 | 05700-041-83-67 | 05700-002-81-34 | 24 | 06401-131-83-75 (L-R) | 06401-331-83-75 |
|  |  |  |  | 06401-231-83-75 (R-L) |  |
| AJ-86 | N/A | 05700-003-13-63 | 24 | N/A (L-R) | N/A |
| With Side Loader |  |  |  | 05700-003-13-64 (R-L) | N/A |
| AJ-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
$\boxed{\square \square^{\circ} \quad \circ}$ $\qquad$〕】

## SECTION 5: PARTS SECTION <br> 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
Prewash Actuator
Wash Actuator
Power Rinse Actuator Final Rinse Actuator Rail Weldment Complete Assembly

AJ-64 MODELS
Not Applicable
05700-021-72-39
05700-002-91-09
05700-021-72-39
05700-002-74-57
05700-002-74-55

AJ-86 MODELS
05700-021-76-97
05700-021-72-39
05700-002-91-09
05700-021-72-39
05700-031-83-96
05700-041-83-72

AJ-86 MODELS
05700-021-76-97
05700-021-72-39
05700-022-91-09
05700-021-72-39
05700-041-91-21
05700-041-91-20

AJ-100 MODELS
05700-021-75-68
05700-021-72-39
05700-002-91-09
05700-021-72-39
05700-041-94-91
05700-041-94-90

AJ-100 MODELS
05700-021-76-96
05700-002-91-10
05700-021-72-39
05700-021-72-39
05700-041-91-03
05700-041-91-04

## SECTION 5: PARTS SECTION

miscellaneous parts and weldments


## SECTION 5: PARTS SECTION 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


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

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


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

## SECTION 5: PARTS SECTION <br> FLOAT SWITCH COMPONENTSISCRAP BASKETS



Float Switch Cover
05700-021-75-71


Wash Tank Float Switch Replacment Kit 06401-003-11-75

Prewash Tank Float Switch Replacment Kit 06401-003-11-76

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.


## SECTION 5: PARTS SECTION

## CURTAINSITUB MAGNETS



Curtain, 24 1/2" Long x 20-1/2" Wide CGP MODELS ONLY 08415-002-47-37



Extra Long Curtain Decal CGP MODELS ONLY 09905-002-52-69

Curtain, 21" Long x 20-1/2" Wide 08415-131-73-45

Long Curtain Decal 09905-011-73-84


Curtain, 12" Long x 20-1/2" Wide 08415-131-73-44

Short Curtain Decal 09905-011-73-82
Extra Long Curtain Decal
CGP MODELS ONLY
09905-002-52-69


Curtain Rod 05700-021-73-43


Limit Switch Bracket 05700-021-71-18


Conveyor Switch Replacement Kit 06401-003-11-79

Replacement Kit Note:
The conveyor switch replacement kit comes with the switch, a terminal and a wire nut.

## Service Note:

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

## SECTION 5: PARTS SECTION VENT COWL ASSEMBLYIVENT SCOOP OPTION



VENT SCOOP OPTION




2" Din Rail
05700-002-36-09

FAN LOAD ON TIMER OUTPUT 5A, 1/4HP, 240 V AC MAX

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

Delay Timer 05945-011-65-44


Side loader track assembly (left to right model shown).


| ITEM | QTY | DESCRIPTION |
| :--- | :--- | :--- |
| 1 | 1 | Track Weldment (Left to Right) 24" |
|  | 1 | Track Weldment (Right to Left) 24" |
|  | 1 | Track Weldment (Left to Right) 30" |
|  | 1 | Track Weldment (Right to Left) 30" |
| 2 | 1 | Actuator Switch Replacement Kit |
| 3 | 2 | Spacer |
| 4 | 1 | Leg Socket Replacement Kit |
| 5 | 1 | Leg Support Replacement Kit |
| 6 | 1 | Bullet Foot |

Mfg. No.
05700-031-78-98
05700-031-95-20
05700-003-04-57
05700-003-04-58
06401-003-10-64
05700-011-71-44
06401-003-09-79
06401-003-09-80
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

## SECTION 5: PARTS SECTION



## Service Note:

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

## SECTION 5: PARTS SECTION SIDE LOADER VENT COWL OPTION

Vent Cowl Replacement Kit (Left to Right)

## 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.
## 06401-003-11-81



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


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

Vent Cowl Gasket, Top: 05330-031-83-47
Vent Cowl Gasket, Side: 05330-031-83-48

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


Replacement Kit Note: The cover kit contains the cover and the hardware for mounting it.


## SECTION 5: PARTS SECTION

 D226 STEAM BOOSTER PLUMBING ASSEMBLY

## SECTION 5: PARTS SECTION

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, ${ }^{\prime \prime}$ NPT, Black Iron | 04730-906-03-34 |
| 21 | 2 | Nipple, 1" NPT x 4" Long, Black Iron | 04730-907-09-34 |
| 22 | 1 | Elbow, $90^{\circ}$, 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 |

## SECTION 5: PARTS SECTION 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 | $04820-111-71-46$ |

## SECTION 5: PARTS SECTION <br> RINSE FILL MOTOR OPTION



| ITEM | QTY | DESCRIPTION |
| :---: | :---: | :---: |
|  | 1 | Rinse Fill Motor Assembly |
| 1 | 1 | Motor |
| 2 | 1 | Bracket, Pump Mounting |
| 3 | 1 | Clamp, Hose $55 / 8$ " to 6" |
| 4 | 1 | Reducer Bushing, 1 1/4" to 1" |
| 5 | 1 | Reducer Bushing 1" to 3/4" |
| 6 | 1 | Elbow, 90 Deg., 1" Street |
| 7 | 1 | Nipple, 1" NPT x 6" Long Brass |
| 8 | 1 | Elbow, 90 Deg. Brass Female |
| 9 | 4 | Lockwasher, 1/4" |
| 10 | 4 | Bolt, 1/4"-20 x 1/2" Long |
| 11 | 4 | Nut, Hex S/S 1/4"-20 |
| 12 | 1 | Rinse Motor Mounting Bracket |

Mfg. No.
05700-002-40-25
06105-002-72-71
05700-002-63-59
04730-011-34-90
04730-002-73-62
04730-011-65-14
04730-002-11-99
04730-002-12-00
04730-002-12-55
05311-274-01-00
05305-274-02-00
05310-274-01-00
05700-002-38-90

## SECTION 6: ELECTRICAL SCHEMATICS



## SECTION 6: ELECTRICAL SCHEMATICS

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



## SECTION 6: ELECTRICAL SCHEMATICS

 AJ-64CE (208-230 VOLT, 60 HZ , THREE PHASE) SECONDARY SIDELE END
L1 L? L3
$\qquad$ +1 $\qquad$
EJIRULATING RINSE FL- $\triangle T$ SWITCH 1
WASH HEATER HIGH LIMIT THERMOSTAT

- RINSE HEATER HICH LJMIT THERM-STAT
RISE REUULATING THERMOSTAT
-LD WATER VALVE (ロPTICNAL)
TAELE LIMIT SWITCH -PTITNAL
W- $\triangle$ SH FILL SLITENIID
REGIRCULATING RINSE FILL SULEVZII
FI $\triangle$ L RIVSE STLEN-JD


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


09905-031-95-56

## SECTION 6: ELECTRICAL SCHEMATICS

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


## SECTION 6: ELECTRICAL SCHEMATICS

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


## SECTION 6: ELECTRICAL SCHEMATICS

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


## SECTION 6: ELECTRICAL SCHEMATICS

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


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


## SECTION 6: ELECTRICAL SCHEMATICS

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


## SECTION 6: ELECTRICAL SCHEMATICS

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


09905-031-80-35

## SECTION 6: ELECTRICAL SCHEMATICS

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


## SECTION 6: ELECTRICAL SCHEMATICS

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


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


## SECTION 6: ELECTRICAL SCHEMATICS

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


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



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


## SECTION 6: ELECTRICAL SCHEMATICS

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


AJ-86CS \& AJ-100CS ( 460 VOLT, 60 HZ , THREE PHASE) SECONDARY SIDE


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


## SECTION 6: ELECTRICAL SCHEMATICS

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


## SECTION 6: ELECTRICAL SCHEMATICS

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



## SECTION 6: ELECTRICAL SCHEMATICS

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


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



SECTION 6: ELECTRICAL SCHEMATICS D226 STEAM BOOSTERIDRAIN QUENCH SYSTEM/SIDE LOADER


