

# Champion®

## Operation, Cleaning, and Maintenance Guide



### 64 PRO Series Two Tank Rack Conveyor Dishwasher

Models	
64 PRO	86 PRO
90FF PRO	
100HD PRO	



[www.championindustries.com](http://www.championindustries.com)

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**Manual P/N 116085 rev. - B**

For machines beginning with S/N RP19038937 and above

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Printed in the USA



The Spirit of Excellence

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## ATTENTION

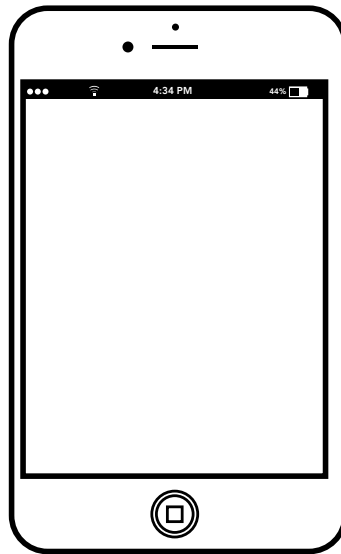
The model no., serial no., voltage, Hz and phase are needed to identify your machine and to answer questions.

**The machine data plate**  
**is located on the side of the top**  
**mounted control cabinet.**

Please have this information ready if you call for service assistance.



## Two ways to **REGISTER YOUR PRODUCT and ACTIVATE YOUR WARRANTY.**



- Use your mobile or computer to go to our website at <http://www.championindustries.com/warranty-registration> and register your product there.
- Use the fax form on the next page.

# PRODUCT REGISTRATION BY FAX

COMPLETE THIS FORM AND FAX TO:

(336) 661-1660 in the USA

1-(800) 204-0109 in Canada

## PRODUCT REGISTRATION CARD

Model

Serial #

Date of Installation: \_\_\_/\_\_\_/\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
(Street) State/Province Zip/Postal Code

Telephone #: ( ) \_\_\_\_\_ --- \_\_\_\_\_

Contact: \_\_\_\_\_

Installation Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone #: \_\_\_\_\_

Contact: \_\_\_\_\_

**FAILURE TO REGISTER YOUR PRODUCT MAY VOID YOUR WARRANTY**

**IMPORTANT IMPORTANT**

# Revision History

Specifications are subject to change based on continual product improvement. Dishwasher owners may request a manual by calling 1(800) 858-4477 in the USA and 1(800) 263-5798 in Canada.

<b><i>Revision Date</i></b>	<b><i>Revised Pages</i></b>	<b><i>Serial Number Effectivity</i></b>	<b><i>Description</i></b>
8.2.19	All	RP19038937	Released First Edition
9.16.19	12-17	RP19038937	Revised HMI Screens
9.25.19	9, 12, 14, 20-27, 35	RP19038937	Revised Instructions

## Limited Warranty

# LIMITED WARRANTY

Champion Industries (herein referred to as "The Company"), 3765 Champion Blvd., Winston-Salem, North Carolina 27105, and 2674 N. Service Road, Jordan Station, Ontario, Canada, L0R 1S0, warrants machines, and parts, as set out below.

Warranty of Machines: The Company warrants all new machines of its manufacture bearing the name "Champion and installed within the United States and Canada to be free from defects in material and workmanship for a period of one (1) year after the date of installation or fifteen (15) months after the date of shipment by The Company, whichever occurs first. [See below for special provisions relating to glasswashers.] Warranty registration must be submitted to The Company within ten (10) days after installation either online at Champion Industries website (<http://www.championindustries.com/warranty-registration>) or by the fax form at the front of this manual. The Company will not assume any responsibility for extra costs for installation in any area where there are jurisdictional problems with local trades or unions.

If a defect in workmanship or material is found to exist within the warranty period, The Company, at its election, will either repair or replace the defective part or accept return of the machine for full credit; provided; however, as to glasswashers, The Company's obligation with respect to labor associated with any repairs shall end (a) 120 days after shipment, or (b) 90 days after installation, whichever occurs first. In the event that The Company elects to repair, the labor and work to be performed in connection with the warranty shall be done during regular working hours by a Champion authorized service technician. Defective parts become the property of The Company. Use of replacement parts not authorized by The Company will relieve The Company of all further liability in connection with its warranty. In no event will The Company's warranty obligation exceed The Company's charge for the machine. The following are not covered by The Company's warranty:

- a. Lighting of gas pilots or burners.
- b. Cleaning of gas lines.
- c. Replacement of fuses or resetting of overload breakers.
- d. Adjustment of thermostats.
- e. Adjustment of clutches.
- f. Opening or closing of utility supply valves or switching of electrical supply current.
- g. Cleaning of valves, strainers, screens, nozzles, or spray pipes.
- h. Performance of regular maintenance and cleaning as outlined in the operator's guide.
- i. Damages resulting from water conditions, accidents, alterations, improper use, abuse, tampering, improper installation, or failure to follow maintenance and operation procedures.
- j. Wear on Pulper cutter blocks, pulse vanes, and auger brush.

Examples of the defects not covered by warranty include, but are not limited to: (1) Damage to the exterior or interior finish as a result of the above, (2) Use with utility service other than that designated on the rating plate, (3) Improper connection to utility service, (4) Inadequate or excessive water pressure, (5) Corrosion from chemicals dispensed in excess of recommended concentrations, (6) Failure of electrical components due to connection of chemical dispensing equipment installed by others, (7) Leaks or damage resulting from such leaks caused by the installer, including those at machine table connections or by connection of chemical dispensing equipment installed by others, (8) Failure to comply with local building codes, (9) Damage caused by labor dispute.

Warranty of Parts: The Company warrants all new machine parts produced or authorized by The Company to be free from defects in material and workmanship for a period of 90 days from date of invoice. If any defect in material and workmanship is found to exist within the warranty period The Company will replace the defective part without charge.

**DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITY. THE COMPANY'S WARRANTY IS ONLY TO THE EXTENT REFLECTED ABOVE. THE COMPANY'S MAKE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED, TO ANY WARRANTY OF MERCHANTABILITY, OR FITNESS OF PURPOSE. THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE REMEDIES SET OUT ABOVE ARE THE EXCLUSIVE REMEDIES FOR ANY DEFECTS FOUND TO EXIST IN THE COMPANY'S DISHWASHING MACHINES AND THE COMPANY'S PARTS, AND ALL OTHER REMEDIES ARE EXCLUDED, INCLUDING ANY LIABILITY FOR INCIDENTALS OR CONSEQUENTIAL DAMAGES.**

The Company does not authorize any other person, including persons who deal in Champion dishwashing machines to change this warranty or create any other obligation in connection with Champion dishwashing machines.

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## Model Descriptions

### Model Size

64 PRO	64" Two Tank Rack Conveyor
86 PRO	64" Two Tank Rack Conveyor with 22" Prewash
90FF PRO	64" Two Tank Rack Conveyor with 26" Front Feed Prewash
100HD PRO	64" Two Tank Rack Conveyor with 36" Prewash

Table 1

### Minimum Operating Temperatures

MODEL	PREWASH TANK	WASH TANK	POWER RINSE TANK	FINAL RINSE
64 PRO	N/A	150°F/66°C	160°F/71°C	180-195°F/82-91°C

Table 2



## SET UP



**CAUTION:**  
There may be more than one power source.

**!** CHECK CHEMICAL DISPENSERS AND SUPPLIES.

**!** TURN WATER, ELECTRICAL AND/OR STEAM SUPPLIES ON.

**!** AUTOMATIC ELECTRIC DRAIN VALVE(S) CLOSE WHEN POWER IS ON.

**!** RED LINE INDICATOR ON VALVE INDICATES OPEN OR CLOSED.

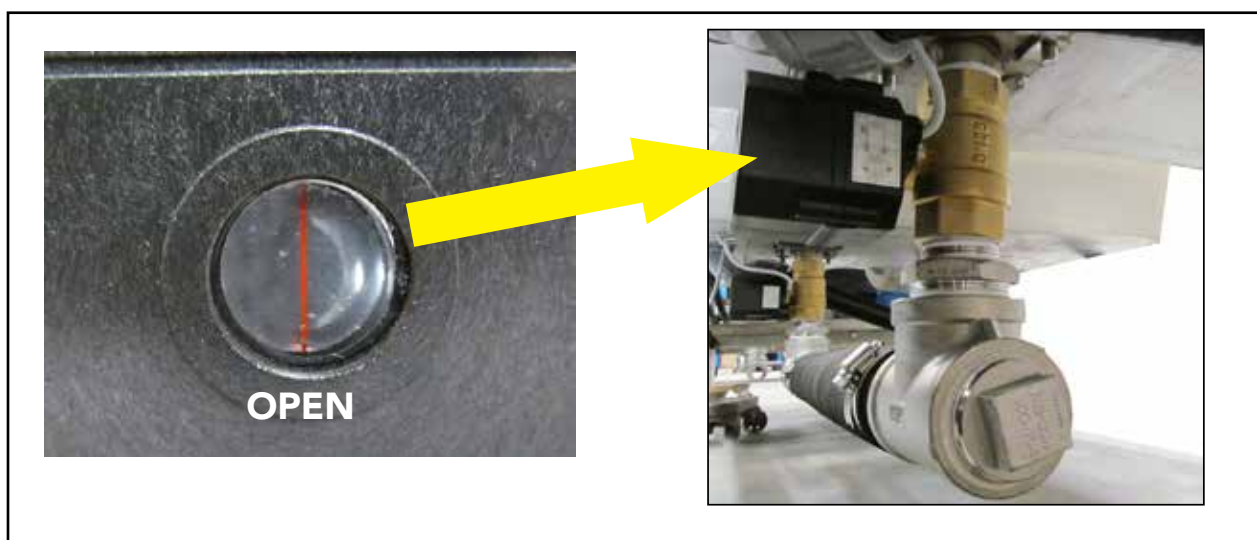


Fig. 2

- 64 PRO Dishwasher features electrically operated drain valves that automatically open and close.

### Drain Valve Operation:

- Valve closes when dishwasher power switch is turned on.
- Valve opens for 10 minutes when power switch is turned off.
- Turning the power on and immediately off will open the valve for an additional 10 minutes.

**SET  
UP**

## INSTALL SCRAP SCREENS AND BASKETS

**1** INSTALL THE SCRAP BASKET.



Fig. 2

**2** INSTALL THE SCRAP SCREENS.

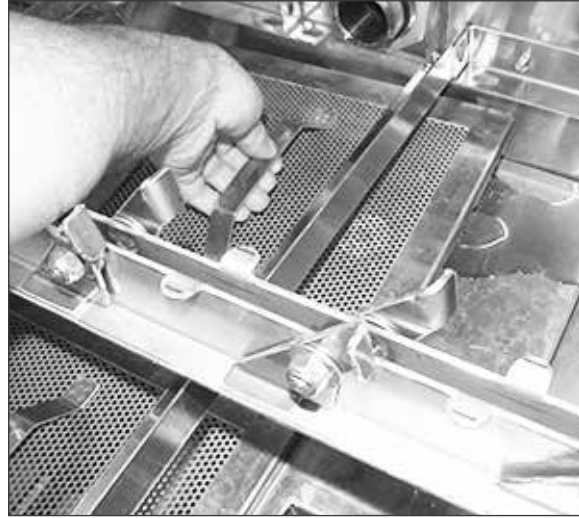


Fig. 3

## Install the Prewash Scrap Screens

**1** INSTALL THE SCRAP BASKET.



Fig. 4

**2** INSTALL THE SCRAP SCREEN.



Fig. 5

## INSTALL WASH ARMS

- 1** SLIDE UPPER WASH ARM INTO TRACKS MAKING SURE IT ENGAGES THE WASH MANIFOLD. PUSH WASH ARM UP UNTIL THE LATCHES LOCK IT IN PLACE.

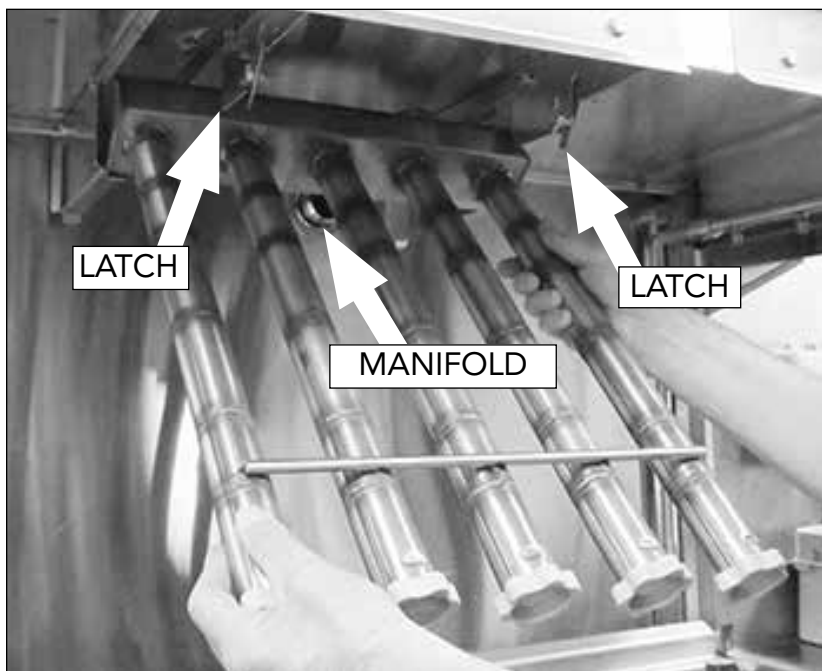


Fig. 6

- 2** SLIDE LOWER WASH ARM INTO TRACKS MAKING SURE IT ENGAGES THE WASH MANIFOLD. PUSH THE END OF THE WASH ARM DOWN TO LOCK IT IN PLACE.

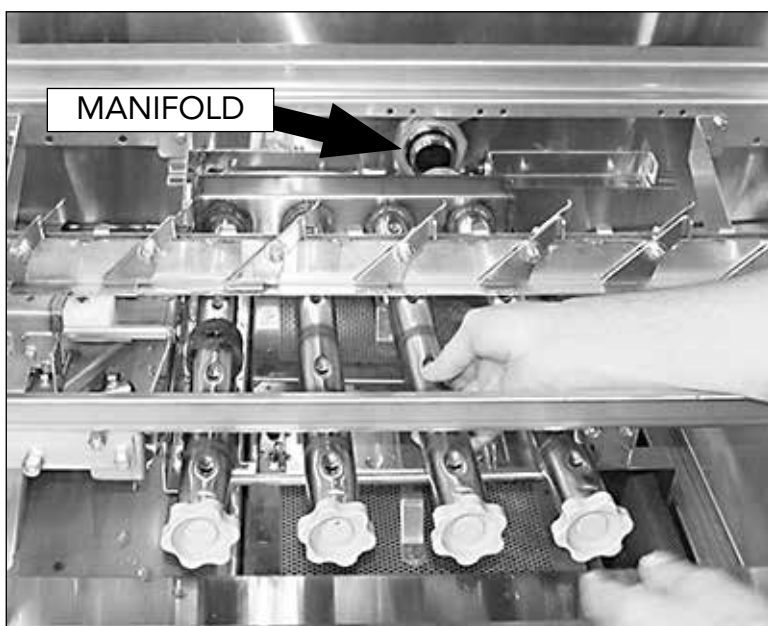


Fig. 7

**SET  
UP**

**INSTALL PREWASH ARMS**

- 1** SLIDE UPPER WASH ARM INTO TRACKS MAKING SURE IT ENGAGES THE WASH MANIFOLD. PUSH WASH ARM UP UNTIL THE LATCHES LOCK IT IN PLACE.



Fig. 8 -  
22" Prewash Tank

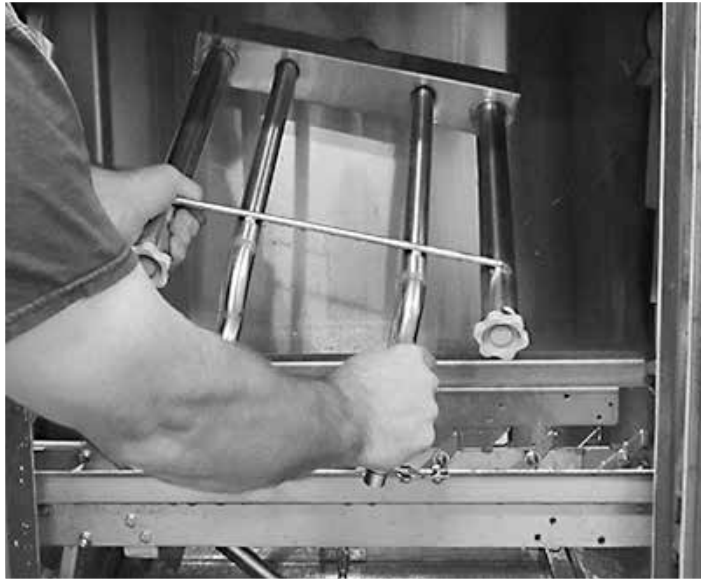


Fig. 9 -  
36" Prewash Tank

**2** MAKE SURE THE SIDE WASH ARM CLEAN-OUT PLUGS AND O-RINGS ARE INSTALLED BEFORE INSTALLING THE ARMS.



Fig. 10

**3** INSTALL THE SIDE WASH ARM PIPE(S). TURN TO LOCK IN PLACE.



22" Prewash Tank



36" Prewash Tank

Fig. 11

## CURTAIN LOCATIONS

Curtain Size

<b>LONG</b>	CURTAIN, 24" x 20-1/4"	P/N 113720
	ROD, 5/16" x 24-5/8"	P/N 108250

<b>MEDIUM</b>	CURTAIN, 24" x 13-1/4"	P/N 108043
	ROD, 5/16" x 23-1/2"	P/N 114012

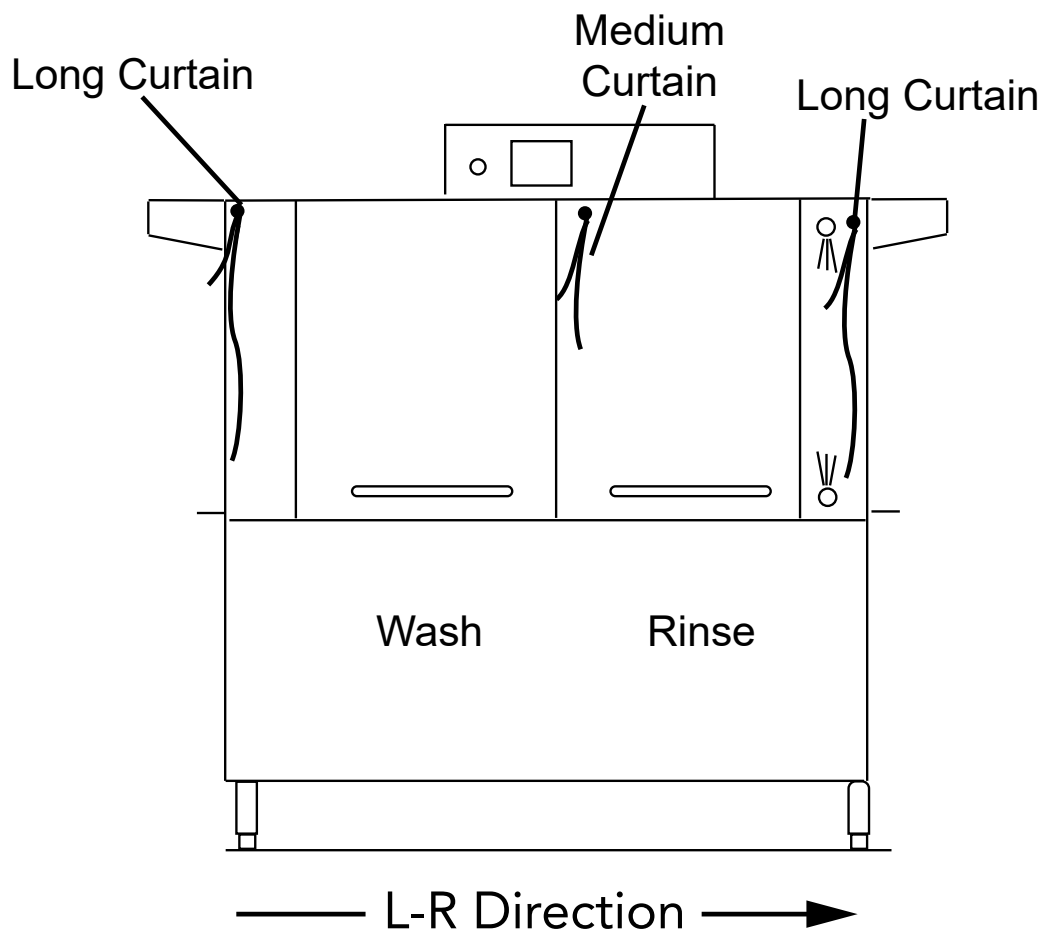


Fig. 12

**NOTE:**

IF DISHWASHER IS EQUIPPED WITH PREWASH TANK, THEN INSTALL THE MEDIUM CURTAIN BETWEEN WASH AND PREWASH TANK AND THE LONG CURTAIN AT ENTRANCE OF THE PREWASH TANK.

## CURTAIN INSTALLATION

**CAUTION:**

Failure to properly install a curtain may prevent proper heating of the machine.

**!** LABELS ON THE FRONT OF THE MACHINE INDICATE THE CURTAIN LOCATIONS.

**!** HANG THE CURTAINS ON THE HOOKS LOCATED ON EACH SIDE OF THE HOOD.

**!** MAKE SURE THE CURTAIN SHORT FLAPS FACE THE LOAD END OF THE MACHINE.

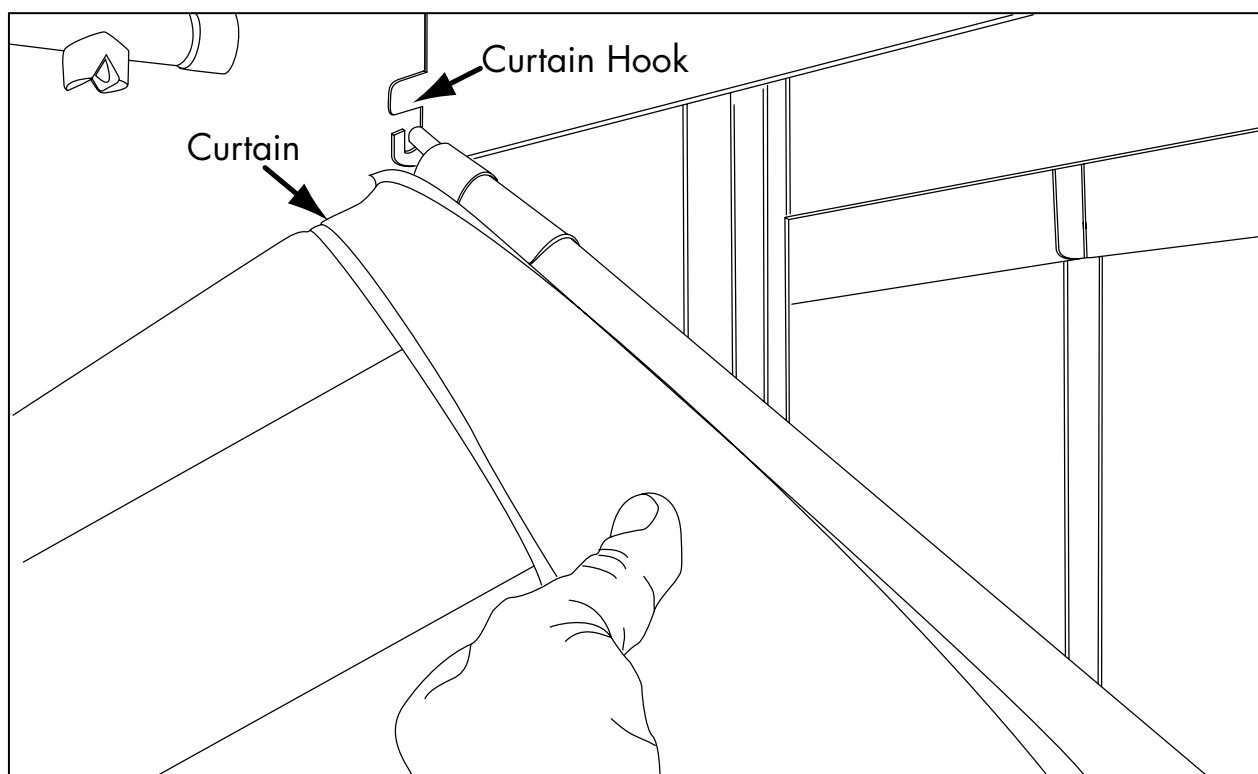


Fig. 13

## Operation - Loading Dish Racks

**!** REMOVE FOOD REMNANTS FROM THE WARES BEFORE LOADING THEM INTO DISH RACKS.

**!** LOAD PLATES IN A PEG RACK, BOWLS AND GLASSES IN A FLAT-BOTTOM RACK.  
**!** LOAD SILVERWARE IN A SINGLE LAYER IN A FLAT-BOTTOM RACK.  
LOAD POTS, PANS AND UTENSILS UPSIDE DOWN IN A FLAT-BOTTOM RACK.  
LOAD BAKE SHEETS AND TRAYS LONG SIDE UP IN A SHEET PAN RACK

**!** DO NOT OVERLOAD RACKS. SPACE WARES EVENLY IN THE DISH RACK.

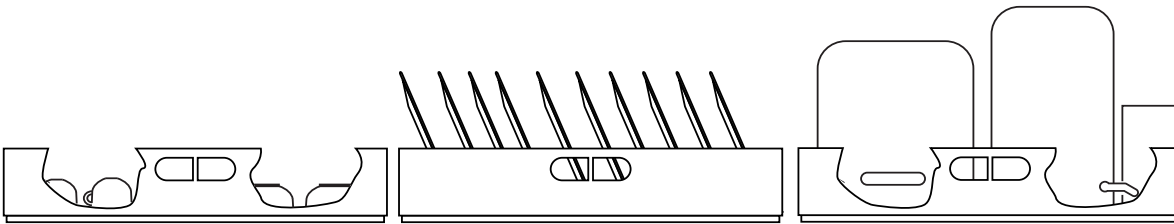


Fig. 14



## Sequence of Operation

### **Power up Procedure:**

1. Touch the Green Power button. The drain valves will close and the dishwasher will begin the automatic fill. The display screen will illuminate; a flashing faucet appears and FILLING displays in the status bar.
2. The incoming wash temperature displays in the Wash °F box. The final rinse temperature displays in the Rinse °F box during the final rinse, the final rinse temperature display is blank at all other times.

### **Cleaning Wares:**

**READY:** The status bar indicates 'READY' when the machine is full of water. WAIT FOR THE WASH TEMPERATURE to read 160°F/71°C before inserting a dish rack into the machine.

Slide a dish rack into the machine until the wash pumps start. The conveyor will catch the rack and move it through the machine. The minimum wash temperature displayed must be 160°F/71°C when the rack is in the wash zone. The final rinse temperature displayed when the dish rack is in the final rinse zone must be 180-195°F/82-90°C. The dishwasher runs 90 seconds for one rack, inserting additional racks continues the automatic operation until the last rack exits the machine. CAUTION: Take care as dish racks exiting the machine may be hot.

**DWELL:** Dwell allows the operator to pause heavily soiled wares in the wash zone for 10 seconds.

**To activate DWELL:** Slide a dish rack into the machine until the conveyor catches the rack, then immediately touch the 'DWELL' button on the Touch Panel/Display. The rack moves 4 secs., stops for 10 secs., moves 4 secs., stops 10 secs., moves 4 secs., stops 10 secs. then resumes normal washing. The dwell button must be touched for each rack that requires extra washing. Do not run racks back to back. The rack switch must change state to activate the next dwell cycle.

### **Alarm Screens:**

1. **CHECK DRAIN:** During the initial fill, if the machine does not fill within 5 minutes, the machine will stop filling and CHECK DRAIN will appear in the status bar. The machine drain or the float switch may be faulty. To correct: Check the machine drain to ensure it is closed. Check the float switches and ensure they move freely. To reset: Touch "CHECK DRAIN" in the status bar. The machine will begin filling again.
2. **TABLE FULL:** An optional table limit switch, (TLS), is available to stop the conveyor when too many dish racks accumulate on the clean dish table. When this happens, 'TABLE FULL' appears in the status bar and the dishwasher pumps, conveyor, and final rinse stop. Remove dish racks from the unload table to reset the TLS, then insert a dish rack to restart the machine.
3. **CONVEYOR JAM:** If the conveyor jams, the pumps and conveyor stop and 'CONVEYOR JAM' appears in the status bar. Remove any dish racks in the machine and clear the jam. Insert a rack into the machine to restart normal operation.
4. **DOOR OPEN:** 'DOOR OPEN' appears in the status bar whenever a door is opened. The status bar displays 'READY' when the door is closed. Insert a dish rack to start the pumps and conveyor drive.
5. **CHECK FLOAT:** 'CHECK FLOAT' appears in the status bar if float faults. Check floats in machine then touch the status bar to reset.
6. **CHECK THERMISTORS:** Indicates a thermistor error. Contact a service agent.
7. **CHANGE WATER (OPTIONAL):** The dishwasher should be drained and refilled with fresh water every four hours of continuous operation. 'Change Water' appears in the status bar to remind the operator to perform this function. The dishwasher should also be drained and cleaned every eight hours of continuous operation and at the end of the day, whichever occurs first. Turning the machine power off will automatically open the electric drain valves for 10 minutes.

## Operation - Control Panel Description

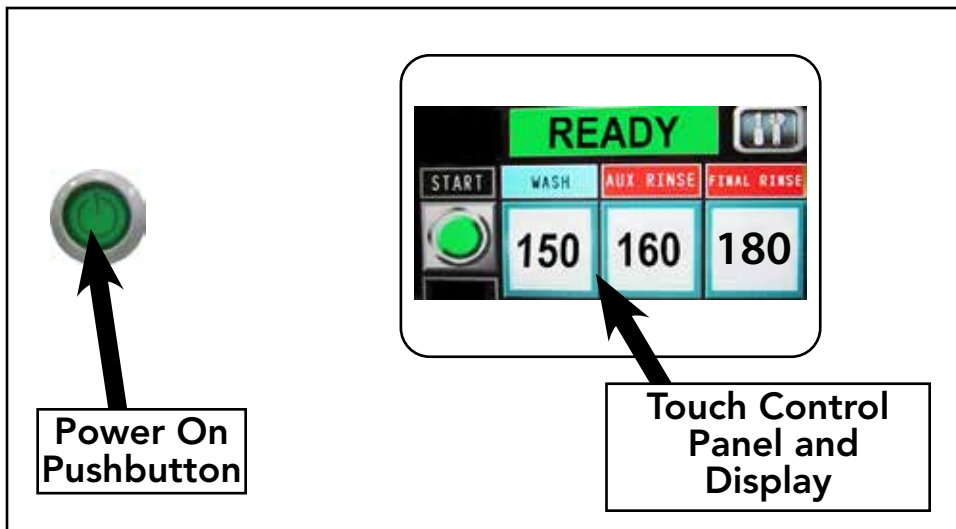


Fig. 15

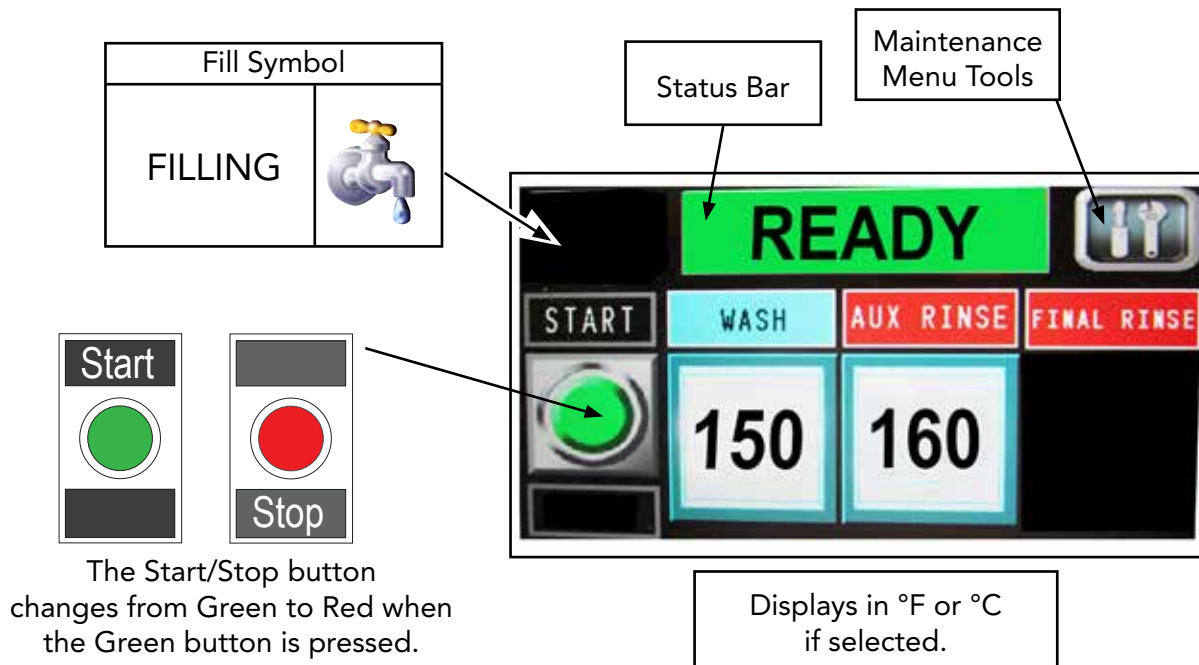
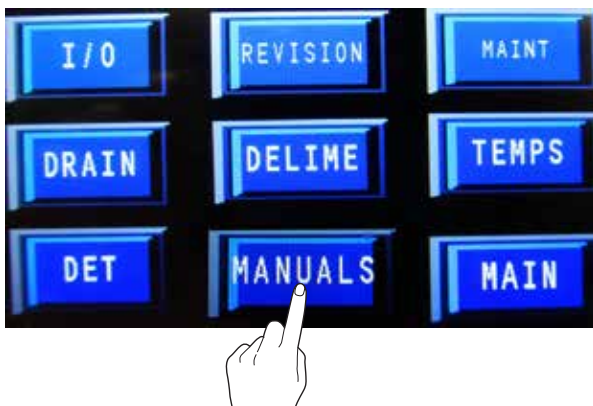


Fig. 16

## Built-in Manuals

Operation and Cleaning manuals are built-in to the display. To access the manuals:

1. Press the "TOOLS" button.
2. Press the "MANUALS" button".
3. Press the Operation or Clean button to access the instructions.



## Sequence of Operation

**INITIAL FILL**— With doors closed, the machine automatically fills when powered up

**1** PUSH THE GREEN POWER BUTTON ON. THE DISPLAY ILLUMINATES, THE FILL SYMBOL FLASHES, AND 'FILLING' APPEARS IN THE STATUS BAR.

**2** THE WASH AND AUXILIARY RINSE TEMPERATURES DISPLAY. THE FINAL RINSE TEMPERATURE DISPLAYS DURING THE FINAL RINSE.



Fig. 17

## Sequence of Operation (continued)

### WASH/FINAL RINSE— Machine washes and performs a final rinse.

- 1** TOUCH THE GREEN BUTTON WHEN READY APPEARS. THE BUTTON CHANGES TO RED.
- 2** INSERT A DISH RACK. DWELL APPEARS ON THE SCREEN AND THE PUMPS AND CONVEYOR START. THE MINIMUM WASH TEMPERATURE IS 150°F, THE POWER RINSE TEMPERATURE IS 160°F.
- 3** THE MINIMUM FINAL RINSE TEMPERATURE IS 180-195°F WHEN THE RACK ENTERS THE FINAL RINSE ZONE. THE FINAL RINSE WINDOW APPEARS.
- 4** SLIDE THE DISH RACK OUT OF THE MACHINE. THE MACHINE WILL STOP AUTOMATICALLY AFTER 2 MINUTES AND THE DISPLAY WILL RETURN TO 'READY' UNTIL ANOTHER DISH RACK IS LOADED INTO THE MACHINE.

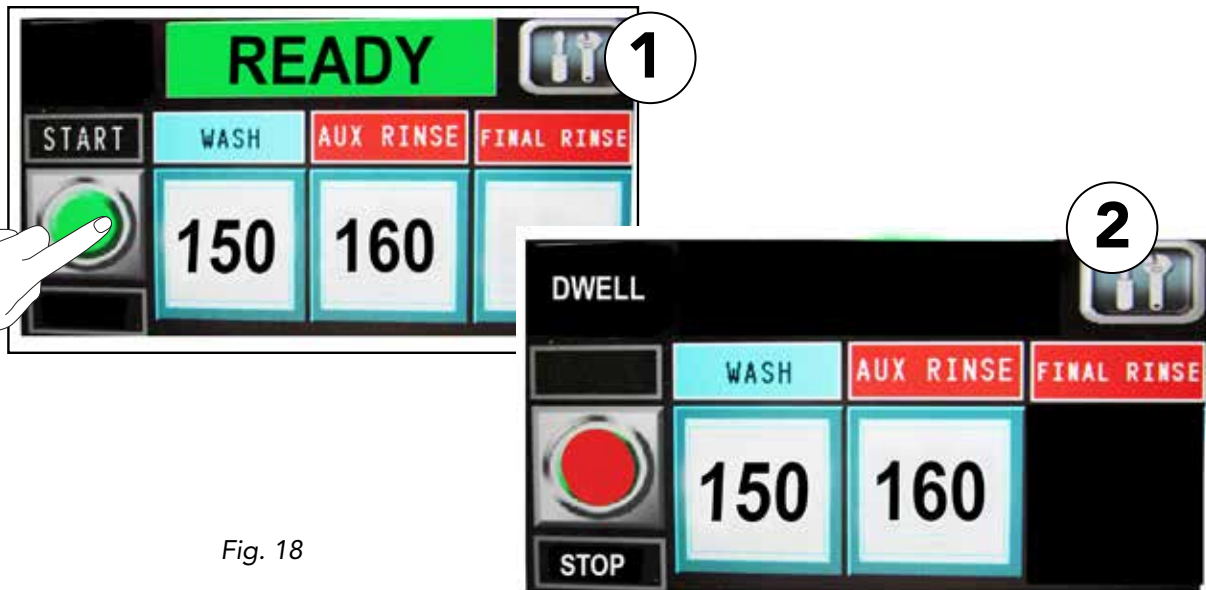
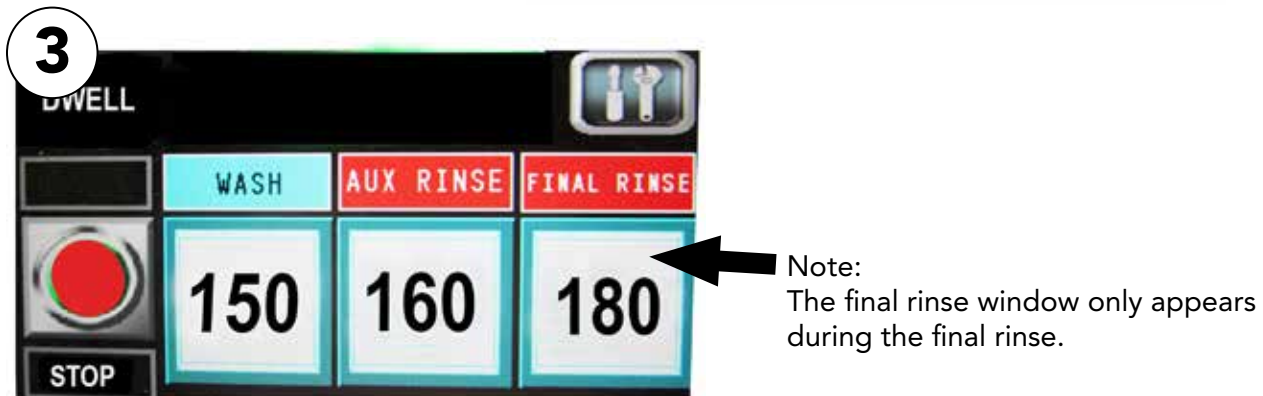


Fig. 18



**DWELL**— Dwell pauses the dish rack in the wash zone to clean heavily soiled wares.

**1** INSERT A DISH RACK OF HEAVILY SOILED DISHES INTO THE MACHINE. 'DWELL' APPEARS ON THE DISPLAY.

**2** Immediately touch the 'DWELL' button when it appears. It will turn red when touched indicating dwell is activated. The rack moves 4 secs., stops for 10 secs., moves 4 secs., stops 10 secs., moves 4 secs., stops 10 secs. then resumes normal washing and then a final rinse.

**3** THE DWELL FUNCTION ENDS WHEN THE DISH RACK EXITS THE MACHINE.



Fig. 19

**DWELL**— Wash delay for multiple dish racks.

TO WASH MULTIPLE DISH RACKS USING THE 'DWELL' FEATURE:

**1** INSERT THE FIRST RACK AND TOUCH THE 'DWELL' BUTTON TO BEGIN.

**2** WAIT FOR THE FIRST RACK TO PAUSE IN APPROXIMATELY 15 SECS. THEN INSERT ANOTHER RACK INTO THE MACHINE AND IMMEDIATELY TOUCH THE 'DWELL' BUTTON.

**3** REPEAT THIS PROCESS UNTIL THE LAST DISH RACK OF HEAVILY SOILED WARES IS INSERTED INTO THE MACHINE. THE DWELL OPERATION WILL STOP AFTER THE LAST RACK EXITS THE MACHINE.

## ALARM SCREENS

**CHECK DRAIN**— The machine will stop filling if there is a problem with the drain.

**!** IF THE MACHINE DOES NOT FILL WITHIN 10 MINUTES, THE FILL STOPS AND 'CHECK DRAIN' APPEARS IN THE STATUS BAR. MAKE SURE THE DRAIN VALVES ARE CLOSED. CHECK THE FLOATS AND ENSURE THEY MOVE FREELY.

**1** TO RESET CHECK DRAIN: TOUCH THE "CHECK DRAIN BUTTON."



Fig. 20

**2** THE SCREEN WILL RETURN TO "FILLING" WHEN THE "CHECK DRAIN" ALARM IS CLEARED.



Fig. 21

## ALARM SCREENS

**DOOR OPEN**— The machine stops if a dishwasher door is opened.



To clear the 'DOOR OPEN' alarm: Close the door.

'READY' will appear in the status bar.

Insert a dish rack to restart the machine.



Fig. 22

**TABLE FULL** — The machine stops if too many dish racks have accumulated on the dishwasher unload table tripping the table limit switch.



To clear the 'TABLE FULL' alarm:

Remove the dish racks on the unload table.

Remove any dish racks inside the machine for reprocessing.

Insert a dish rack to restart the machine.



Fig. 23

## ALARM SCREENS

**BELOW TEMP**— The below temp alarm indicates the wash temperature is below the minimum 150°F. The operator should determine why the temp is low and take corrective action.

**1** THE DISPLAY INDICATES 'BELOW TEMP' WHEN THE TANK IS FULL OF WATER BUT HAS NOT REACHED THE PRESET TEMPERATURE.

**2** 'READY' IS DISPLAYED WHEN THE TEMPERATURE IS MET; HOWEVER, THE MACHINE CAN BE STARTED AT ANY TIME THE OPERATOR CHOOSES.



Fig. 24



## ALARM SCREENS

**CONVEYOR JAM** — The machine stops and 'Conveyor Jam' is displayed if the conveyor is overloaded or an object interferes with the conveyor's movement.



To rest the 'Conveyor Jam' alarm:

1. Open the doors and remove any dish racks.
2. Inspect the machine interior for articles obstructing the pawl bar drive.
3. Touch 'RESET'.
4. Touch 'MAIN'.
5. Touch the green 'Start' button when 'READY' appears.
6. Insert a dish rack of wares.

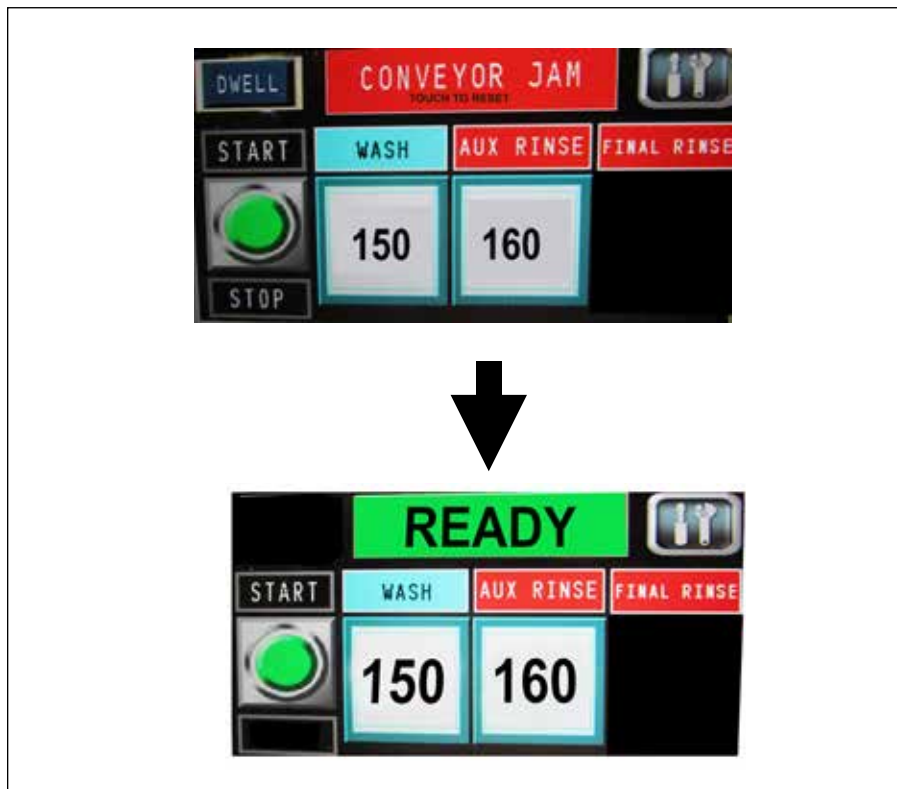


Fig. 25

## ALARM SCREENS

### CHECK THERMISTORS— Indicates an error in a thermistor circuit.

**1** THE DISPLAY INDICATES 'CHECK THERMISTORS' IN A WASH, POWER RINSE, OR BOOSTER TANK.

**2** CONTACT A SERVICE AGENT TO RESOLVE THE ERROR.



Fig. 26

## CHECK FLOAT— Float may be jammed or defective.

**1** THE DISPLAY INDICATES 'CHECK FLOAT' IN A PREWASH, WASH, POWER RINSE, OR BOOSTER TANK.

**2** INSPECT THE FLOAT TO ENSURE IT IS MOVING FREELY.



Fig. 27

## Operation

# ELECTRIC DRAIN VALVE OPERATION

The electric drain valves can be opened using the "TOOLS" button and options screens.

1. Press the "TOOLS" button.



2. Press the "DRAIN" button.



2. Press the desired button to open the valve. The valve will remain open until the button is pressed again.

- WASH TANK DRAIN
- POWER RINSE TANK DRAIN
- PREWASH TANK DRAIN



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## CLEANING

**WASH ARMS** — The upper and lower wash arms should be removed to clean. The upper wash arms have five pipes, the lower wash arms have four pipes.

- 1** THE UPPER WASH ARM ASSEMBLY HAS FIVE ARMS, THE LOWER HAS FOUR. THEY ARE NOT INTERCHANGEABLE. REMOVE THE ASSEMBLIES TO CLEAN.
- 2** ROTATE THE WASH ARM END PLUGS 1/4 TURN AND PULL OUT TO REMOVE (FIG. 26).
- 3** INSPECT THE WASH ARM O-RING. DAMAGE SIGNIFICANTLY REDUCES WASH PERFORMANCE.
- 4** FLUSH THE WASH ARMS AND INSPECT THE WASH ARM NOZZLES TO ENSURE THEY ARE CLEAN.
- 5** INSPECT THE WASH MANIFOLD O-RING (FIG. 27). REPLACE IF DAMAGED OR MISSING.

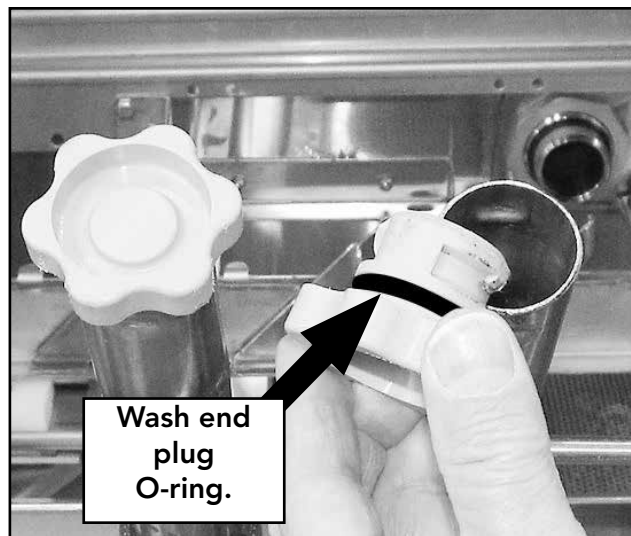
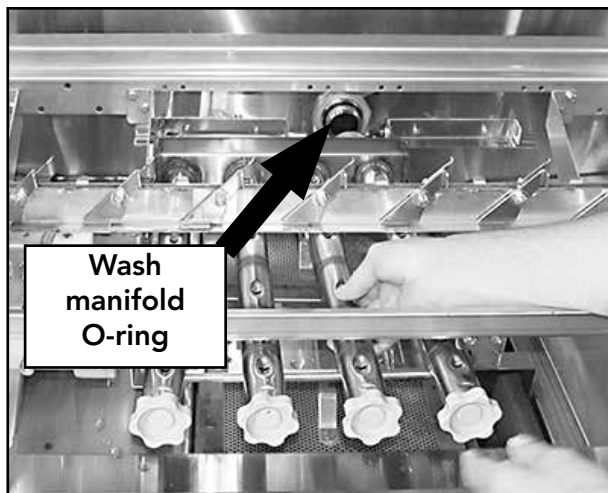


Fig. 28

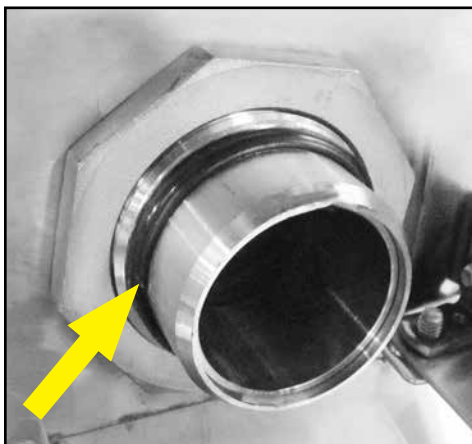


Fig. 29

## PREWASH ARMS — The side and upper wash arms should be removed to clean.

**1** TURN SIDE ARM 1/4 TURN AND PULL DOWN TO REMOVE. INSPECT O-RING FOR WEAR AND REPLACE AS NECESSARY (Fig. 30).

**2** CLEAN THE SPRAY NOZZLES WITH A PAPER CLIP (Fig. 31).

**3** REMOVE THE ARM END PLUGS AND FLUSH WITH CLEAN WATER. CHECK THE O-RING AND REPLACE AS REQUIRED (FIG. 32).



Fig. 30



Fig. 31



Fig. 32



36" Prewash Tank



22" Prewash Tank

(continued on next page)

## CLEANING (continued)

### PREWASH ARMS (continued)

**1** REMOVE PREWASH UPPER SPRAY ARMS AND CLEAN (Fig. 33-34).

**2** REMOVE THE ARM END PLUGS AND FLUSH WITH CLEAN WATER. CHECK THE O-RING AND REPLACE AS REQUIRED (FIG. 33-34).



Fig. 33 -  
22" Prewash Tank

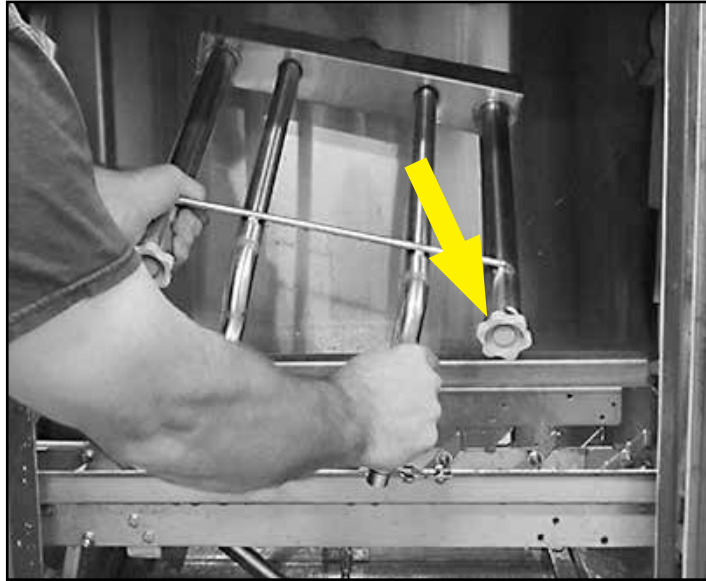


Fig. 34 -  
36" Prewash Tank



**RINSE ARMS** — The upper and lower rinse arm nozzles should be cleaned regularly to prevent scale build-up.

**1** ROTATE RINSE ARM 1/4 TURN AND PULL TO REMOVE (FIG. 35).

**2** USE SCREWDRIVER TO REMOVE END PLUG AND FLUSH ARM WITH CLEAN WATER. INSPECT O-RING FOR DAMAGE AND REPLACE IF NEEDED (FIG. 36).

**3** CLEAN THE SPRAY NOZZLES WITH A PAPER CLIP (FIG. 37).



Fig. 35



Fig. 36

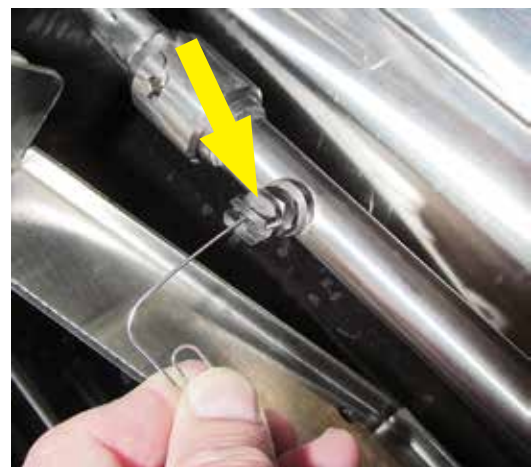


Fig. 37

## SCRAP SCREENS AND SCRAP BASKETS



**CAUTION:**

Spray and wipe down the interior of the machine to remove debris before removing scrap screens and baskets. DO NOT CLEAN INTERIOR WITH METAL PADS.

**1 REMOVE THE SCRAP BASKET.**



Fig. 38

**2 REMOVE THE SCRAP SCREENS.**

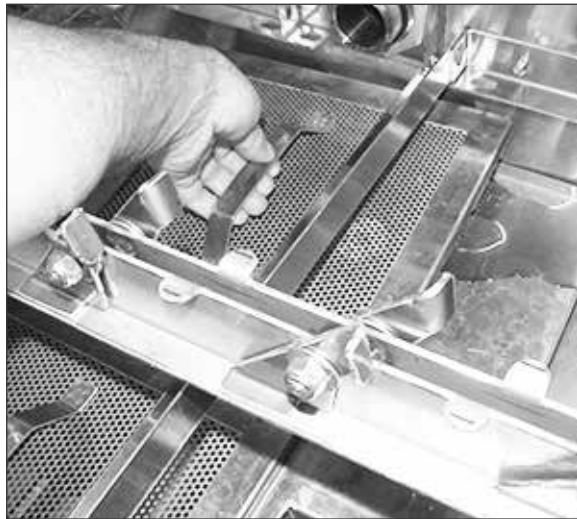


Fig. 39

**3 REMOVE PREWASH SCREENS.**



Fig. 40

**4 REMOVE PREWASH BASKET.**



Fig. 41

**5 FLUSH BOTH SIDES OF THE SCREENS AND BASKETS IN A REMOTE SINK. DO NOT STRIKE SCREENS ON HARD SURFACES.**

## PUMP SUCTION STRAINER AND DRAIN



**CAUTION:**

Failure to clean the pump suction strainer significantly reduces wash results.

**1**

TURN THE MACHINE POWER SWITCH OFF AND ON TO OPEN THE ELECTRIC DRAIN VALVES FOR 10 MINUTES. FLUSH TANK WITH FRESH WATER. CLEAN DRAIN SCREEN (FIG. 42).

**2**

PULL THE PUMP STRAINER HANDLE UP TO REMOVE (FIG. 43)

**3**

CLEAN STRAINER AS SHOWN IN FIG. 44.

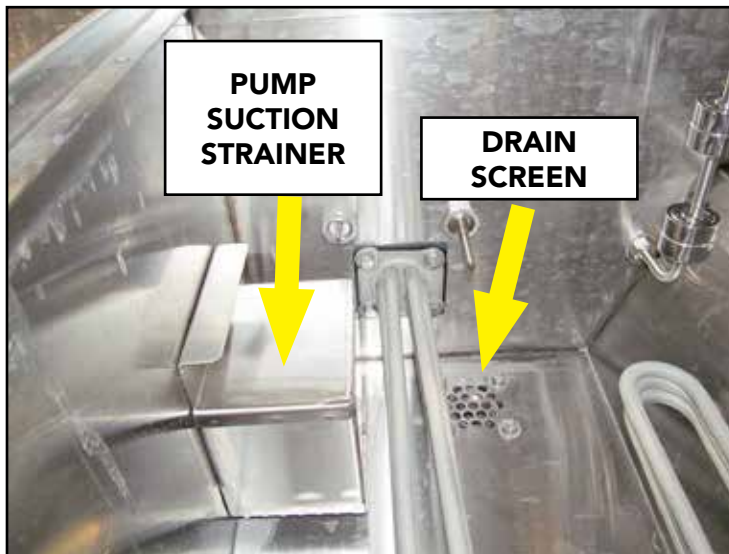


Fig. 42



Fig. 43



Fig. 44

## EXTERIOR

**1**

USE SOFT CLOTH AND MILD DETERGENT.

**2**

DO NOT SPRAY EXTERIOR WITH WATER.

**3**

LEAVE DOORS OPEN TO AIR DRY MACHINE.

## CLEANING

### Cleaning - Intervals

Cleaning your dishwasher is the best maintenance you can do. The cleaning intervals below are the minimum requirements for most dishwashers. You may need to clean your dishwasher more often when washing heavily soiled wares or during long periods of continuous operation.

#### Daily or every 4 hours of operation

1. Turn power switch OFF.
2. Drain valves open automatically. Remove scrap screens and scrap baskets. Clean inside of the tanks and flush with clean water. Back flush the scrap screens until clean.

#### **DO NOT STRIKE SCREENS OR BASKETS AGAINST SOLID OBJECTS**

3. Remove the spray arm assemblies. Remove the end cap from each spray arm.
4. Flush the spray arms and nozzles to remove any debris.
5. Replace the end caps. Check the condition of the manifold O-ring.
6. Reinstall the spray arms.
7. Remove and clean the curtains. Allow them to air dry at the end of the day.
8. Leave the doors open at night to air dry the machine.
9. Make sure that the final rinse nozzles are clear of mineral deposits.
10. Straighten a metal paper clip to clean the nozzles.
11. Clean the exterior of the machine with a soft cloth and mild detergent.
12. Check machine for leaks.
13. Check the chemical supplies and refill as necessary.

#### At the End of the Day

1. Perform Steps 1-13 above.
2. Remove the curtains and clean with fresh water.

#### **DO NOT USE STEEL WOOL TO CLEAN THE INTERIOR OF THE MACHINE.**

3. Wipe the interior and exterior of the machine with a soft cloth and a mild detergent. **DO NOT HOSE THE EXTERIOR OF THE MACHINE WITH WATER.**
4. Reassemble the dishwasher and leave the doors open to air dry.
5. Contact the chemical supplier for deliming chemicals if required.



## Deliming



### WARNING:

Consult the chemical representative's recommendations for the use of deliming chemicals. Wear protective clothing, goggles and face shield when handling chemicals.

Deliming intervals are determined by the amount of lime build-up in the dishwasher. A password protected delime time interval is adjustable by a management.

## Delime Alarm

- A yellow "DELIME REQUIRED" message will appear when deliming is due.
- Press the button.
- The message box 'Are you sure...'
- Press "YES" to begin deliming, "NO" to pause.
- The yellow "Delime Required" message will reappear.



**Step 1:** Deliming begins when "DRAINING" is displayed.

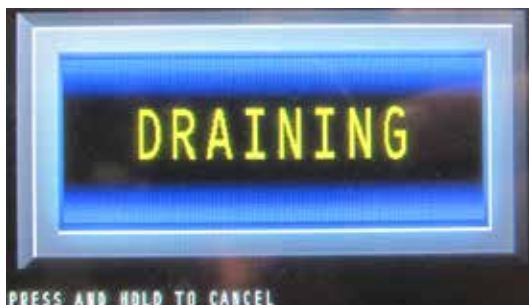


Fig. 45

**Step 2:** The operation can be stopped by pressing and holding the words "PRESS AND HOLD TO CANCEL" below the message window.



### NOTE:

Deliming can also be started manually. See page 32.

## Deliming

**Step 3:** The display returns to the main screen and displays "DELIME REQUIRED". Pressing "TOUCH TO RESET" will bypass the delime function but the prompt will return until a delimiting operation is performed

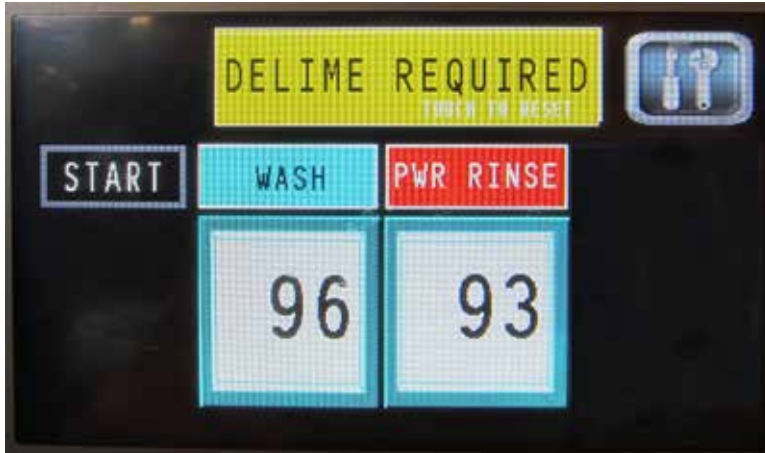
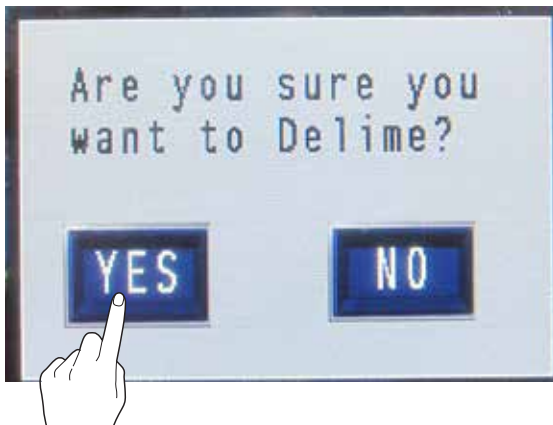


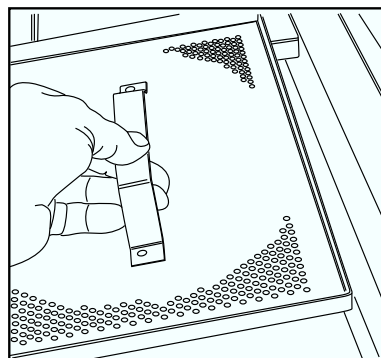
Fig. 46

**Step 4:** Press "YES" to begin the delimiting process.



**Step 5:** "CLEAN SCREENS" picture displayed.

- Remove scrap screens.
- Clean food soils.
- Reinstall screens.



**Step 6:** "CLOSE DOOR TO FILL" is displayed.



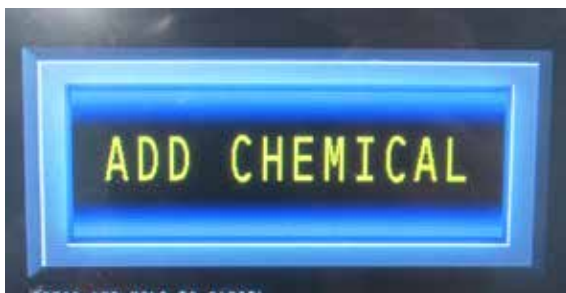
**Step 7:** Close doors and machine fills.

- "FILLING" displayed.



**Step 8:** "ADD DELIME CHEMICAL" displayed.

- Open the doors and add the delime chemical according to the chemical representative's instructions.
- The wash tank capacity = 17 US gals.
- **DELIMING OPERATION CAN NOT BE STOPPED ONCE DELIMER IS ADDED.**



## Delimiting

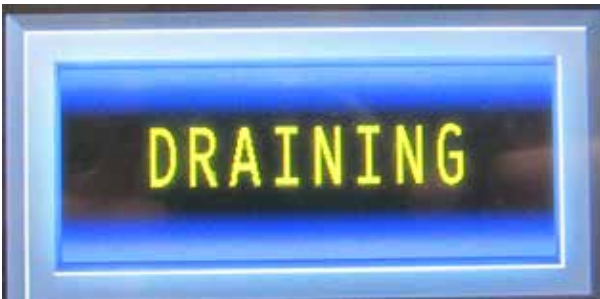
**Step 9:** "CLOSE DOOR TO START" is displayed.



**Step 10:** "PUMPS ON" is displayed. Pumps will run.



**Step 11:** "DRAINING" is displayed. Machine drains.



**Step 12:** "FILLING" is displayed. Machine fills.





**Step 13:** "DELIME RINSE" displayed.

- Final rinse water valve opens for the pre-programmed time.
- Time remaining displayed on screen.
- Valve closes.



**Step 14:** "DRAINING" is displayed. Machine drains.



**Step 15:** "DELIME COMPLETE" is displayed when deliming is complete.

- Touch the display and return to the main screen.
- Machine will begin a normal fill.



## Deliming

### POWER GREEN POWER BUTTON OFF:

The deliming process can not be stopped by pushing the main power button off.

- Push green power button off. The green light will go out and the screen will go blank. Deliming continues.
- Push the green power button on.
- The main screen will come on and "RETURN TO DELIME" will appear in the status bar.
- "TOUCH TO RESET" and deliming continues to run.



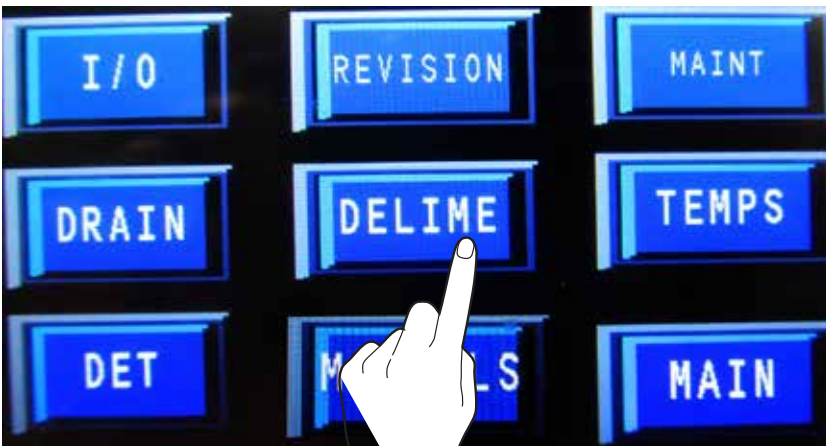
### MANUAL DELIME START

The deliming process can be started manually.

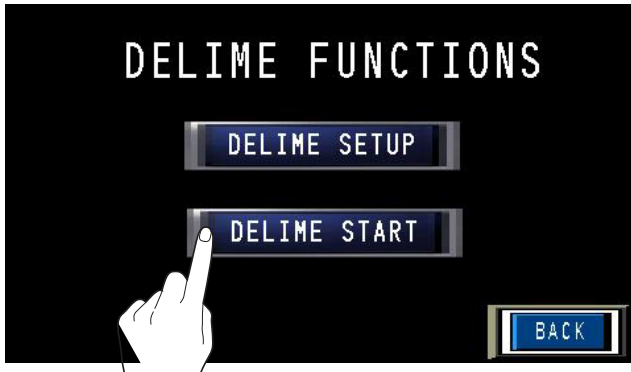
**Step 1:** Press the "TOOLS" button.



**Step 2:** Press the "DELIME" button.



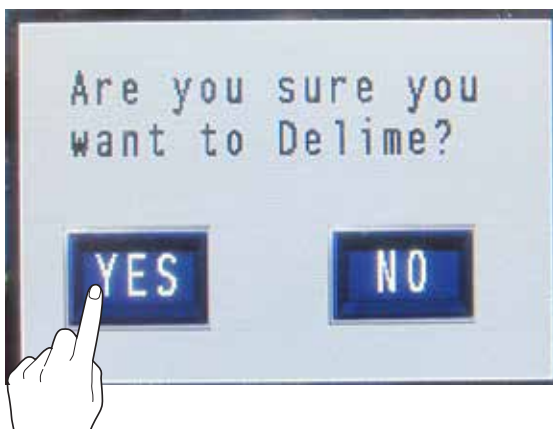
**Step 3:** Press "DELIME START".



**NOTE:** "The "DELIME START" button disappears and can not be pressed when the machine is filling or washing. Delime Start is only available when the machine is idle and "READY" is displayed on the main screen.



**Step 4:** Press "YES" to begin the deliming process.



**Step 5:** FOLLOW STEPS 5-15 on pages 28-31 to perform the deliming.

# MAINTENANCE

## Schedules

### Weekly

1. Inspect all water lines for leaks and tighten at joints if required.
2. Clean any detergent residue from the exterior of the machine.
3. Clean any accumulated scale from the heating element.
4. Inspect the spray arms for damage or missing parts.
5. Inspect the final rinse arm nozzles and clean with paper clip if required.
6. Inspect the pawl bar and drive assembly for damage or missing parts.
7. Check that float switches move freely.
8. Check the idle pump actuator and the final rinse actuator for freedom of travel.
9. Remove and clean the pump suction strainer (See page 23).

### Monthly

1. Inspect interior of machine for lime deposits and clean.
2. Check o-rings on spray arm piping connections.
3. Clean any accumulated scale from the heating element.
4. Inspect the spray arms o-rings and ensure all plugs are installed.
5. Inspect the final rinse arms for missing o-rings.
6. Inspect the pawl bar and drive assembly for damage or missing parts.
7. Check that float switches move freely.
8. Check the idle pump actuator and the final rinse actuator move freely.
9. Check the condition of Touchscreen display and pressure gauge.
10. Perform complete operation check.

### Yearly

1. Contact authorized service agent to perform complete maintenance review of machine.
2. Correct any abnormal situations as recommended.

Before calling for service check the following conditions.

1. Dishwasher main power and water supply is on.
2. Machine has been assembled correctly.
3. Conveyor is clear of any obstructions.
4. Screens and pump intake screens are clear.
5. Doors are closed and secure.

Condition	Cause	Solution
Dishwasher will not run.	Door not closed. Main power OFF. Dishwasher OFF. Dish rack not inserted.	Close door completely. Check breaker on panel. Turn dishwasher ON. Insert dishrack into machine.
Low or no water.	Main water supply off. PRV setting incorrect Solenoid strainer clogged. Solenoid valve defective.	Open supply valve. Adjust the PRV setting Clean strainer. Contact Service Agent.
Poor wash results.	Detergent not added to tank. Wares incorrectly loaded in dishrack.  Clogged screens . Clogged spray arms.  Thermostat defective.  End plugs missing.  Water temperature low.	Check detergent supply.  Reposition wares or reduce amount of wares.  Clean screens.. Clean spray arms.  Contact Service Agent.  Check spray arms.  Check incoming water temperature.
Dishwasher conveyor stops for 10 seconds.	'DWELL' feature in action.	DO not touch 'DWELL' button when loading rack.
Dishwasher conveyor will not run.	Conveyor jammed or table limit switch has stopped conveyor.	Check conveyor for jams Remove racks from load end of table.

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