INSTALLATION & OPERATION MANUAL

FOR JACKSON MODELS:

JPX-300H

JPX-300HC

JPX-300HN

JPX-300L



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

MANUFACTURERS WARRANTY

ONE YEAR LIMITED PARTS & LABOR WARRANTY

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

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

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

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

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

TRAVEL LIMITATIONS

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

WARRANTY REGISTRATION CARD

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

REPLACEMENT PARTS WARRANTY

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

PRODUCT CHANGES AND UPDATES

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

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

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

ITEMS NOT COVERED

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



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

LLAME AL 1-888-800-5672 PARA REGISTRAR ESTE PRODUCTO!
AL NO HACERLO LA GARANTIA SERA ANULADA!

S.V.P. APPELER 1-888-800-5672 POUR ENREGISTRER CE PRODUIT, LA GARANTIE SERA ANNULEE POUR TOUT PRODUIT NON- ENREGISTREE

REVISION	REVISION DATE	MADE BY	APPLICABLE ECN	DETAILS
А	01-30-03	MAW	6641	Release to production
В	02-26-03	MAW	N/A	Updated operation instructions
С	04-22-03	CBW	N/A	Added JPX-300HN
D	04-12-04	MAW	N/A	Converted to new layout. Added specifications for JPX-300HN 115 Volt.
E	01-27-05	MAW	7068	Added Deliming Instructions. Add dimension drawing for JPX-300L. Removed JPX-300L model designation. Added JPX-300HC model.
F	08-25-05	MAW	7310	Added JPX-300HN dimensions drawing. Added schematics for use with stainless steel switches. Changed JPX-300LP to JPX-300L.
G	11-15-05	MAW	7552	Add instructions and schematics for use with the univeral timers.
Н	01-30-06	MAW	7602	Update schematics with universal timers: 9905-003-12-88, 9905-002-12-84, 9905-003-13-84 & 9905-003-13-86 to match relay to contactor change.
I	02-07-06	MAW	7602	Update Schematic 09905-002-72-28 with relay to contactor change.
J	03-09-06	MAW	7714	Added JPX-300L 208-230V Model. Updated to new layout.
PG 8, 9, 15	09-14-06	MAW	N/A	Added the register product page. Added instructions for the HTS-11 system.
PG 11	03-06-07	MAW	N/A	Clarified instructions for setting chemical feeder pumps on the universal timer.
К	03-16-10	RLC	8012	Corrected Schematic for Drain Valve
L	03-22-13	RLC	QOF NDB-219	Updated manufacturer information.

Jackson

JPX-300HN

JPX-300H = High temperature, hot water sanitizing, with a booster tank.

JPX-300HC = High temperature, hot water sanitizing, with a booster tank, and a cycle counter.

JPX-300HN = High temperature, hot water sanitizing, with no booster tank.

JPX-300L = Low temperature with chemical feeder pumps.

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

Jackson WWS Inc. provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is available from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Technical support is not available on holidays. Contact technical support toll free at 1-888-800-5672. Please remember that technical support is available for service personnel only.

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SPECIFICATIONS of the JPX-300H/JPX-300HC/JPX-300HN

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)	
RACKS PER HOUR	30
DISHES PER HOUR	600
GLASSES PER HOUR	600
OPERATING CYCLE (SECONDS)	
WASH TIME	82
DRAIN TIME	28
RINSE TIME	10
TOTAL CYCLE TIME (MINUTES)	2

ELECTRICAL REQUIREMENTS

WASH MOTOR HP 3/4

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

JPX-300H/JPX-300HC:

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

5 MINUTE TIMER OPERATING CYCLE (SECONDS)

TANK CAPACITY (LITERS) (GALLONS)

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

			RINSE HEATER	TOTAL	TYPICAL ELECTRICAL
VOLTS	<u>PH</u>	<u>HZ</u>	<u>RATINGS</u>	<u>AMPS</u>	CIRCUIT
208	1	50	8.2KW @ 230V	40 A	50 AMP
208	1	50	10KW @ 230V	47 A	60 AMP
230	1	50	8.2KW @ 230V	47 A	60 AMP
230	1	50	10KW @ 230V	51 A	70 AMP
208	1	60	8.2KW @ 230V	39 A	50 AMP
208	1	60	10KW @ 230V	42 A	60 AMP
230	1	60	8.2KW @ 230V	46 A	60 AMP
230	1	60	10KW @ 230V	50 A	70 AMP
460	3	60	8.2KW@480V	11 A	15 AMP
460	3	60	10KW @480V	14 A	20 AMP

JPX-300HN:

TEMPERATURES

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

WATER REQU	UIREMENTS
------------	-----------

(60°C) 140°F
43.3°C) 110°F
82.2°C)180°F
1/2"
1 1/2"
$20\ \pm 5$

<u>VOLTS</u> 208 230	<u>РН</u> 1 1	<u>HZ</u> 50 50	RINSE HEATER <u>RATINGS</u> N/A N/A	TOTAL <u>AMPS</u> 12 A 12 A	TYPICAL ELECTRICAL CIRCUIT 15 AMP 15 AMP
115	1	60	N/A	24 A	30 AMP
208	1	60	N/A	11 A	15 AMP
230	1	60	N/A	12 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.

SPECIFICATIONS of the JPX-300L

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)	
RACKS PER HOUR	24
DISHES PER HOUR	600
GLASSES PER HOUR	600
OPERATING CYCLE (SECONDS)	
WASH TIME	56
DRAIN TIME	26
RINSE TIME	35

TEMPERATURES

TOTAL CYCLE TIME

WASH (MINIMUM)	(48.9°C) 120°F
WASH (RECOMMENDED)	(60°C) 140°F
RINSE (MINIMUM)	(48.9°C) 120°F
RINSE (RECOMMENDED)	(60°C) 140°F

WATER REQUIREMENTS

INLET TEMPERATURE (RECOMMENDE	D) (60°C) 140°F
INLET TEMPERATURE (MINIMUM)	(48.9°C) 120°F
WATER LINE SIZE I.P.S. (MINIMUM)	1/2"
DRAIN LINE SIZE I.P.S. (MINIMUM)	1 3/8"
FLOW PRESSURE P.S.I.	20 ±5
MINIMUM CHLORINE REQUIRED (PPM) 50

ELECTRICAL REQUIREMENTS

WASH MOTOR HP 3/4

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

JPX-300L:

120

			RINSE		TYPICAL
VOLTS	РН	HZ	HEATER RATINGS	TOTAL AMPS	ELECTRICAL CIRCUIT
115	1	60	N/A	14 A	20 AMP
208	1	60	N/A	7 A	15 AMP
230	1	60	N/A	7 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.

JPX-300H/HC DIMENSIONS

LEGEND

A - Water Inlet 1/2" Female Pipe Thread, 2 1/2" AFF

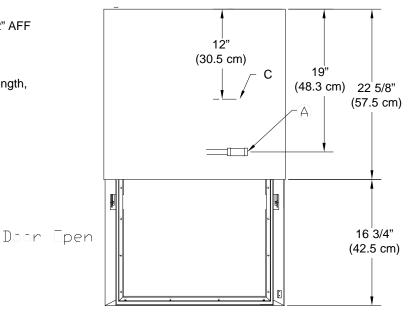
B - Chemical Feeder Connection

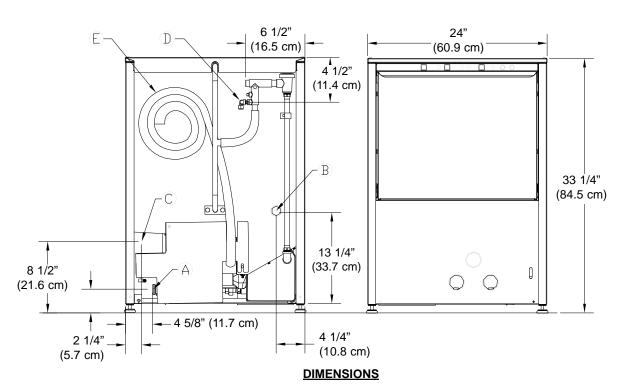
C - Electrical Connection

D - Rinse Additive Connection

E - Drain Connection Flexible Hose 6' Free Length,

1" ID x 1 3/8" OD





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

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

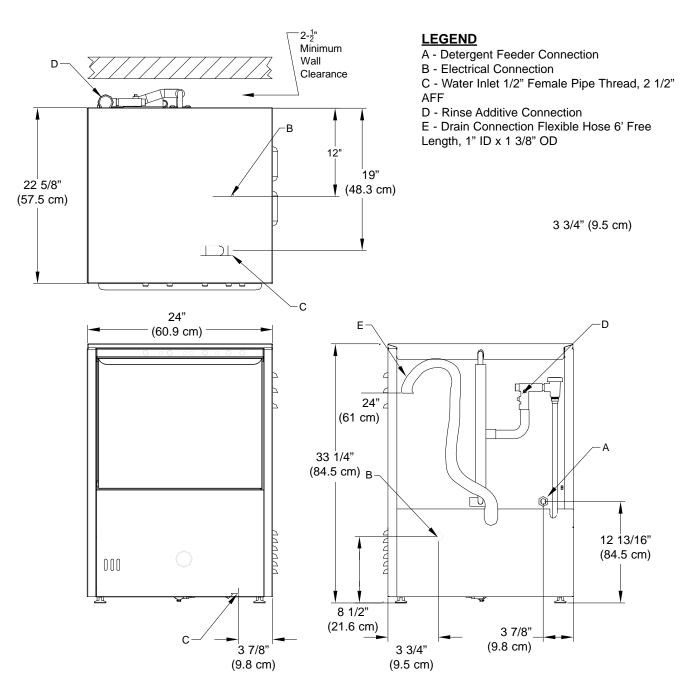
JPX-300HN DIMENSIONS

2 1/2" (6.4 cm) Min. Wall Clearance -**LEGEND** A - Water Inlet 1/2" ID Female Pipe Thread, 2 1/2" AFF B - Detergent Feeder Connection C - Electrical Connection D - Drain Connection Flexible Hose 6' Free Length, E. 1" ID x 1 3/8" OD 12" E - Rinse Additive Connection (30.5 cm) 19" (48.3 cm) 22 5/8" (57.5 cm) Α DOOR OPEN 16 3/4" (42.5 cm) 6 1/2" (16.5 cm) D 24" (60.9 cm) 4 1/2" (11.4 cm) В 33 1/4" (84.5 cm) 13 1/4" 8 1/2" (33.7 cm) (21.6 cm) 4 5/8" (11.7 cm) 4 1/4" 2 1/4" 2 1/4" (5.7 cm) (10.8 cm) (5.7 cm) **DIMENSIONS**

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

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

JPX-300L DIMENSIONS



DIMENSIONS

Height (minimum): Height (maximum):	33 1/4" (84.5 cm) 34 1/4" (87 cm)	Inside Clearance Height: Inside Clearance Width:	14 1/2" (36.8 cm) 20 1/4" (51.4 cm)
Width:	24" (60.9 cm)	Inside Clearance Depth:	21 1/4" (54 cm)
Depth:	22 5/8" (57.5 cm)	Door Open Depth:	39 1/2" (100.3 cm)
Wall Clearance (minimum):	2 1/2" (6 4 cm)		

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

INSTALLATION INSTRUCTIONS

VISUAL INSPECTION: Before installing the unit, check the container and machine for damage. A damaged container is an indicator that there may be some damage to the machine. If there is damage to both the container and machine, do not throw away the container. The dishmachine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others may result in there being damage to the unit while in transit. If such a situation occurs, do not return the unit to Jackson; instead, contact the carrier and ask them to send a representative to the site to inspect the damage to the unit and to complete an inspection report. You must contact the carrier within 48 hours of receiving the machine. Also, contact the dealer through which you purchased the unit.

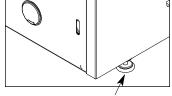
UNPACKING THE DISHMACHINE: Once the machine has been removed from the container, ensure that there are no missing parts from the machine. This may not be obvious at first. If it is discovered that an item is missing, contact Jackson immediately to have the missing item shipped to you.

LEVEL THE DISHMACHINE: The dishmachine is designed to operate while being level. This is important to prevent any damage to the machine during operation and to ensure the best results when washing ware. The unit comes with adjustable bullet feet, which can be turned using a pair of channel locks or by hand if the unit can be raised safely. Ensure that the unit is level from side to side and from front to back before making any connections.

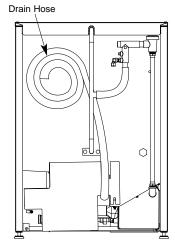
PLUMBING THE DISHMACHINE: All plumbing connections must comply with all applicable local, state, and national plumbing codes. The plumber is responsible for ensuring that the incoming water line is thoroughly flushed prior to connecting it to any component of the dishmachine. It is necessary to remove 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. A water hardness test must be performed to determine if the HTS-11 (scale prevention and corrosion control) need to be installed. A hardness test kit is attached to the warning tag that is attached to the y-strainer toward the front of the machine. If the hardness is higher than 5 GPG the HTS-11 will need to be installed, please contact Jackson immediately to have this item shipped to you.

WATER SUPPLY CONNECTION FOR MACHINES WITH A WATER HARDNESS GREATER THAN 5 GPG: Ensure that you have read the section entitled "PLUMBING THE DISHMACHINE" above before proceeding. Install the HTS-11 into the water line (1/2" ID pipe size minimum) before the dishmachine line y-strainer using copper pipe. The HTS-11 must be installed vertically. A mounting bracket is provided to facilitate the venture metering head to the wall. Observe proper inlet/outlet water directions. Flow directions are molded into the top of the head. It is recommended that a water shut-off valve be installed before the HTS-1 to allow access for servicing. Plumb from the HTS-11 outlet to the y-strainer using copper pipe (or order the 1/2" ID flexible hose kit offered by Jackson). The water supply line is to be capable of 20 ± 5 PSI "flow" pressure at the recommended temperature indicated on the data plate. See "Pressure Regulator" and "Shock Absorber" sections.

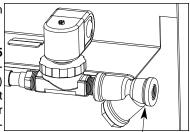
WATER SUPPLY CONNECTION FOR MACHINES WITH A WATER HARDNESS OF 5 GPG OR LESS:Ensure that you have read the section entitled "PLUMBING THE DISHMA-CHINE" above before proceeding. Install the water supply line (1/2" ID pipe size minimum) to the dishmachine line y-strainer using copper pipe (or order the 1/2" ID flexible hose kit offered by Jackson). It is recommended that a water shut-off valve be installed in the water line between the main supply and the machine to allow access for service. The water supply line is to be capable of 20±5 PSI "flow" pressure at the recommended temperature indicated on the data plate.



Adjustable Bullet Foot



Back of Machine Showing Drain Hose



Incoming Plumbing Y-Strainer

PRESSURE REGULATOR: Do to areas where the water pressure fluctuates or is greater

than the recommended pressure, it is recommended installing a water pressure regulator. Do not confuse static pressure with flow pressure. Static pressure is the line pressure in a "no flow" condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the fill valve is opened during the cycle.

ELECTRICAL INSTALLATION INSTRUCTIONS

SHOCK ABSORBER: It is also recommended that a shock absorber (not supplied with the JPX-300 series models) 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.

CONNECTING THE DRAIN LINE: The JPX-300 series machines are a pumped (pressure) drain capable of pumping waste water to a height of 24 inches from the floor to the kitchen's drain system. The dishmachines are supplied with a 10 foot long hose that extends from the rear side of the machine. There must also be an air gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 12 gallons per minute.

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.

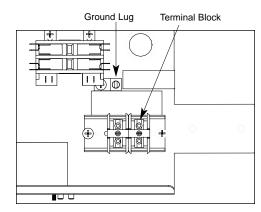
Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

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

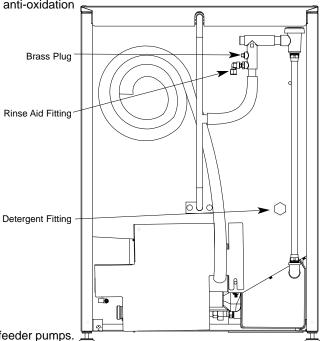
To install the incoming power lines, remove the kick panel. This will require taking a phillips head screwdriver and removing the two screws at the bottom of the kick panel; open the door slightly while carefully lifting the kick panel up and out of the way. Install 3/4" conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1 and L2) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided. It is recommended that "DE-OX" or another similar anti-oxidation agent be used on all power connections.

VOLTAGE CHECK: Ensure that the power switch is in the OFF position and apply power to the dishmachine. Check the incoming power at the terminal block and ensure it corresponds to the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem. Do not run the dishmachine if the voltage is too high or too low. Shut off the service breaker and mark it as being for the dishmachine. Advise all proper personnel of any problems and of the location of the service breaker. Replace the control box cover and tighten down the screws.

CHEMICAL CONNECTIONS: All chemical hookup locations are located on the back of the dishmachine. Please refer to the drawing at the right for the correct connection point. The JPX-300H/HC/HN dishmachines are supplied with integral detergent and rinse aid chemical feeder pumps. The JPX-300L dishmachine is supplied with integral detergent, rinse additive and sanitizer chemical feeder pumps.



Control Box Electrical Connection



Please refer to page 11 for instructions on priming the chemical feeder pumps.

Back of Unit Showing Chemical Connection Points

CHEMICAL DISPENSING EQUIPMENT



WARNING: CHLORINE-BASED SANITIZERS CAN BE DETRIMENTAL TO YOUR MACHINE IF THE CHEMICAL SOLUTION IS TOO STRONG. SEE YOUR CHEMICAL PROFESSIONAL TO ENSURE YOUR DISPENSER IS SET UP CORRECTLY.

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.

TO PREPARE CHEMICAL FEEDER PUMPS FOR OPERATION

The JPX-300H/HC/HN dishmachines are supplied with integral detergent and rinse aid chemical feeder pumps. The JPX-300L dishmachine is supplied with integral detergent, rinse additive and sanitizer chemical feeder pumps. Locate the open ends of the chemical tubes with the tube stiffeners and place each one in the appropriate container.

- A. **Red** Tubing = **Detergent**
- B. Blue Tubing = Rinse Aid
- C. White Tubing = Sanitizer

PRIMING CHEMICAL FEEDER PUMPS

Chemical feeder pumps need priming when the machine is first installed or if for some reason the chemical lines have been removed and air is allowed to enter.



CAUTION: Water must be in the sump and wash tank prior to the dispensing of chemicals. Sanitizer in concentration is caustic and may cause damage without dilution.

- 1. Verify that the proper chemical tube stiffener inlet is in the proper container.
- 2. Use the prime switches located at the top of the unit to prime each pump. The switches are clearly marked ("D", "R", and "S") as to what chemical feeder pump they are assigned to.
- 3. To prime the pumps, hold the switch in the momentary position until chemical can be observed entering the sump.
- 4. Detergent is dispensed as required during the wash cycle by the cam timer. The amount of detergent may need to be increased or decreased depending on water quality and type of detergent. It is adjusted by changing the detergent cam on the cam timer.
- 5. Rinse additive is dispensed as required into the final rinse. The amount of rinse aid may need to be adjusted depending on water hardness and results. It can be changed by changing the rinse cam on the cam timer.
- 6. Sanitizer (either chlorine or iodine) is dispensed into the final rinse. The amount of sanitizer may need to be adjusted depending on the concentration and type of sanitizer used. It is adjusted by changing sanitizer cam on the cam timer.



WARNING: Some of the chemicals used in dishwashing may cause chemical burns if they come in contact with your skin. Wear protective gear when handling these chemicals. If you do come in contact with these chemicals, immediately flush the affected area with fresh water.

PROGRAMMING INSTRUCTIONS FOR CHEMICAL FEEDER PUMPS (FOR INSTALLATION TECHNICIAN ONLY)

To access the programming mode, the machine must be ON, and idle (between cycles).

On the timer board, press and hold both the MOVE and ENTER buttons on the timer board simultaneously for two seconds.

The PROGRAM (PGM) light and light A will illumniate.

Note: Once in the programming mode, the MOVE button is used to scroll between the programming categories and the ENTER button is used to select the category.

Press the MOVE button to move the solid light to the desired location of FILL, RINSE AID, DETERGENT or SANITIZER. Please note that options A, B, C, and D are not adjustable outputs.

Press the ENTER button for the chosen category. Now, the (PGM) light will illuminate along with lights corresponding to the time values forthe chosen category. The ACCEPT light will blink.

The PROGRAM light will illuminate.

To change the value of a parameter, use the MOVE button to illuminate the light next to the time option (time is in seconds). In the time categories, each second in use will light up. To deselect the option, press ENTER and the light will go off, press ENTER again and it will illuminate. Once you have set your time category, press the MOVE button until the ACCEPT light illuminates and press ENTER. This will save the changed parameters.

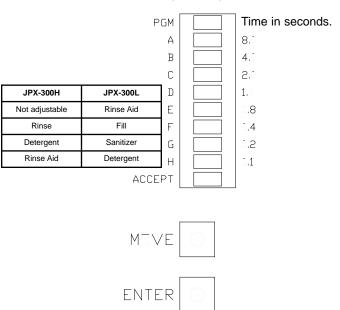
Once you press the ENTER button when the ACCEPT light is blinking you will exit the programming mode. To change any other values, you will have to return to the programming mode. To revert back to a previous setting, you must return to that option and change the parameter back to the previous setting.

Once in the programming mode, if there have been no keypad inputs for approximately 2 minutes, the system will automatically exit out of the programming mode. Any changes to parameters will be saved when the programming mode is automatically exited.

The wash and drain settings are not adjustable.

All time adjustments are in seconds. Refer to the chart below for the adjustable outputs.

Timer Programming Board



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.

OPERATION INSTRUCTIONS

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

- 1. The strainer is in place and is clean.
- 2. That the wash and rinse arms are screwed securely into place and that their endcaps are tight. The wash and rinse arms should rotate freely.
- 3. Verify all chemical levels for machine chemical feeder pumps are correct.

POWER UP: To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified.

FILLING THE WASH TUB: For the initial fill, close the door and ensure that the MANUAL switch light is not on. Depress and hold the START CYCLE switch until the auto light comes on and releases. For the initial fill, run the machine through 3 cycles to fill the tub sump. The machine will run a partial cycle and fill to the bottom of the pan strainer. Open the door and verify that the water level is correct.



NOTE: For the JPX-300H/JPX-300HC: Ensure the orange/white wires at the heater contactor are connected properly. They have been purposely disconnected at the factory to avoid damage to the heater element when there is no water in the booster heater.

Hereafter, the water level is controlled by the timer that has been preset at the factory. Verify that there are no other leaks on the unit before proceeding any further. The wash sump 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.

The machine runs a complete cycle to drain and fill. If the machine is not allowed to drain, the water will build up inside the tub. After the initial fill, the rinse water for the current cycle will become the wash water for the next cycle.

WARE PREPARATION: Proper preparation of ware will help ensure good results and less re-washes. If not done properly, ware may not come out clean and the efficiency of the dishmachine will be reduced. It is important to remember that a dishmachine is not a garbage disposal and that simply throwing 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.

WARM-UP CYCLES: For a typical daily start-up, it is recommended to run the machine through 3 cycles to ensure that all of the cold water is out of the system and to verify that the unit is operating correctly. To cycle the machine, ensure that the power is on and that the tub has filled to the correct level.

Press the START CYCLE button and hold until the <u>green auto light</u> is on and releases, the unit will start, run through the cycle, and shut off automatically. Repeat this two more times. The unit should now be ready to proceed with the washing of ware.

WASHING A RACK OF WARE: To wash a rack, open the door completely and slide the rack into the unit. Close the door, press the START CYCLE button and hold until the green auto light is on and releases, the unit will start. Once the cycle is completed, open the door and remove the rack of clean ware. Replace with a rack of soiled ware and close the door. The process will then repeat itself.

OPERATIONAL INSPECTION: Based upon usage, the pan strainer may become clogged with soil and debris as the workday progresses. Operators should regularly inspect the pan strainer to ensure it has not become clogged. If the strainer does, it will reduce the washing capability of the machine. Instruct operators to clean out the pan strainer at regular intervals or as required by work load.

OPERATION INSTRUCTIONS (CONTINUED)/DELIMING INSTRUCTIONS

SHUTDOWN AND CLEANING: At the end of the workday, close the door. Start a cycle. Wait approximately five seconds after the green auto light comes on and then push the POWER OFF switch. This will put the machine in shutdown mode which will let the machine drain completely prior to shutting off. Once the wash tub is drained and power light is off, remove he pan strainer. Remove soil and debris from the strainer and set to the side. Unscrew the wash and rinse arms from their manifolds. Remove the endcaps and flush the arms with water. Use a brush to clean out the inside of the arms. If the nozzles appear to be clogged, use a toothpick to remove the obstruction. Wipe the inside of the unit out, removing all soil and scraps. Reassemble the wash and rinse arms and replace them in the unit. The arms only need to be hand tight, do not use tools to tighten them down. Reinstall the strainer and close the door.

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.

NOTE: If this machine is equipped with a HTS-11, scale prevention and corrosion control device, and lime is becoming a frequent problem, the cartridge needs to be replaced. To order a replacement cartridge, call Jackson immediately to have one shipped to you.

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 tank can be verified on the specification sheet(s) of this manual.

Perform the following operations to delime the dishmachine:

- 1. Push Manual Switch on the front of the control panel.
- 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. Press the Power Switch to turn the unit off and open the doors.
- 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.

SECTION 3: PREVENTATIVE MAINTENANCE

SECTION 3: PREVENTATIVE MAINTENANCE

PREVENTATIVE MAINTENANCE

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

There are many things that operators can do to prevent catastrophic damage to the dishmachine. One of the major causes of component failure has to do with prescrapping procedures. A dishmachine is not a garbage disposal; any large pieces of material that are put into the machine shall remain in the machine until they are either broken up (after spreading out on your ware!) or physically removed. Strainers are installed to help catch debris, but they do no good if they are clogged. Have operators regularly inspect the pan strainers to ensure (1) that they are free of soil and debris and (2) they are laying flat in the tub.

When cleaning out strainers, do NOT beat them on waste cans. The strainers are made of metal and can be forgiving; but once severe damage is done, it is next to impossible for the strainer to work in the way it was designed to. Wipe out strainers with a rag and rinse under a faucet if necessary. For stubborn debris, a toothpick should be able to dislodge any obstructions from the perforations. Always ensure that strainers are placed back in the machine before operation and that they lay flat in the tub.

You may wish to also refer to the page entitled "Detergent Control" in order to learn more about how your water hardness will effect the performance of your machine. Hard water makes dishmachines work harder and decreases efficiency.

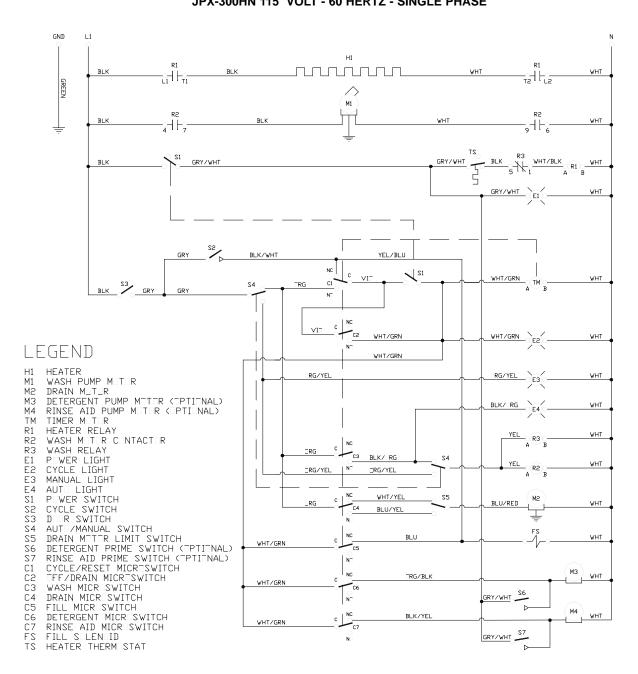
Again, it is important to remind operators that trying to perform corrective maintenance on the dishmachine could lead to larger problems or even cause harm to the operator. If a problem is discovered; secure the dishmachine using proper shut down procedures as listed in this manual and contact a QUALIFIED SERVICE AGENCY.

Some problems, however, may 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 a QUALIFIED SERVICE AGENCY to determine what can be done.

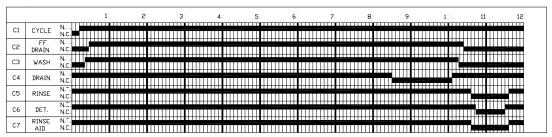
By following the operating and cleaning instructions in this manual, you should get the most efficient results from your machine. As a reminder, here are some steps to take to ensure that you are using the dishmachine the way it was designed to work:

- 1. Ensure that the water temperatures match those listed on the machine data plate.
- 2. Ensure that all strainers are in place before operating the machine.
- 3. Ensure that all wash and/or rinse arms are secure in the machine before operating.
- 4. Ensure that drains are closed/sealed before operating.
- 5. Remove as much soil from dishes by hand as possible before loading into racks.
- 6. Do not overfill racks.
- 7. Ensure that glasses are placed upside down in the rack.
- 8. Ensure that all chemicals being injected to machine have been verified as being at the correct concentrations.
- 9. Clean out the machine at the end of every workday as per the instructions in the manual.
- 10. Always contact a QUALIFIED SERVICE AGENCY whenever a serious problem arises.
- 11. Follow all safety procedures, whether listed in this manual or put forth by local, state or national codes/regulations.

SECTION 4: ELECTRICAL SCHEMATICS JPX-300HN 115 VOLT - 60 HERTZ - SINGLE PHASE

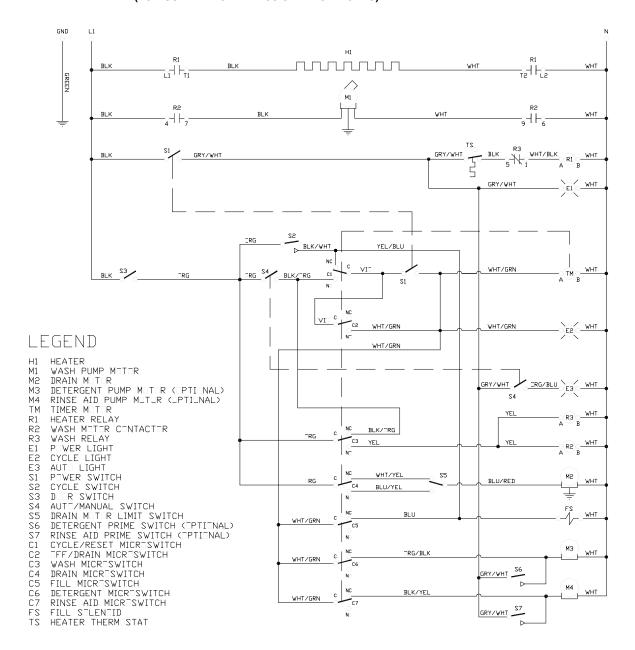


TIMING CHART

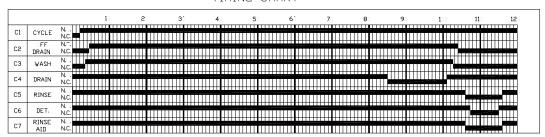


9905-002-92-21a

JPX-300HN (FOR USE WITH STAINLESS STEEL SWITCHES) 115 VOLT - 60 HERTZ - SINGLE PHASE

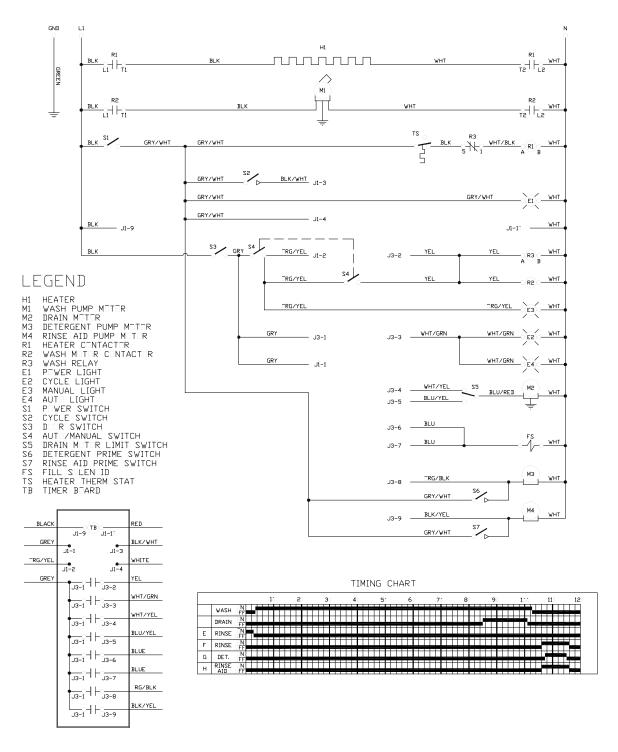


TIMING CHART



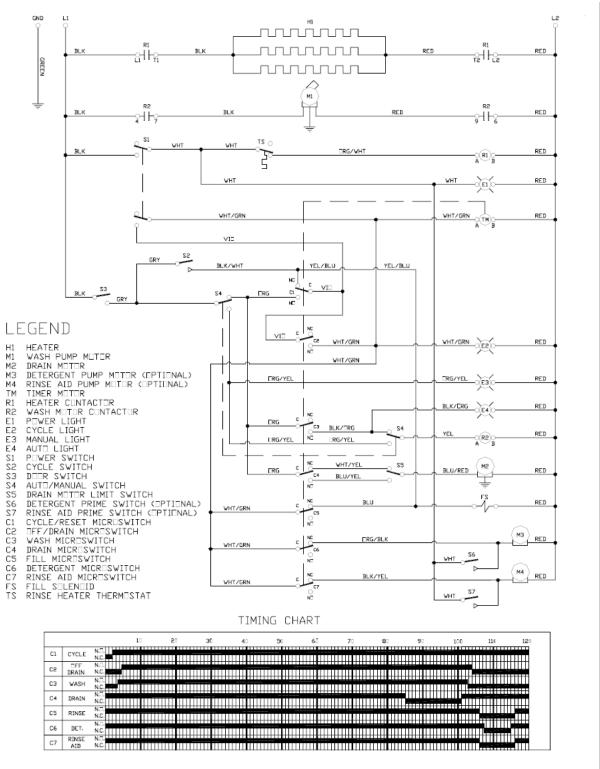
9905-002-92-21c

JPX-300HN (UNIVERSAL TIMER & SS SWITCHES) 115 VOLT - 60 HERTZ - SINGLE PHASE



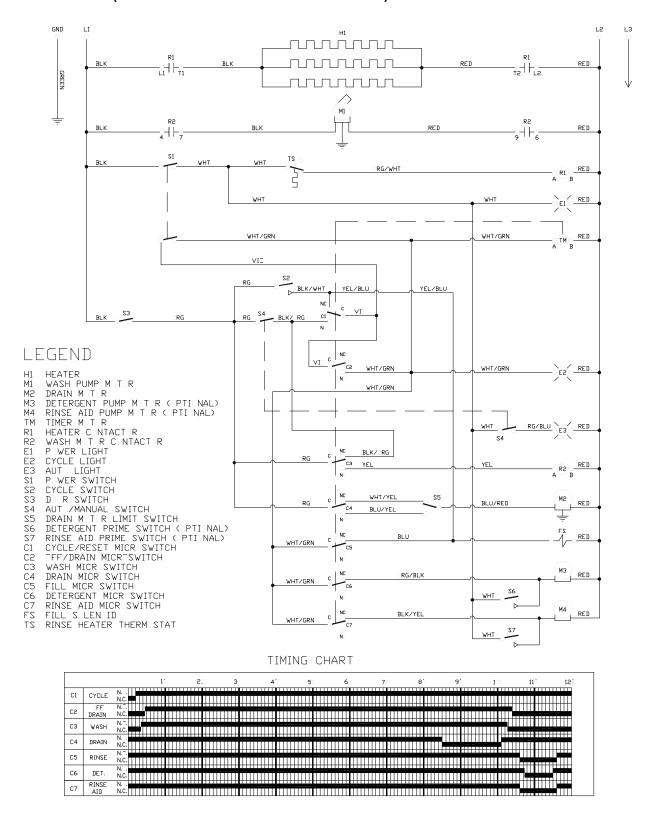
9905-003-13-868

JPX-300H/JPX-300HN 208-230 VOLT - 60 HERTZ - SINGLE PHASE



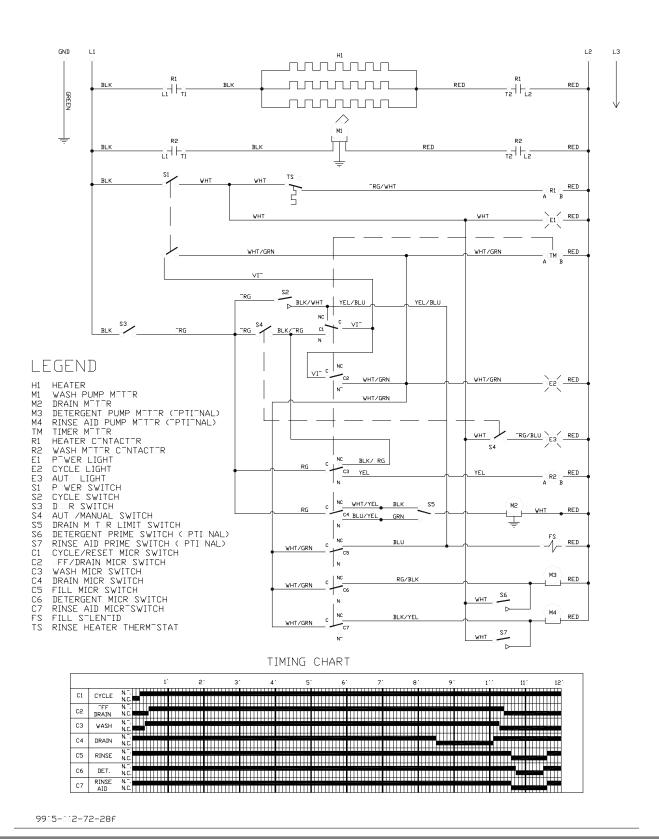
9905-002-72-28c

JPX-300H/HN (FOR USE WITH STAINLESS STEEL SWITCHES) 208-230 VOLT - 60 HERTZ - SINGLE PHASE



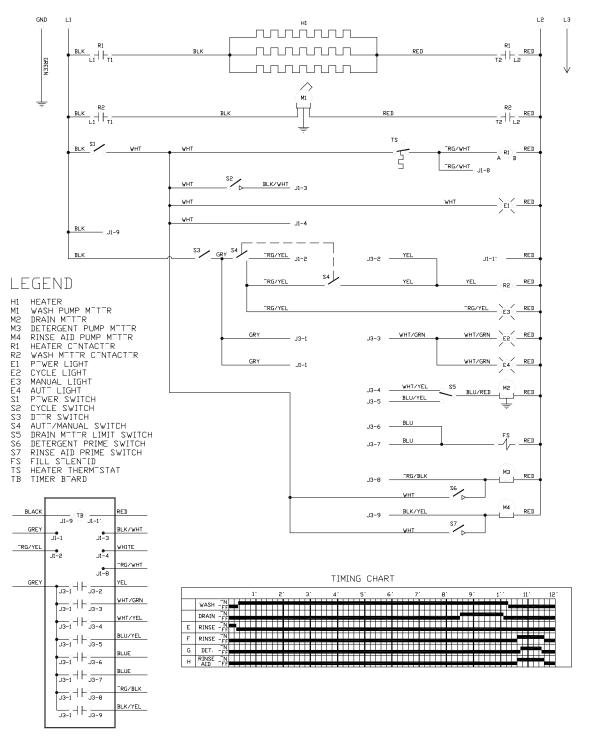
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JPX-300H/HN (S/S SWITCHES & CONTACTOR) 208-230 VOLT - 60 HERTZ - SINGLE PHASE



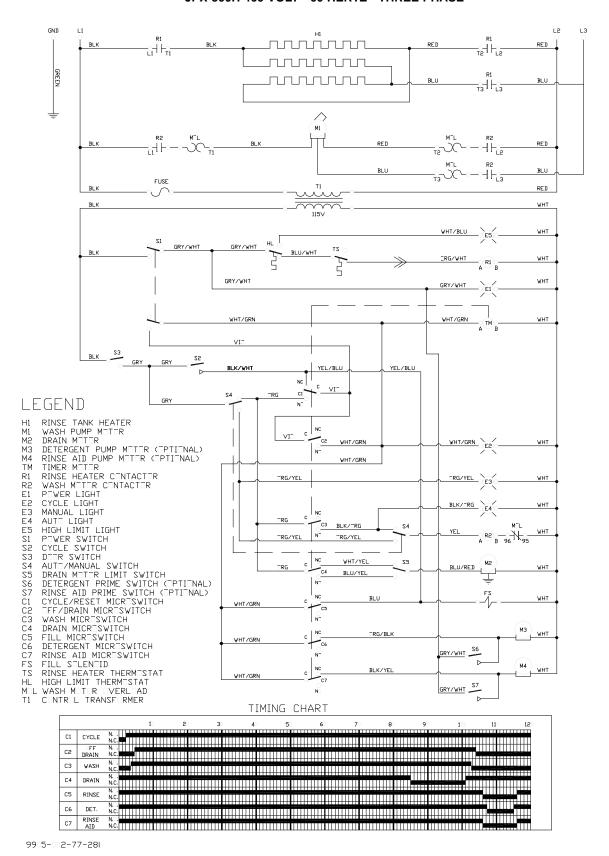
JPX-300 Installation/Operation Manual 7610-002-71-26 Rev.L Issued: 03-09-2006 Revised: N/A

JPX-300H/HN (UNIVERAL TIMER & SS SWITCHES) 208-240 VOLT - 60 HERTZ - SINGLE PHASE

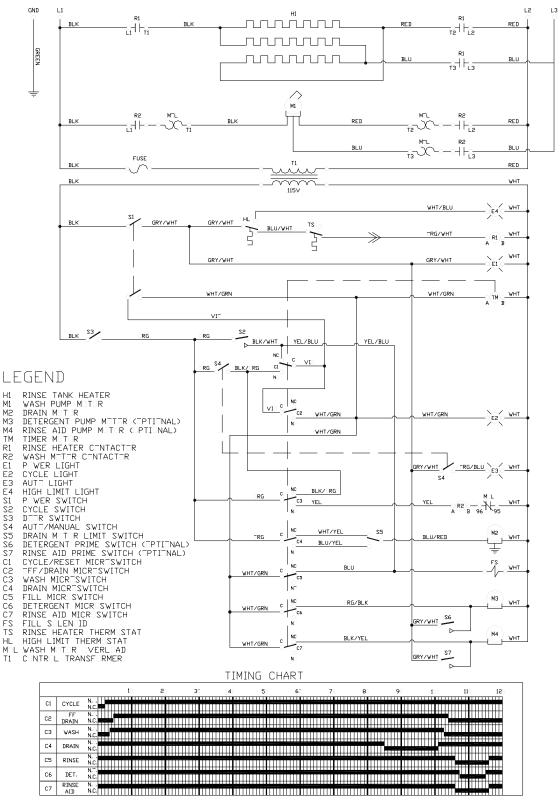


9905-003-12-84c

JPX-300H 460 VOLT - 60 HERTZ - THREE PHASE

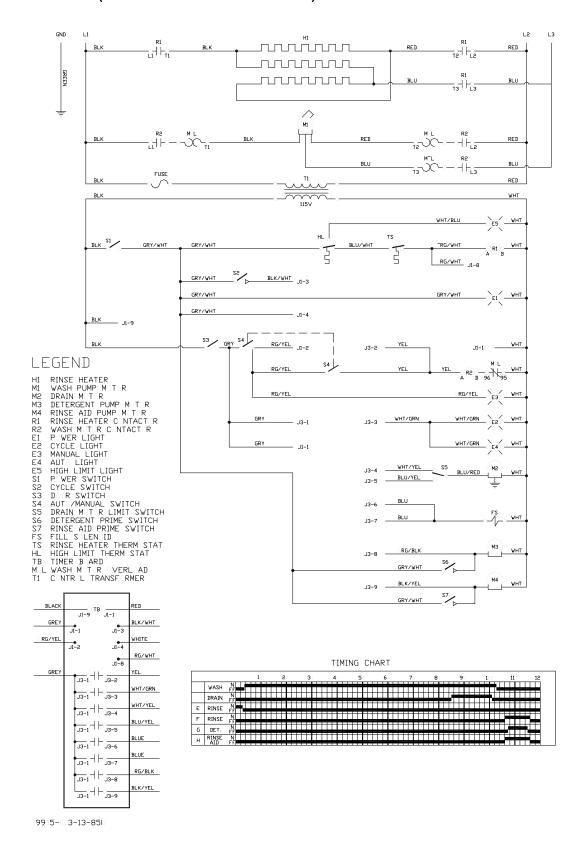


JPX-300H (FOR USE WITH STAINLESS STEEL SWITCHES) 460 VOLT - 60 HERTZ - THREE PHASE

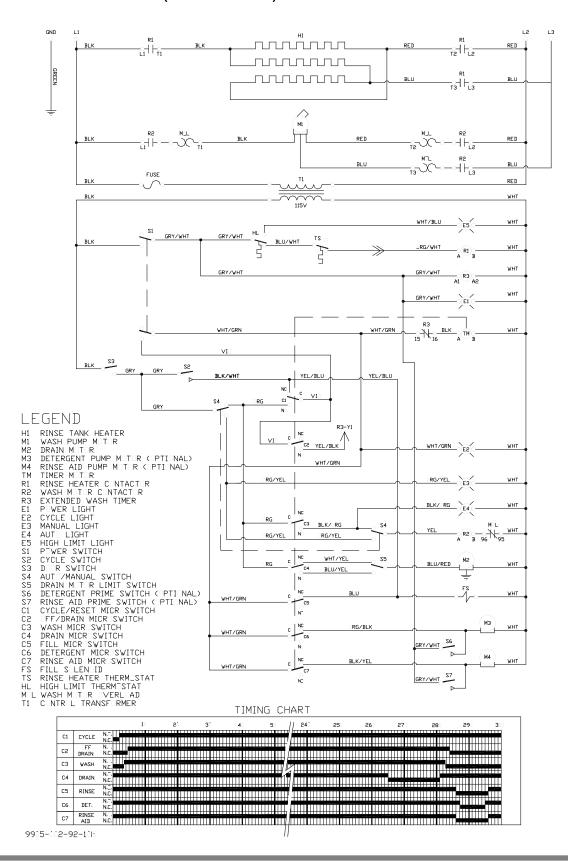


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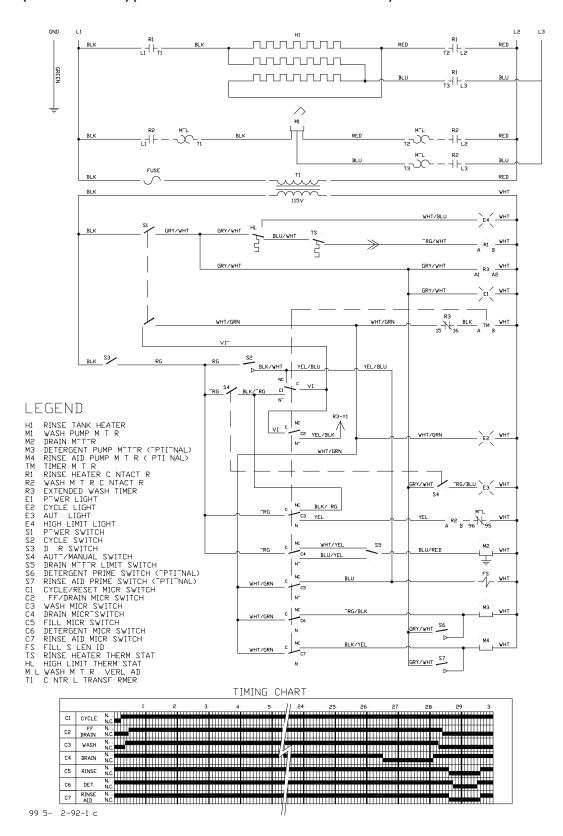
JPX-300H (UNIVERSAL TIMER & SS SWITCHES) 460 VOLT - 60 HERTZ - THREE PHASE



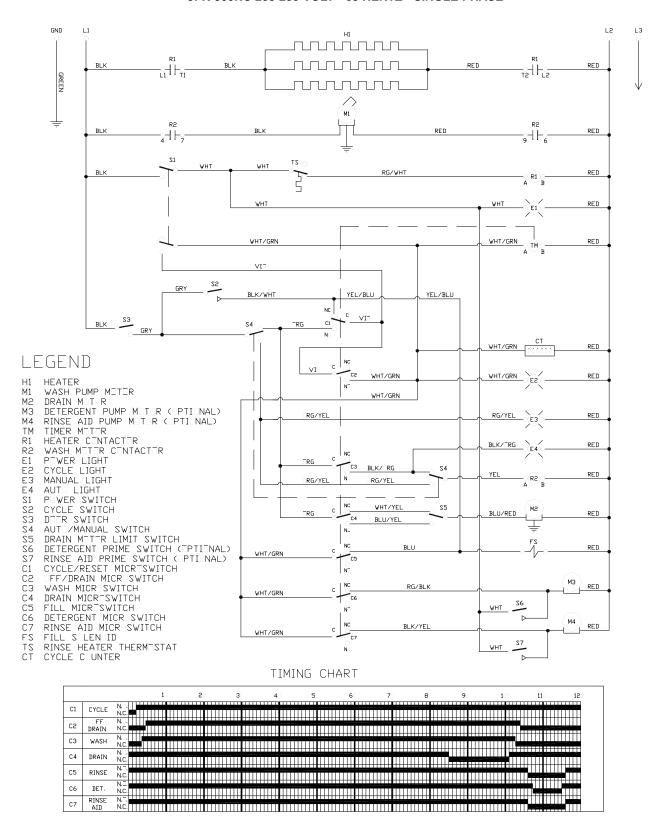
JPX-300H (EXTENDED WASH) 460 VOLT - 60 HERTZ - THREE PHASE



JPX-300H (EXTENDED WASH) (FOR USE WITH STAINLESS STEEL SWITCHES) 460 VOLT - 60 HERTZ - THREE PHASE

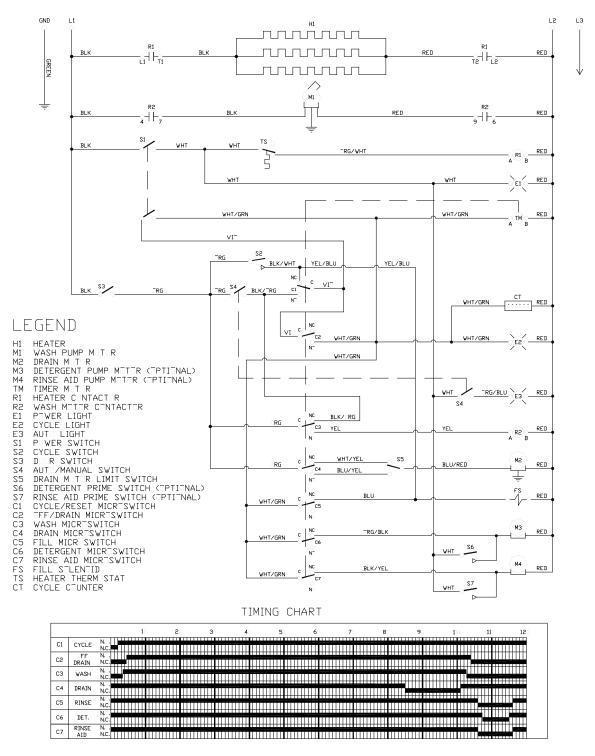


JPX-300HC 208-230 VOLT - 60 HERTZ - SINGLE PHASE



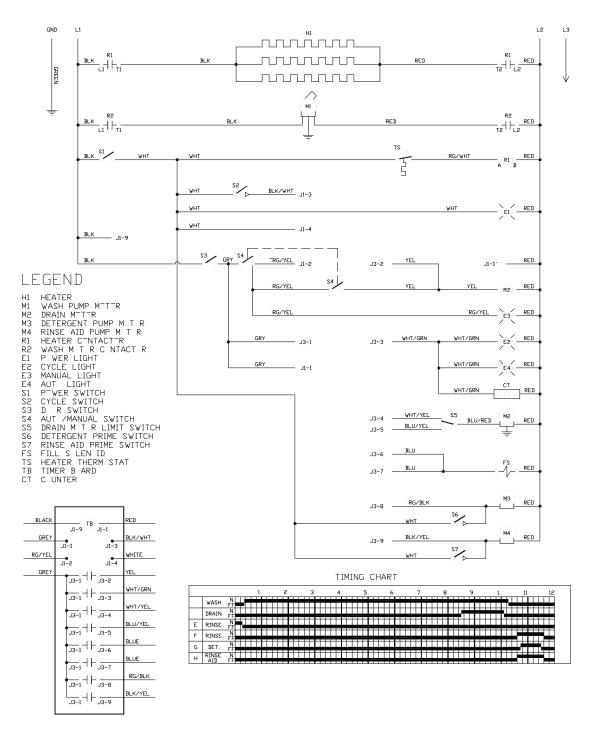
9905-002-95-586

JPX-300HC (FOR USE WITH STAINLESS STEEL SWITCHES) 208-230 VOLT - 60 HERTZ - SINGLE PHASE



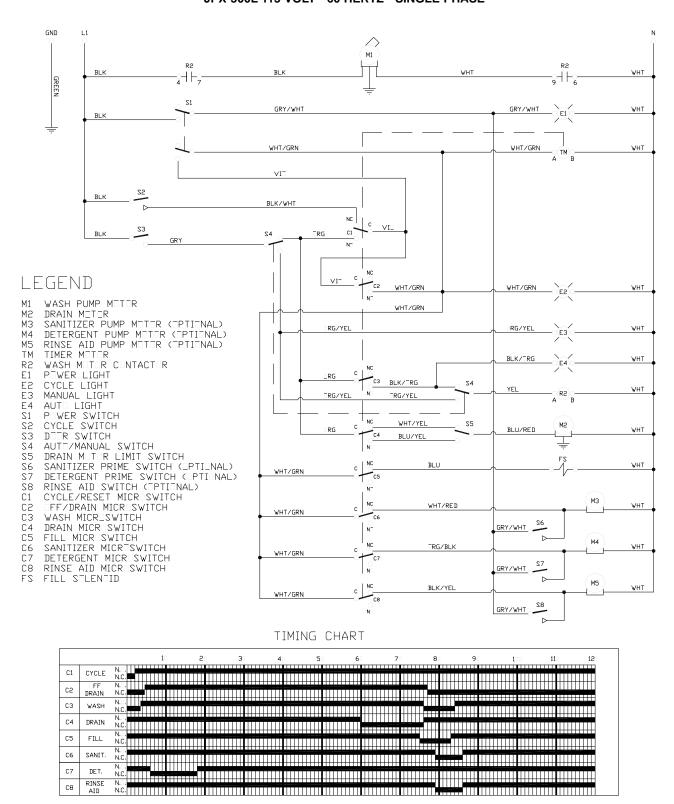
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JPX-300HC (UNIVERSAL TIMER & SS SWITCHES) 208-230 VOLT - 60 HERTZ - SINGLE PHASE



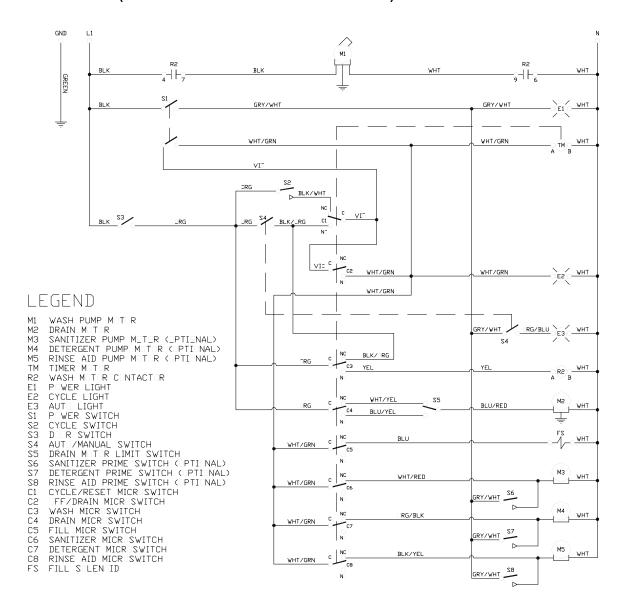
9905-003-12-88

SECTION 4: ELECTRICAL SCHEMATICS JPX-300L 115 VOLT - 60 HERTZ - SINGLE PHASE

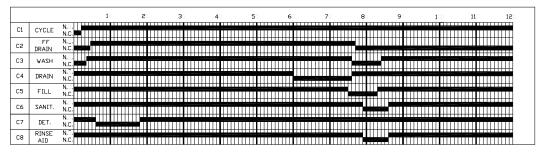


9905-002-72-29a

JPX-300L (FOR USE WITH STAINLESS STEEL SWITCHES) 115 VOLT - 60 HERTZ - SINGLE PHASE

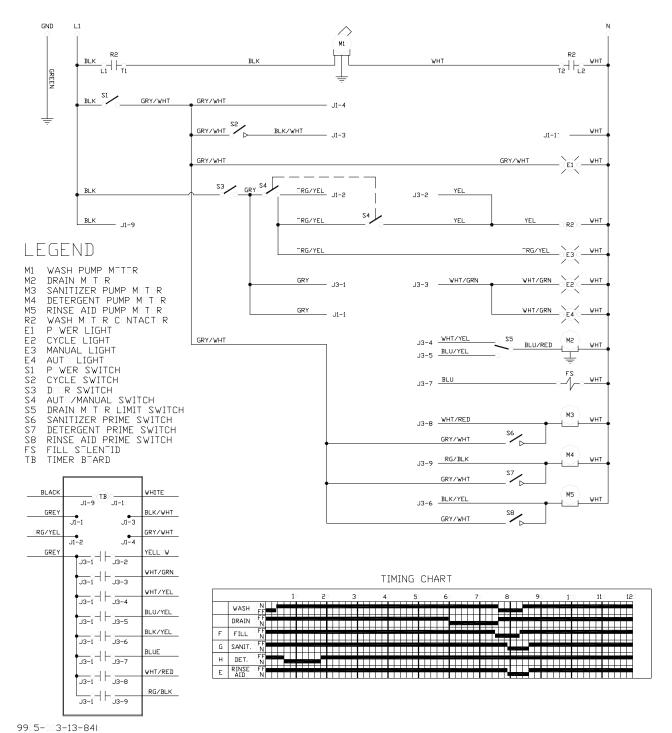


TIMING CHART

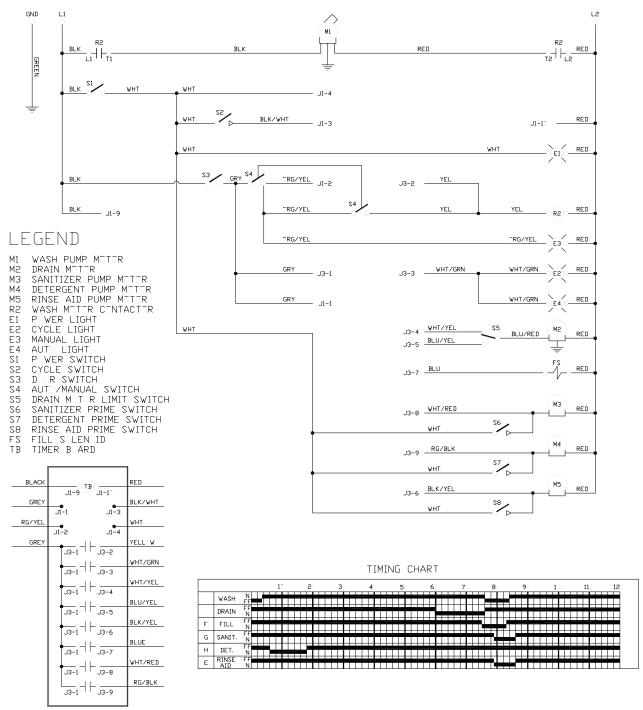


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JPX-300L (UNIVERSAL TIMER & SS SWITCHES) 115 VOLT - 60 HERTZ - SINGLE PHASE



JPX-300L (UNIVERSAL TIMER & SS SWITCHES) 208-230 VOLT - 60 HERTZ - SINGLE PHASE



SECTION 5: JACKSON MAINTENANCE & REPAIR CENTERS

SECTION 5: JACKSON MAINTENANCE & REPAIR CENTERS

ALABAMA TO GEORGIA

ALABAMA:

JONES-McLEOD APPLIANCE SVC

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

JONES-McLEOD APPLIANCE SVC

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

ALASKA:

RESTAURANT APPLIANCE SERVICE

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

ARIZONA:

AUTHORIZED COMMERCIAL FOOD EQMT. SVC

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

GCS SERVICE INC.

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

ARKANSAS:

BROMLEY PARTS & SVC

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

COMMERCIAL PARTS & SVC.

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

CALIFORNIA:

BARKERS FOOD MACHINERY SERVICES

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

INDUSTRIAL ELECTRIC SVC.

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

P & D APPLIANCE SVC

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

P & D APPLIANCE

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

COLORADO:

GCS SERVICE INC.

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

HAWKINS COMMERCIAL APPLIANCE SERVICE 3000 S. WYANDOT ST.

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

METRO APPLIANCE SERVICE

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

CONNECTICUT:

GCS SERVICE INC.

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

DELAWARE:

FOOD SERVICE EQMT.

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

GCS SERVICE INC.

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

ELMER SCHULTZ SERVICE

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

EMR SERVICE DIVISION

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

FLORIDA:

COMMERCIAL APPLIANCE

SERVICE

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

GCS SERVICE INC

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

GCS SERVICE INC

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

GCS SERVICE INC

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

JONES-McLEOD APPLIANCE SVC

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

GEORGIA:

GCS SERVICE INC

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

HERITAGE FOODSERVICE GROUP OF ATLANTA

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

WHALEY FOODSERVICE REPAIRS

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

SECTION 5: JACKSON MAINTENANCE & REPAIR CENTERS —

HAWAII TO MINNESOTA

HAWAII:

FOOD EQMT. PARTS & SER-VICE CO.

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

IDAHO:

RESTAURANT APPLIANCE SVC.

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

RON'S SERVICE

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

ILLINOIS:

CONES REPAIR SVC.

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

EICHENAUER SERVICES INC.

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

INDIANA:

GCS SERVICE INC.

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

IOWA:

GOODWIN TUCKER GROUP

2900 DELAWARE AVENUE DES MOINES, IA 50317 (515) 262-9308 800-372-6066 FAX: (515) 262-2936 parts@goodwintucker.com

CONES REPAIR SVC.

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

KANSAS:

GCS SERVICE INC.

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

KENTUCKY:

CERTIFIED SERVICE CENTER

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

CERTIFIED SERVICE CENTER

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

CERTIFIED SERVICE CENTER

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

LOUISIANA:

BANA PARTS INC.

1501 KUEBLE STREET HARAHAN, LA 70123 (504) 734-0076 800-325-7543 FAX: (504) 734-8456

BANA PARTS INC.

4028 GREENWOOD ROAD SHREVEPORT, LA 71109 (318) 631-6550 800-832-6550 FAX: (318) 636-5675

MAINE:

GCS SERVICE INC.

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

MASSACHUSETTS RESTAURANT SUPPLY

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

MARYLAND:

EMR SERVICE DIVISION

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

EMR SERVICE DIVISION

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

EMR SERVICE DIVISION

2626 PITTMAN DRIVE SILVER SPRING, MD 20910 (301) 588-8080 800-348-2365 FAX: (301) 588-6985 baltparts@emrco.com

GCS SERVICE INC.

SILVER SPRING, MD (301) 585-7550 (DC) (410) 792-0338 (BALT) (800) 638-7278 FAX: (301) 495-4410

MASSACHUSETTS:

ACE SERVICE CO.

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

MASSACHUSETTS RESTAURANT SUPPLY

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

MICHIGAN:

GCS SERVICE INC.

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

JACKSON SERVICE COMPANY

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

GCS SERVICE INC.

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

MINNESOTA:

GCS SERVICE INC. MINNEAPOLIS. MN

(612) 546-4221 800-345-4221 FAX: (612) 546-4286

SECTION 5: JACKSON MAINTENANCE & REPAIR CENTERS —

MISSISSIPPI TO NEW YORK

MISSISSIPPI:

GCS SERVICE INC.

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

GCS SERVICE INC.

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

MISSOURI:

GCS SERVICE INC.

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

GCS SERVICE INC.

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

KAEMMERLIN PARTS & SVC.

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

MONTANA:

RESTAURANT APPLIANCE SVC.

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

NEBRASKA:

GOODWIN - TUCKER GROUP

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

NEVADA:

HI TECH COMMERCIAL SERVICE

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

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

GCS SERVICE INC.

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

NEW HAMPSHIRE:

GCS SERVICE INC.

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

ACE SERVICE CO.

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

MASSACHUSETTS RESTAU-RANT SUPPLY

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

NEW JERSEY:

JAY HILL REPAIRS

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

ELMER SCHULTZ SERVICES

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

GCS/STOVE PARTS

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

NEW YORK:

APPLIANCE INSTALLATION

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

B.E.S.T. INC.

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

DUFFY'S EQUIPMENT SVC.

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

NORTHERN PARTS & SVC.

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

GCS SERVICE INC.

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

ALL SERVICE KITCHEN EQUIPMENT REPAIR

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

ALL ISLAND REPAIRS

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

NORTH CAROLINA:

AUTHORIZED APPLIANCE SERVICECENTER

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

AUTHORIZED APPLIANCE SERVICECENTER

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

AUTHORIZED APPLIANCE SERVICECENTER

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

AUTHORIZED APPLIANCE SERVICECENTER

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

WHALEY FOODSERVICE

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

WHALEY FOODSERVICE REPAIRS

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

WHALEY FOODSERVICE REPAIRS

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

WHALEY FOODSERVICE REPAIRS

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

SECTION 5: JACKSON MAINTENANCE & REPAIR CENTERS

NORTH DAKOTA TO UTAH

NORTH DAKOTA:

GCS SERVICE INC. MINNEAPOLIS, MN (612) 546-4221 800-345-4221

FAX: (612) 546-4286

OHIO:

CERTIFIED SERVICE CENTER 890 REDNA TERRACE

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

CERTIFIED SERVICE CENTER

171J-K NORTH HAMILTON RD. COLUMBUS, OH 43213 (614) 751-3769 (866) 862-1252 FAX: (614) 751-5792 jadkins@certifiedsc.com

CERTIFIED SERVICE CENTER

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

COMMERCIAL PARTS & SVC. OF COLUMBUS

1150 WEST MOUND STREET COLUMBUS, OH 43223 (614) 221-0057 800-837-8327 FAX: (614) 221-3622

GCS SERVICE INC.

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

ELECTRICAL APPLIANCE REPAIR SVC.

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

OKLAHOMA:

HAGAR RESTAURANT EQMT.

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

OREGON:

RON'S SERVICE

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

PENNSYLVANIA:

A.I.S. COMMERCIAL PARTS & SERVICE

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

ELMER SCHULTZ SVC.

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

K & D PARTS AND SERVICE

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

RHODE ISLAND:

GCS SERVICE INC. EAST PROVIDENCE, RI (401) 434-6803 800-462-6012

FAX: (401) 438-9400

SOUTH CAROLINA:

AUTHORIZED APPLIANCE SERVICECENTER

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

AUTHORIZED APPLIANCE SERVICECENTER

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

FAX: (864) 235-9623

WHALEY FOODSERVICE REPAIRS

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

WHALEY FOODSERVICE REPAIRS

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

WHALEY FOODSERVICE REPAIRS

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

WHALEY FOODSERVICE REPAIRS

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

SOUTH DAKOTA:

GCS SERVICE INC. MINNEAPOLIS, MN (612) 546-4221 800-345-4221

FAX: (612) 546-4286

TENNESSEE:

GCS SERVICE INC. MEMPHIS, TN (901) 366-4587 800-262-9155 FAX: (901) 366-4588

GCS SERVICE INC.

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

TEXAS:

ARMSTRONG REPAIR CEN-

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

COMMERCIAL KITCHEN REPAIR CO.

1377 N BRAZOS P.O BOX 831128 SAN ANTONIO, TX 78207 (210) 735-2811 800-292-2120 FAX: (210) 735-7421 brock@commercialkitchen.com

GCS SERVICE INC.

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

GCS SERVICE INC.

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

GCS/STOVE PARTS

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

UTAH:

LA MONICA'S RESTAURANT EQMT. SVC.

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

SECTION 5: JACKSON MAINTENANCE & REPAIR CENTERS —

VERMONT TO WYOMING/CANADA

VERMONT:

NORTHERN PARTS & SVC.

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

GCS SERVICE INC.

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

FAX: (617) 889-1222

VIRGINIA:

DAUBERS, INC.

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

GCS SERVICE INC.

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

WASHINGTON:

SEATTLE, WA

GCS SERVICE INC.

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

RESTAURANT APPLIANCE SERVICE

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

WEST VIRGINIA:

STATEWIDE SERVICE, INC.

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

WISCONSIN:

APPLIANCE SERVICE CEN-TER, INC.

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

APPLIANCE SERVICE CEN-

TER, INC.

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

APPLIANCE SERVICE

CENTER

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

WYOMING:

HAWKINS COMMERCIAL APPLIANCE SERVICE

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

METRO APPLIANCE SERVICE

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

CANADA

THR GARLAND GROUP

1177 KAMATO ROAD MISSISSAUGA, ONTARIO L4W 1X4

(905) 206-8380 SALES: (905) 624-1419 FAX: (905) 624-1851 SERVICE: 800-427-6668

FAX: 800-361-7745

November 22, 2005