

Operation, Cleaning, and Maintenance Guide



PRO Series Ventless Heat Recovery Rack Conveyor Dishwashers

Models		
44 PRO-VHR	66 PRO-VHR	
70FF PRO HD-VHR		
80HD PRO-VHR		

SCHNEIDER PLC CONTROLS





www.championindustries.com

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For machines beginning with S/N RP20022553 and above

3765 Champion Boulevard Winston-Salem, NC 27105 (336) 661-1556 Fax: (336) 661-1660 Toll-free: 1(800) 858-4477 2674 N. Service Road, Jordan Station Ontario, Canada LOR 1S0 (905) 562-4195 Fax: (905) 562-4618 Toll-free: 1(800) 263-5798 Printed in the USA



The Spirit of Excellence

National Service Department

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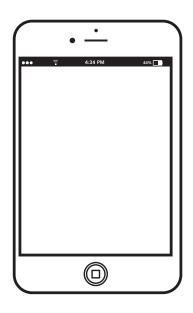
ATTENTION

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

The machine data plate
is located on the right front corner
of the lower panel

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

Three ways to REGISTER YOUR PRODUCT and ACTIVATE YOUR WARRANTY.





- Use your mobile or computer to go to our website at www.championindustries.com and register your product there.
- Scan the QR code(http://champdw.us/PRO located near the data plate.
- 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:					
)	(Street)		State/Province	Zip/Postal Code
Installation Company Address: Telephone #: Contact:	<i>y</i> :				

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 a access a revised manual on-line or by calling 1(800) 858-4477 in the USA and 1(800) 263-5798 in Canada.

Revision Date	Revised Pages	Serial Number Effectivity	Description	
3.6.20	All	RP20022553	Released First Edition	

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, LOR 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 on the Champion Industries website (http://www.championindustries.com, in the USA or http://www.championindustries.com/canada in Canada or by the fax form provided 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 Sizes

44 PRO-VHR	44" Single Tank Rack Conveyor
66 PRO-VHR	44" Single Tank Rack Conveyor with 22" Prewash
70FF PRO-VHR	44" Single Tank Rack Conveyor with 26" Front feed Prewash
80HD PRO-VHR	Heavy Duty 44" Single Tank Rack Conveyor with 36" Prewash

Table 1

Minimum Operating Temperatures

MODEL	PREWASH TANK	WASH TANK	FINAL RINSE
44 PRO-VHR, 66 PRO- VHR,	N/A	160°F/71°C	180-195°F/82-91°C
70 PRO-FF VHR, 80 PRO-HD-VHR 80 PRO-FF-VHR,	Not to exceed 140°F/60°C	160°F/71°C	180-195°F/ 82-91°C

Table 2

SET UP

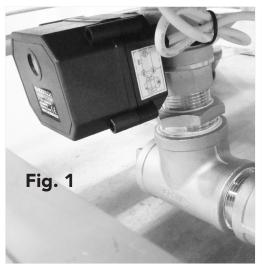


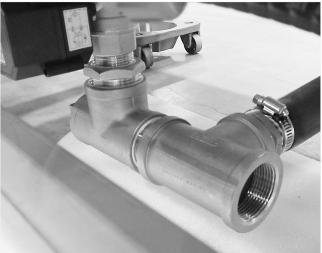


CAUTION:

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.





- PRO Series Dishwashers feature electrically operated drain valves that automatically open and close to drain the dishwashers.
- Refer to Fig. 1 above and note the location of the drain valve.

Drain Valve Operation:

- Valve closes when dishwasher power switch is turned on.
- Valve opens for 10 minutes when power switch is turned off then closes.
- Turn the power on and immediately off to open the valve for an additional 10 minutes.
- See page 25 to manually operate the valve.



Install the Wash Scrap Screens

1 INSTALL THE SCRAP BASKET.

2 INSTALL THE SCRAP SCREENS.



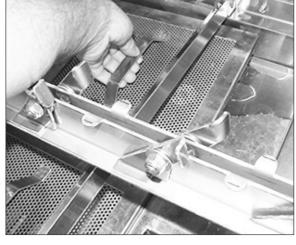


Fig. 2

Fig. 3

Install the Prewash Scrap Screens

1 INSTALL THE SCRAP BASKET.

2 INSTALL THE SCRAP SCREENS.



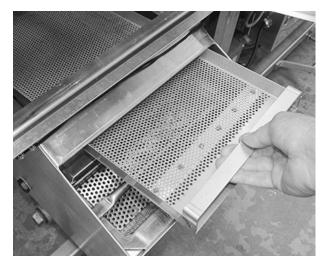


Fig. 4

Fig. 5

Install the Wash Arms

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

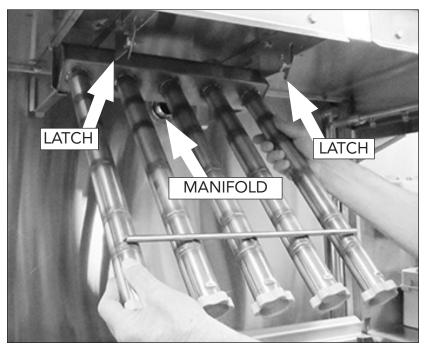


Fig. 6

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.

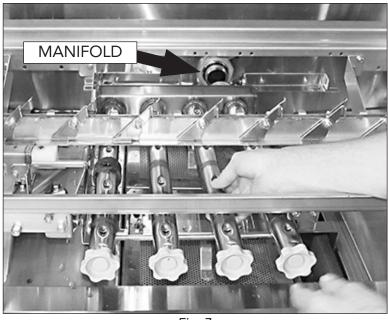


Fig. 7



Install the Prewash Arms (If applicable)

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

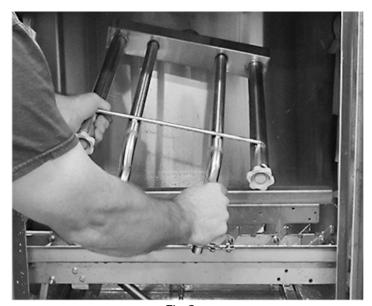


Fig.9 -36" Prewash Tank

2 MAKE SURE THE CLEAN-OUT PLUGS AND O-RINGS ARE INSTALLED.



Fig. 10

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



22" Prewash Tank



36" Prewash Tank

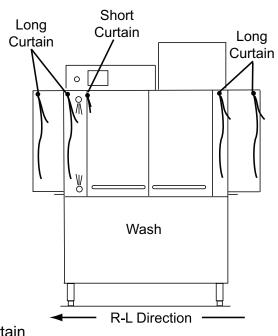
Fig. 11

Curtain Locations

Curtain Size

LONG	24" x 20-1/4" [610mm x 514mm]	P/N 113720
	ROD, 5/16" x 24-5/8"	P/N 108250

SHORT	24" x 6-1/4" [610mm x 159mm]	P/N 109723
	ROD, 5/16" x 23-1/2"	P/N 1113012



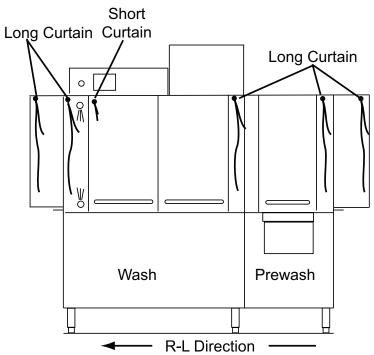


Fig. 12

Curtain Installation



CAUTION:

Failure to properly install a curtain may adversely affect the operation 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.

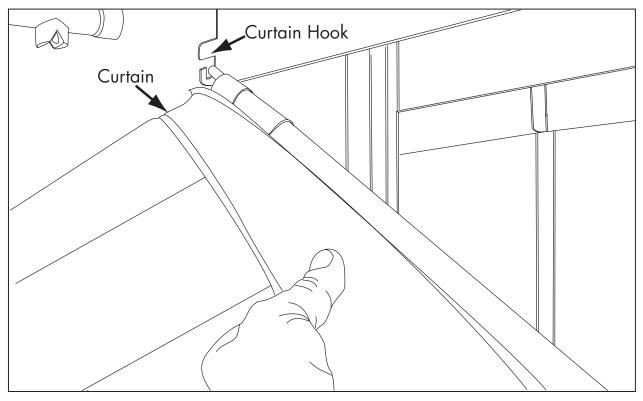


Fig. 13

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
- ① DO NOT OVERLOAD RACKS. SPACE WARES EVENLY IN THE DISH RACK.

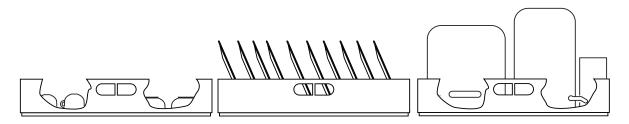


Fig. 14

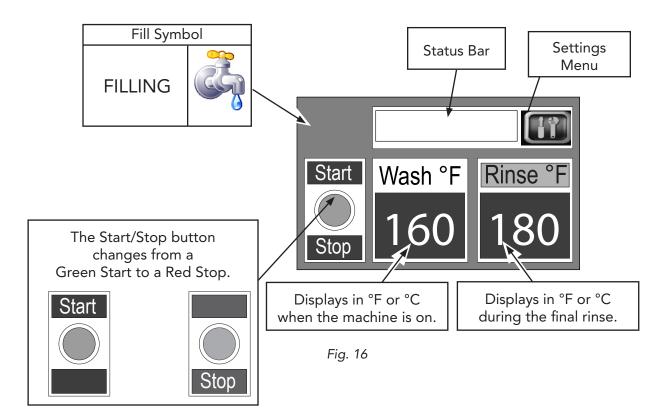
Sequence of Operation

- 1. Touch the Green power button. The electric drain valve(s) 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. <u>CHECK DRAIN</u>: 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. Check the machine drain to ensure it is closed. To reset: touch the Wrench symbol to go to the settings screen, touch 'Reset'. The machine will begin filling again. Touch 'MAIN' and return to the operation screen.
- 3. 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.
- 4. <u>READY:</u> 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.
- 5. Slide a dish rack into the machine until the wash pump(s) 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 for 90 seconds for one rack, inserting additional racks continues the automatic operation until the last rack exits the machine. Take care as hot dish racks exit the machine.
- 6. <u>DWELL:</u> 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 will pause in the wash zone for 10 seconds. Wait until dish rack has left the wash zone
 - before inserting another rack. The dwell button must be touched for each rack.
- 7. TABLE FULL: An optional table limit switch, (TLS), is available to stop the conveyor when too many dish racks are allowed to accumulate on the clean dish table. When this happens, 'TABLE FULL' appears in the status bar and the dishwasher pump(s), 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.
- 8. <u>CONVEYOR JAM:</u> 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.
- 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.
- 10. <u>HEAT PUMP:</u> The dishwasher immediately stops when this appears in the status bar and cannot be restarted by the operator. Contact a supervisor and/or service agent to correct this situation.
- 11. THERMISTORS: If a thermistor fails the main status bar will indicate "CHECK THERMISTOR". The problem must be repaired and the button must be pushed before continuing operation.
- 12. <u>CHECK FLOATS:</u> Indicates a problem with a float. Check the floats, then push the button (Touch to Reset) on the main display to restart operation.

Operation - Control Panel Description



Fig. 15



Displays

INITIAL FILL —

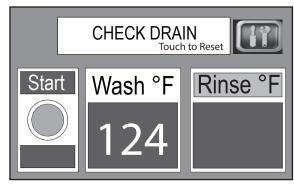
- Push the green Power button ON. The display illuminates, the fill symbol flashes, and 'Filling' appears in the status bar.
- The wash temperature displays. The rinse temperature display is blank; it only displays a temperature during the final rinse.



Fig. 17

CHECK 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.
- 1 Touch the "CHECK DRAIN" button to reset the alarm.





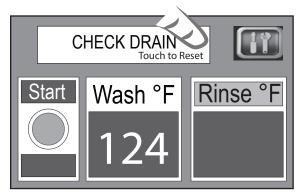


Fig. 19

Continued on next page.

BELOW TEMP — **READY**

- The display indicates 'BELOW TEMP' when the tank is full of water but has not reached the preset temperature. The preset temperature is usually set to 165°F/74°C.
- 2 The display indicates 'READY' when the wash tank reaches the preset temperature.
- **Default Setting:** Machine will wash when 'START' is pressed and a rack inserted into the machine. **Optional Setting:** The machine will not wash until the preset temperature is reached.

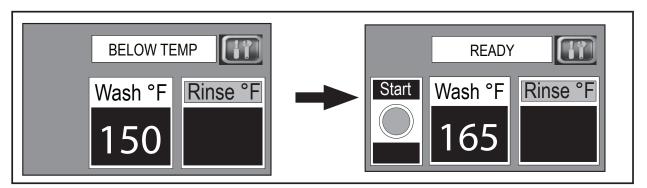


Fig. 20

Displays (continued)

WASH — FINAL RINSE

- Touch the green 'Start' button when 'READY' appears in the status bar. The button will change to a red 'Stop' button.
- Insert a dish rack into the machine, the pumps and conveyor will start automatically. The minimum wash temperature is 160°F/71°C.
- The final rinse temperature is displayed when the dish rack enters the final rinse zone. The final rinse temperature must be between 180-195°F/82-90°C.
- Slide the dish rack out of the machine. The machine will stop automatically and the display will return to 'READY' unless another dish rack inserted.

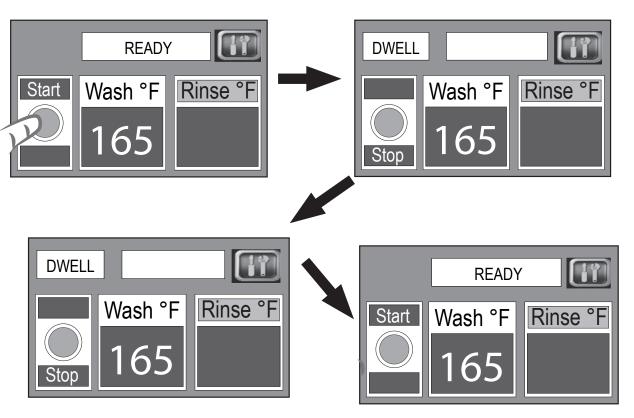


Fig. 21

DWELL — Ten second wash delay for a single dish rack.

- Insert a dish rack of heavily soiled dishes into the machine. 'DWELL' appears on the display.
- Immediately touch the 'DWELL' button when it appears. It will turn red when touched indicating dwell is activated. The conveyor will stop the rack for ten seconds when it is in the wash zone. The rack will then continue to the final rinse zone and exit the machine.
- 3 The DWELL function ends when the dish rack exits the machine.

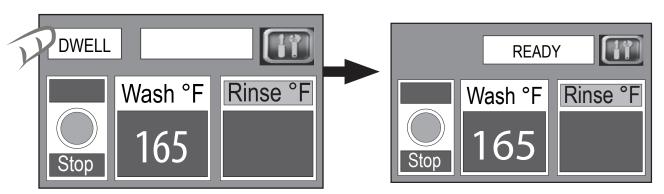


Fig. 22

DWELL — Ten second 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.
- Wait for the first rack to pause for 10 seconds then insert another rack into the machine and immediately touch the 'DWELL' button.
- 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.

Displays - ALARMS

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.

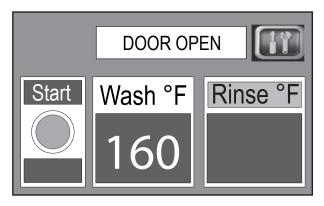


Fig. 23

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:

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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.

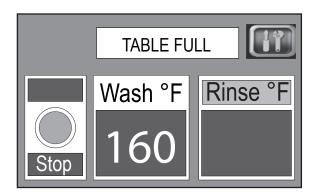


Fig. 24

ALARMS

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:

- A
- 1. Open the doors and remove any dish racks.
- 2. Remove obstructions to the drive.
- 3. Touch the "CONVEYOR JAM" button to reset.

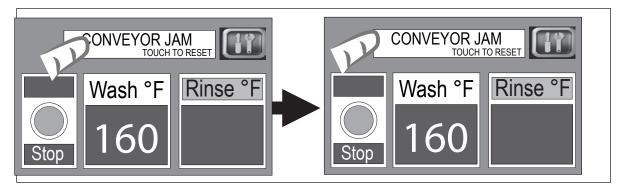


Fig. 25

HEAT PUMP — The machine stops and cannot be restarted by the operator.



To clear the 'HEAT PUMP' alarm:

Push the machine power button OFF and contact an authorized service agent.

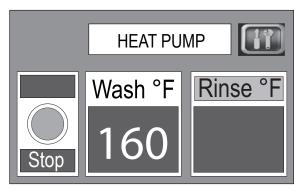


Fig. 26

ALARMS

THERMISTORS — The machine stops and cannot be restarted by the operator.

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To clear the 'HEAT PUMP' alarm:

Push the machine power button OFF and contact an authorized service agent.

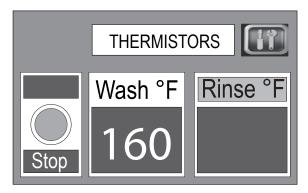


Fig. 27

CHECK FLOATS — The floats may be soiled and not moving freely.

0

To clear the 'CHECK FLOATS' alarm:

Check the floats for debris and make sure they move freely.

Push the "Touch to Reset" on the status bar and resume operation.

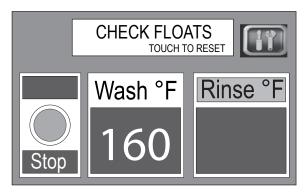


Fig. 28

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 8 hours of continuous operation

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

DO NOT STRIKE SCREENS OR BASKETS AGAINST SOLID OBJECTS

- 5. Remove the spray arm assemblies. Remove the end cap from each spray arm.
- 6. Flush the spray arms and nozzles to remove any debris.
- 7. Replace the end caps. Check the condition of the manifold O-ring.
- 8. Reinstall the spray arms.
- 9. Remove and clean the curtains. Allow them to dry at the end of the day.
- 10. Leave the doors open between operations, allowing the machine to dry.
- 11. Make sure that the final rinse nozzles are clear of mineral deposits.
- 12. Straighten a metal paper clip to clean the nozzles.
- 13. Check the temperature and pressure gauge readings during operation.
- 14. Inspect the machine for signs of water leaks.
- 15. Check the chemical supplies and refill as necessary.

At the End of the Day

- 1. Perform Steps 1-13 listed 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 allow overnight drying.
- 5. Perform the machine "DELIMING" operation.

Cleaning

PUMP SUCTION STRAINER — The pump suction strainer is located in the bottom of the wash tank(s) and is the most neglected cleaning task.



CAUTION:

Failure to clean the pump suction strainer reduces wash results.

TO CLEAN THE PUMP SUCTION STRAINER:

- Perform the cleaning procedures shown on the next pages before cleaning the strainer.
- Refer to Fig. 28 below and note the location of the strainer on the tank wall. Pull the strainer straight up to remove.
- Refer to Fig. 29 below and note the screen on the bottom of the strainer. Thoroughly clean this screen.

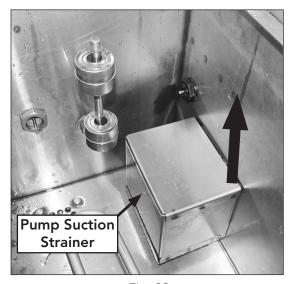


Fig. 29



Fig. 30

Cleaning

WASH ARMS — The upper and lower wash arms should be removed and cleaned after eight hours of continuous operation and at the end of the day.

- 1 Rotate the wash arm end plugs 1/4 turn and pull out to remove.
- 2 Inspect the wash arm O-ring. Damage significantly reduces wash performance.
- 3 Flush the wash arms and inspect the wash arm nozzles to ensure they are clean.
- 4 Inspect the wash manifold O-ring. Damage significantly reduces performance.
- 5 Remove the Prewash sidewash pipe plugs and flush pipes clean (see Fig. 32).

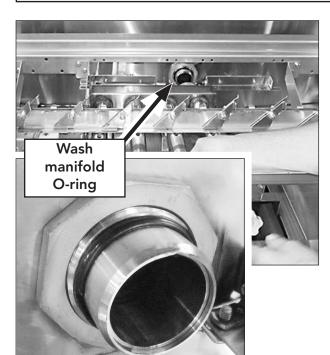


Fig. 31

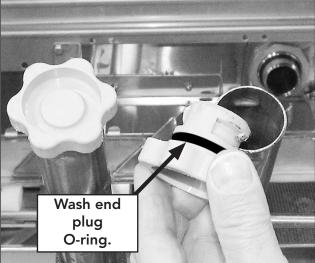


Fig. 32



Fig. 33

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

TO CLEAN THE RINSE ARMS:

- 1 Rotate the rinse arm 1/4 turn and pull to remove from the rinse manifold.
- 2 Inspect the rinse arm O-rings and replace if damaged or worn.
- 3 Use a straightened paper clip to clean the rinse arm nozzles.
- 4 Remove the end plug and flush to remove any debris.



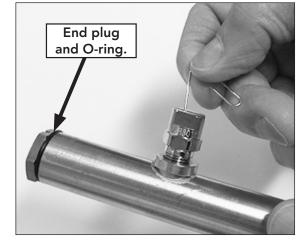


Fig. 34

Fig. 35

EXTERIOR —



CAUTION:

NEVER HOSE THE EXTERIOR OF THE MACHINE WITH WATER.

TO CLEAN THE MACHINE EXTERIOR:

- 1 Use a soft cloth and mild detergent.
- 2 Leave the doors open to aid in overnight drying.

Deliming



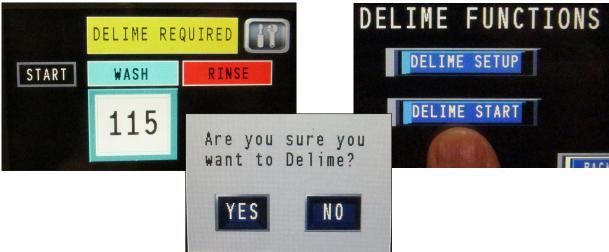
WARNING:

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

NOTE: The delime setup parameters are set at the factory but may be changed by the user if desired.

DELIME REQUIRED PROMPT

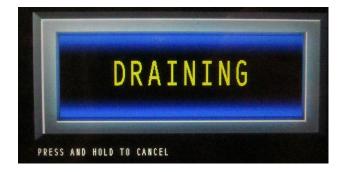
- A yellow "DELIME REQUIRED" appears in the main screen status bar when deliming is due.
- Press the "Delime Required" button.
- Press the "DELIME START" button.



- A confirmation YES-NO box appears. Press YES to continue, NO to stop.
- No will return to the main screen but the "DELIME REQUIRED" message will reappear.
- Press "YES" to begin a deliming operation and follow the prompts:
- Delime Required notifications can only be cleared by completing the delime operation or starting and stopping the delime operation.

STEP 1: "DRAINING". The machine will begin to drain.

Push "Press and Hold To Cancel" for 3 secs. to stop the delime operation and return to Main screen.



STEP 2: The "CLEAN SCREENS" prompt the user to open machine doors and remove and

clean the scrap screens.

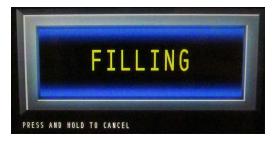


STEP 3: The "CLOSE DOOR TO FILL" prompts the user to close the doors. The machine will begin to fill. "Press and Hold To Cancel" stops the delime operation and returns

to the Main screen.



STEP 4: "FILLING" indicates the machine is filling. "Press and Hold To Cancel" 3 secs. to stop the delime operation and returns to the Main screen.



STEP 5: "ADD CHEMICAL" prompts to add deliming chemical to the wash tank.



For safety, the delime operation can not be stopped after the chemical is added.



Deliming (continued)

STEP 6: "CLOSE DOOR TO START". The machine will begin washing. NOTE: Delime operation can not be stopped.



STEP 7: "PUMPS ON". Pumps will run for 3 minutes.

Note: Factory default setting is 5 minutes. User defined if desired.

WARNING: DO NOT OPEN DOORS!



STEP 8: "DRAINING" indicates chemical is being removed from machine.



STEP 9: "FILLING" indicates chemical removed and machine preparing to rinse.



STEP 10: "DELIME RINSE" for 2 minutes.

Note: Factory default setting is 10 minutes. User defined if desired.



STEP 11: "DRAINING" indicates chemical is being removed from machine.



STEP 12: "FILLING" indicates chemical removed and machine preparing to rinse.



Deliming (continued)

STEP 13: "DELIME RINSE for 1 minute. WARNING: DO NOT OPEN DOOR!



STEP 14: "DRAINING" for the last time.



STEP 15: "DELIME COMPLETE".

"TOUCH TO CONTINUE"

Touch the button to exit the delime operation.



STEP 16: Machine begins a normal fill.



STEP 17: Machine is ready. Make sure wash temperature is 160°F before starting.



Delime Setup

- Delime parameters are set at the factory.
- Factory delime "PUMPS ON" is set to 5 minutes
- Factory "Delime Rinse" is set at 10 minutes.
- Factory "Delime Required" is set for 100 hours.
- The end-user can change these settings.



To set the delime parameters:

STEP 1: Press the "Tools" button on the Main Screen.



STEP 2: Press the "DELIME" button.



STEP 3: Press the "DELIME SETUP" button.



Continued on next page.

Delime Setup (continued)

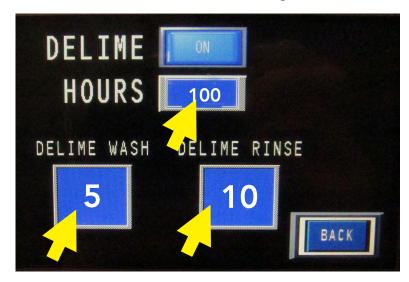
STEP 4: Press 7777 on the Keypad then ENT.



STEP 5: Press "DELIME" on to activate the delime function.

- HOUR = The operating hours before "DELIME REQUIRED" is displayed.
- DELIME WASH = The minutes "PUMPS ON" runs the pumps during deliming.
- DELIME RINSE = The minutes "DELIME RINSE" rinses during deliming.

NOTE: Pushing the number value in a box will bring up the keypad. Enter the desired value and ENT to change the value.



STEP 6: Press "BACK" then "MAIN" to exit the DELIME SETUP.

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. Check that the drain screens are clean.
- 4. Clean any accumulated scale from the heating element.
- 5. Inspect the spray arms for any damage or missing parts.
- 6. Inspect the final rinse arms for missing parts.
- 7. Inspect the pawl bar and drive assembly for damage or missing parts.
- 8. Check that float switches move freely.
- 9. Check the idle pump actuator and the final rinse actuator for freedom of travel.

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 parts and are clean.
- 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. Check the drive clutch and adjust as necessary.
- 10. Check the pump rotation and direction of rotation.
- 11. Check the operation of temperature gauges or displays.
- 12. Perform complete operation check.

Yearly

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

Troubleshooting Chart

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. Drains are closed.
- 5. Screens and pump intake screens are clear.
- 6. Doors are closed and secure.

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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.	Check detergent suppy.
	Wares incorrectly loaded. in dishrack.	Reposition wares or reduce amount of wares.
	Clogged screens.	Clean screens
	Clogged spray arms.	Clean spray arms.
	Thermostat defective.	Contact Service Agent.
	End plugs missing.	Check spray arms.
	Water temperature low.	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.

Appendix A:

HOW TO MANUALLY OPERATE NEW PRO DRAIN VALVE

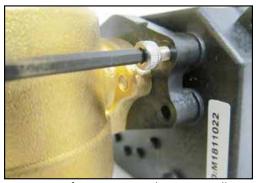
Electric Drain Valve, P/N 117014 Beginning with S/N: RP19062022, Effective 7/1/19



- The new electric drain valve does not have a manual lever as the Dependo-Drain.
- To manually operate the new valve, four 2.5mm socket allen screws must be removed, the valve coil removed, and the valve globe rotated with pliers.
- The valve coil has an indicator line showing valve position.
 Ensure valve is reassembled in the same position.



1



Remove four 2.5mm coil retaining allen screws.

2



Remove the coil from the valve body.

3



Using pliers, turn the valve body key to the vertical position to open valve.

Reassemble in reverse order.

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