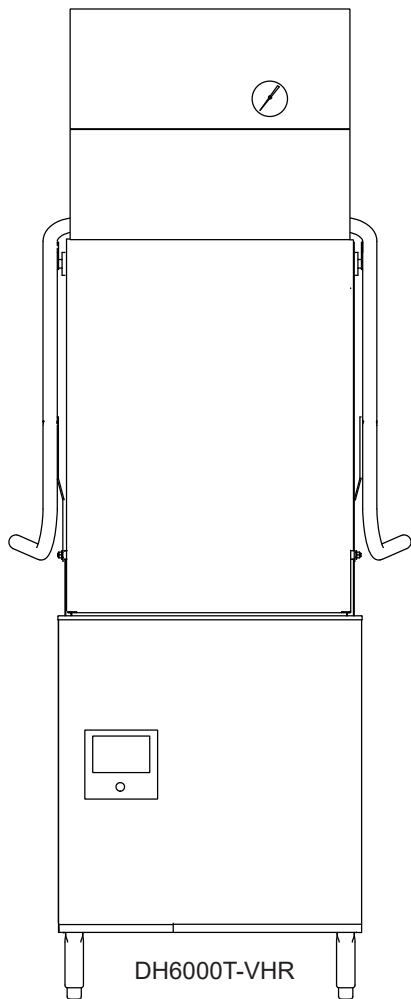


Champion®

Operation, Cleaning, and Maintenance Manual



M2 SERIES

Models:

DH6000-VHR DH6000T-VHR

Hot water sanitizing machine w/fresh water rinse and built-in stainless steel electric booster/Ventless Heat Recovery

DH6000-STANDARD DH6000T-STANDARD

Hot water sanitizing machine w/fresh water rinse and built-in stainless steel electric booster



Issue Date: 3.6.23

Manual P/N 117537 rev. B

For machines beginning with S/N D22042134 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 L0R 1S0
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Printed in the USA



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In the USA:

Toll-free: (800) 858-4477

Tel: (336) 661-1556

Fax: (336) 661-1660

email: service@championindustries.com

ATTENTION

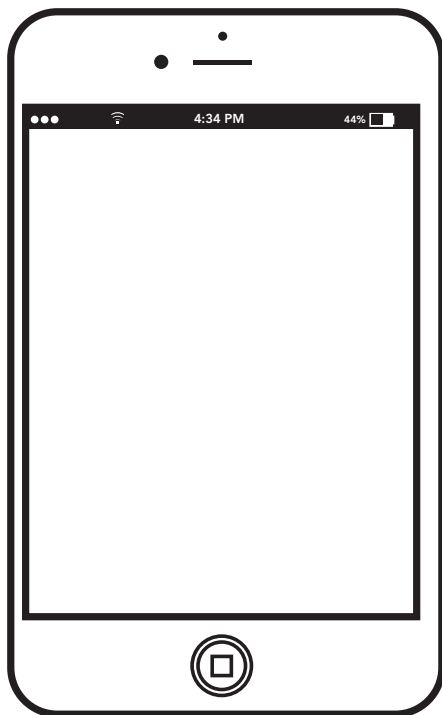
The model no., serial no., voltage, Hz and phase are needed to identify your machine and to answer questions.

The machine data plate
is located on the 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 device and connect to the website www.championindustries.com to register your product.
- or
- Scan the QR code <http://champDW.DHM2> located on the lower front panel of the machine.
- or
- Complete the fax form on the next page and fax to 1 (800) 661-1660.

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

Due to ongoing value analysis at Champion Industries, specifications contained in this manual are subject to change without notice.

Revision History

Revision Date	Revised Pages	Serial Number Effectivity	Revision Description
5.30.22	All	D22042134	Released first edition
3.6.23	All	D230322622	Revised detergent sensor
	22	All	Added Appendix A

LIMITED WARRANTY

Champion Industries, Bi-Line Systems (herein referred to as ("The Companies")), 3765 Champion Blvd., Winston-Salem, North Carolina, 27105) warrants machines and parts, as set out below:

WARRANTY OF MACHINES: The Companies warrant all new machines of its manufacture bearing the name Champion or Bi-Line and installed within the United States to be free from defects in material and workmanship for a period of one (1) year from the date of installation or fifteen (15) months from the date of shipment by The Companies, whichever occurs first. This Limited Warranty does not cover products shipped outside of the United States. The warranty registration card must be returned to The Companies within ten (10) days after installation or registered online at www.championindustries.com/warranty-registration for the United States; or by fax using the form provided at the front of this manual. If the warranty card, fax, or email are not sent to The Companies within fifteen (15) days, then the warranty will expire after fifteen (15) months from the date of shipment. The Companies will not assume any responsibility for additional installation costs in any area with jurisdictional problems with local trades or unions. The Companies reserves the right to repair or replace a defective part or the entire machine, if a defect in workmanship or material is identified within the warranty period. Alternatively, The Companies may elect to accept the return of the machine for a full credit. In the event if The Companies elect to repair then the labor and work performed in connection with the warranty shall be done by The Companies' authorized service agent during regular working hours and at regular labor rates. Overtime charges are the responsibility of the equipment purchaser. Warranty travel is be covered up to fifty (50) miles from the authorized service technician's servicing office. If travel exceeds fifty (50) miles, the end user will be responsible for any additional travel expense. Service calls initiated under warranty and found not to contain any defects in materials or workmanship, will not be covered by The Companies warranty. Defective parts become the property of The Companies. Use of non-OEM replacement parts, not authorized by The Companies, will relieve The Companies of all further liability in connection with its warranty. In no event, will The Companies' warranty obligation exceed the charge for the machine. Machines that come with a factory-paid start-up will be limited to one (1) authorized service call for start-up. Installation problems or delays, of any kind, will not be covered by The Companies' warranty and will be the sole responsibility of the equipment purchaser.

THE WARRANTY DOES NOT COVER:

- a. Chemical tubing, chemical squeeze tubes, O-rings, or curtains.
- b. Vacuum breakers.
- c. Adjustments to structural or mechanical components covered by recommended maintenance procedures.
- d. Replacement of fuses, resetting of overload breakers, or high-limit thermostats.
- e. Adjustments of thermostats or other temperature controlling devices.
- f. Adjustments of clutches.
- g. Adjustments of water pressure(s).
- h. Adjustments of factory chemical pumps and settings.
- i. Opening or closing of utility supply valves or switching of electrical supply current.
- j. Cleaning of valves, strainers, screens, nozzles, or spray pipes.
- k. Regular maintenance and cleaning as outlined in the operator's guide.
- l. Damages resulting from water conditions, accidents, alterations, improper use, abuse, tampering, improper installation, under or over voltage conditions, power surges, inadequate wiring, outdoor use, or failure to follow maintenance and operation procedures.
- m. Pulper cutter blocks, pulse vanes, and auger brush due to wear and tear.
- n. Damages due to improper storage.
- o. Special installations or applications, including remote locations, are limited in coverage by this warranty.
- p. Any installation that requires additional work and/or travel to gain access to a machine for service is the sole responsibility of the equipment purchaser.

THE FOLLOWING DEFECTS ARE NOT COVERED BY THE WARRANTY:

1. Damage to the exterior or interior finish.
2. Damage caused by improper connection to utility service other than that designated on the rating plate.
3. Inadequate or excessive water pressure.
4. Corrosion due to foreign materials, improper water supplies, improper chemicals, or chemicals dispensed in excess of recommended concentrations.
5. Failure of components due to the connection of third-party chemical dispensing equipment installed by others.
6. Leaks and damage due to the use of non-specified water quality.
7. Leaks and damage caused by the installer, including machine table connections.
8. Leaks or damage caused by chemical dispensing equipment connections installed by others.
9. Failure to comply with all local building codes.
10. Damage caused by labor dispute.

WARRANTY OF PARTS: The Companies warrant all new machine parts produced or authorized by The Companies to be free from defects in material and workmanship for a period of ninety (90) days from the date of invoice. If any parts defect in material and workmanship is found to exist within the warranty period, then The Companies will refund the cost of the defective part.

DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITY.

THE COMPANIES' WARRANTY IS ONLY TO THE EXTENT REFLECTED ABOVE. THE COMPANIES MAKE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF PURPOSE. THE COMPANIES 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 MACHINES AND PARTS OF THE COMPANIES. ALL OTHER REMEDIES ARE EXCLUDED, INCLUDING ANY LIABILITY FOR INCIDENTALS OR CONSEQUENTIAL DAMAGES.

Champion Industries or Bi-Line Systems does not authorize any other person, including persons who deal in Champion Industries or Bi-Line Systems machines, to change this warranty or create any other obligation in connection with Champion Industries or Bi-Line Systems machines.

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SAFETY SYMBOLS

- The following symbols are used to alert the reader to important information.



WARNING:

Warning statements indicate a condition or practice extremely important to the health of the operator or the operation of the machine.



CAUTION:

Caution statements indicate a condition or practice that may result in damage to the machine.

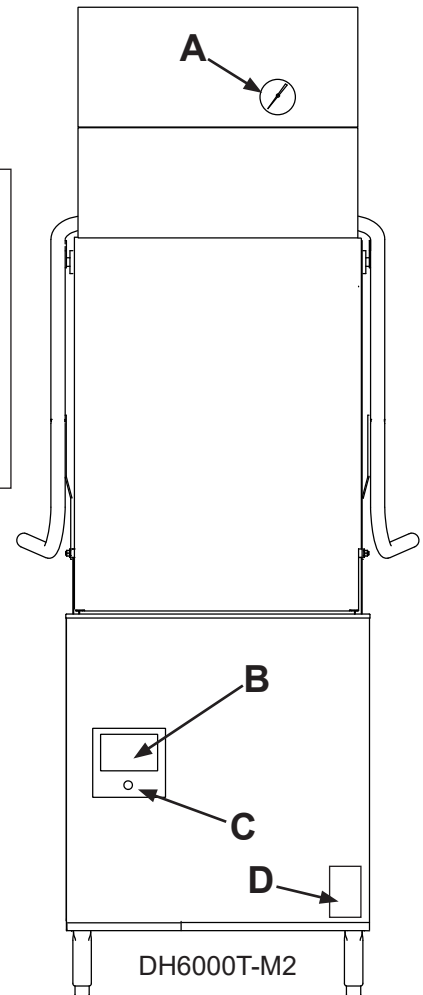


NOTE:

Note statements highlight important information necessary for the operation of the machine.

MACHINE CONTROLS

- A** — Final rinse flowing pressure gauge = 18 PSI
- B** — HMI (Human Machine Interface) Touchscreen Display
- C** — Green machine power ON/OFF button
- D** — Machine data plate



OPERATION SEQUENCE

1. Check chemical containers.
2. Turn main power and water supply on. Push dishwasher green power button on.
3. 'CLOSE DOOR TO FILL' appears. Red door icon displays if door is open. Close door.
4. 'FILLING' is displayed. Blue bars indicate water level. Red wavy lines indicate tank and booster heat are on.
5. Prepare a rack of soiled wares for insertion into the machine.
6. 'TOUCH HERE TO SELECT CYCLE' appears.
7. Touch the yellow bar to select 1, 2, 4, or 6 minute cycle.
8. Check wash tank temperature to ensure it is a minimum of 150°F/65.5°C.
9. Open door and insert rack of soiled wares. Close doors.
10. Blue 'WASHING' bar appears with a block at right indicating the selected time.
11. Machine begins cycle. Machine washes for programmed time.
12. Red 'RINSING' BAR appears. Ensure the Rinse Temp is a between 180-195°F/82.2-90.5°C.
13. Check final rinse temperature gauge, (top of machine), reads the proper flowing pressure listed on the machine data plate located at bottom front corner of front panel.
14. Yellow 'DWELLING' bar appears indicating machine is building temperature for sanitizing.
15. 'TIME REMAINING' indicates the time remaining in the total wash cycle.
16. 'SLEEP' appears if the machine is idle for an extended time. Touch the screen to start machine.
17. TO DRAIN THE MACHINE: Press the green power switch off. The machine will automatically drain for 10 minutes. Pressing the power switch on and immediately off will initiate another 10 minute drain cycle.

Care and Use of Warewashing Chemicals



CAUTION:

Warewashing chemicals are supplied by others. Always follow supplier's instructions for handling and use of chemicals.



DETERGENT REQUIREMENT:

Use a commercial grade NON-CHLORINATED liquid detergent in the dishwasher. Consult the chemical supplier for the rinse-aid requirements.

Recommended Water Hardness

- A water supply with a water hardness of 3 grains/US Gal - 0.83 Imp. Gal - 5/3mg/L or less is highly recommended.

CYCLE TIMES

- The DH6000/DH6000T-VHR cycles consist of a wash, rinse, dwell and recovery time. The recovery portion of the cycle removes steam and recycles heat.

VHR CYCLE OPTION	VHR CYCLE TIMES*
Dishwasher Cycle Option 1	Approx. 1 minute
Wash*	36 seconds
Rinse	8 seconds
Dwell **	16 seconds
Recovery ***	30 seconds
Dishwasher Cycle Option 2	Approx. 2 minutes
Wash*	94 seconds
Rinse	10 seconds
Dwell **	16 seconds
Recovery ***	30 seconds
Pot/Pan Cycle Option 4	Approx. 4 minutes
Wash*	214 seconds
Rinse	10 seconds
Dwell **	16 seconds
Recovery ***	30 seconds
Pot/Pan Cycle Option 6	Approx. 6 minutes
Wash*	334 seconds
Rinse	10 seconds
Dwell **	16 seconds
Recovery ***	30 seconds

- The DH6000/DH6000T cycles consist of a wash, rinse, dwell time.

STANDARD CYCLE OPTION*	STANDARD CYCLE TIMES*
Dishwasher Cycle Option 1	Approx. 1 minute
Wash	36 seconds
Rinse	8 seconds
Dwell **	16 seconds
Dishwasher Cycle Option 2	Approx. 2 minutes
Wash	94 seconds
Rinse	10 seconds
Dwell **	16 seconds
Pot/Pan Cycle Option 4	Approx. 4 minutes
Wash	214 seconds
Rinse	10 seconds
Dwell **	16 seconds
Pot/Pan Cycle Option 6	Approx. 6 minutes
Wash	334 seconds
Rinse	10 seconds
Dwell **	16 seconds

* Cycle times can be changed when machine is washing.

** Cycle pauses.

*** Exhaust fan runs to remove steam and recover heat from wash chamber.

MACHINE ASSEMBLY

To assemble the dishwasher:

1. Install the pump strainer in guide rails, (Fig.1).
2. Install the center spacer plate in the tank slot.
3. Install the two scrap baskets, (Fig. 1).
4. Hold the upper wash and rinse arms in place and secure with the rinse arm pin.
5. Place lower wash arm then rinse arm and secure with the rinse arm pin, (Fig. 2).
Repeat for upper wash and rinse arms.

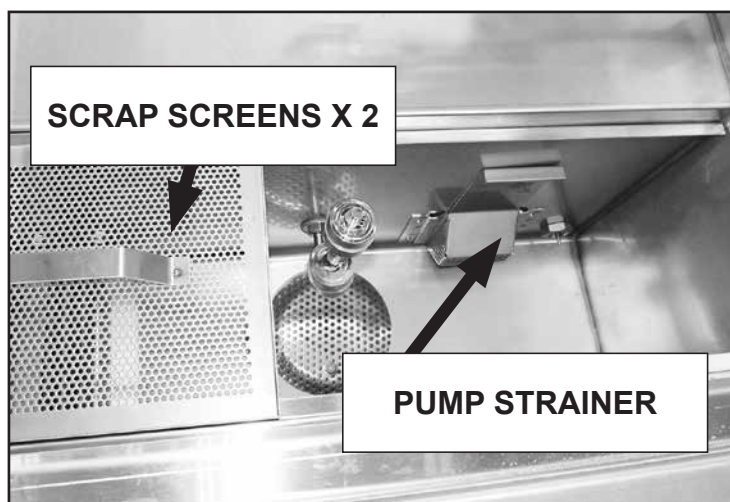


Fig. 1 - Scrap screens and pump strainer

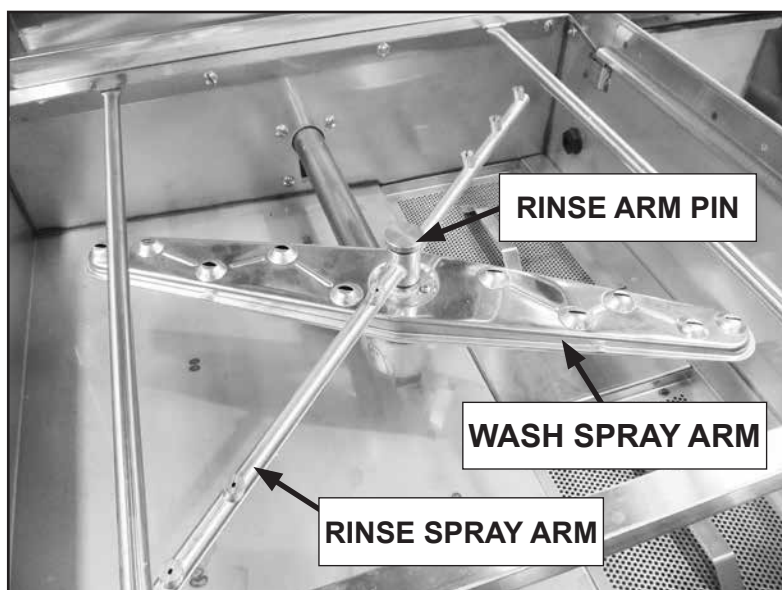


Fig. 2 - Wash and rinse arms

DISH RACK LOADING

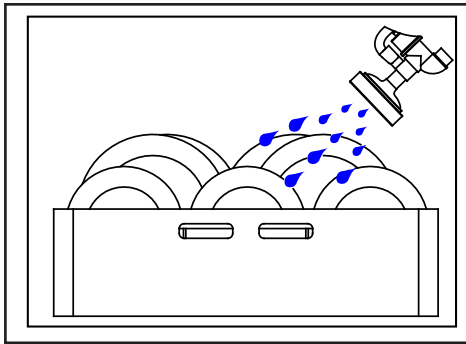


Fig. 3 - Scrap dishes.

- Wares should be scrapped and rinsed to remove large food particles and debris, (Fig. 3).

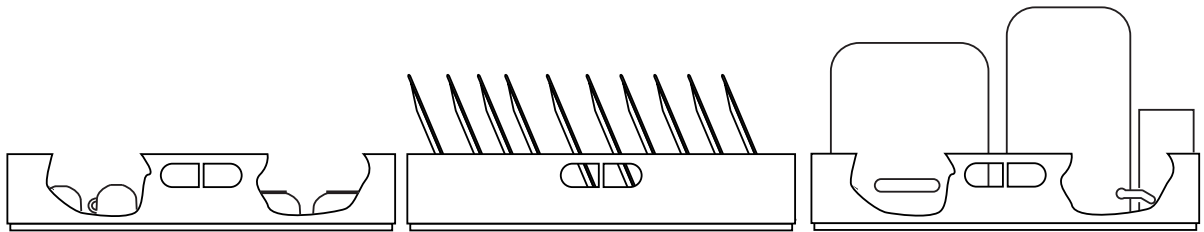


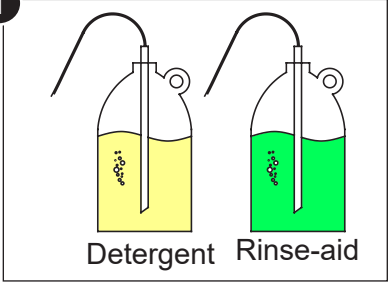
Fig. 4 - Load wares.

- Load plates in peg racks, bowls and cups in flat-bottom racks, and glasses in a glass 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 on the short edge in a bake sheet rack.
- Do not overload dish racks and only wash one dish rack at a time.
- Never wash objects such as mops, floor mats, or other foreign materials.

BASIC OPERATION

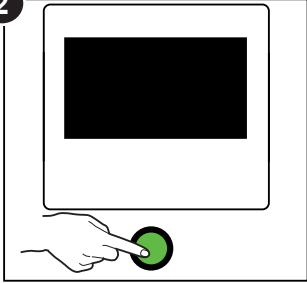
- Follow the steps and instructions below for basic operation.

1

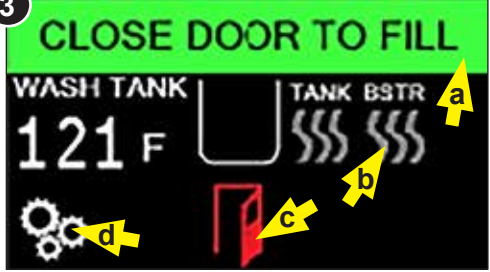


Detergent Rinse-aid

2

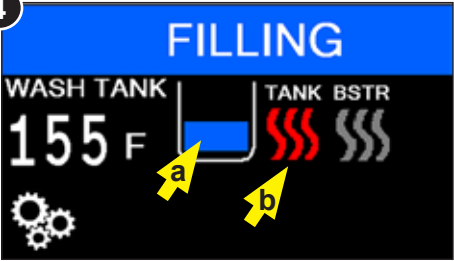


3

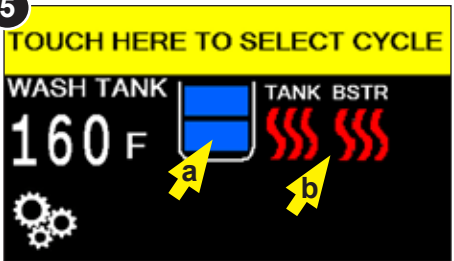


- Check chemical container supply.
- Turn main power and water supply on. Push dishwasher green power button on.
- 'CLOSE DOOR TO FILL' appears. Red door icon displays if door is open. Note the display icons: (a) message bar, (b) tank and booster heat icons; red is on, gray is off, (c) red door icon indicates door is open, (d) supervisor menu button.

4

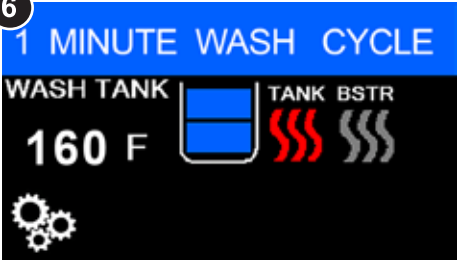


5



- Message bar displays 'FILLING'; machine fills automatically. Note the display icons: (a) flashing blue indicates wash tank is filling, (b) red wavy lines indicate tank heat is on.
- 'TOUCH HERE TO SELECT CYCLE' appears when machine is ready to wash.

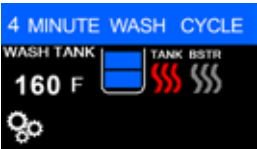
6



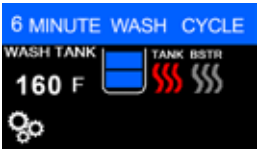
2 MINUTE WASH CYCLE



4 MINUTE WASH CYCLE

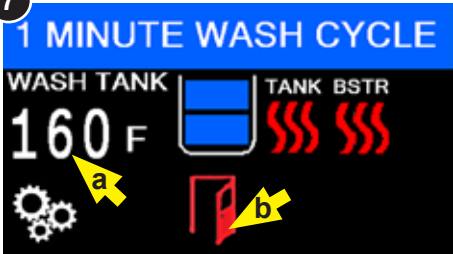


6 MINUTE WASH CYCLE

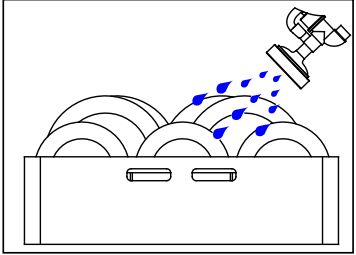


- Press 'Touch Here to Select' once for a 1 minute wash cycle. Each press advances for 2, 4, and 6 minute cycles. Pressing again returns to 'TOUCH HERE TO SELECT CYCLE'.

7

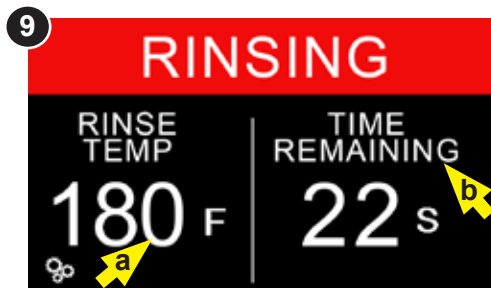
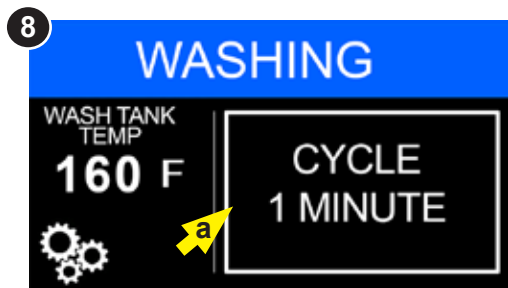


7. Ensure the wash tank temperature is a minimum of 150°F/65.5°C before washing, (see a). Note the red door icon, (see b), indicating the door is open.



Load soiled wares into the dish rack. wash one rack at a time and do not overload.

BASIC OPERATION

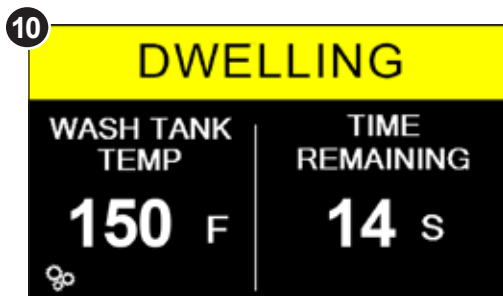


8. Insert the dish rack into machine and close doors. 'WASHING' appears in the message bar and machine begins to wash. A block, (a), with 'CYCLE 1 MINUTE' is displayed. The block may be pressed to advance the time from 2, 4, or 6 minutes during the cycle.



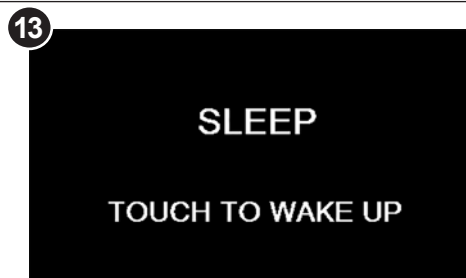
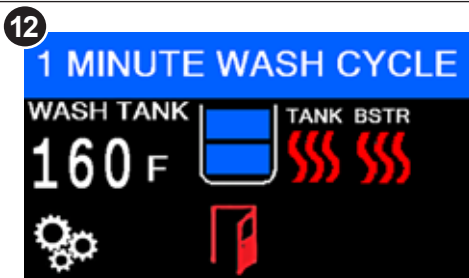
If 'Cycle 1 Minute' is selected during a previously selected 'Cycle 2 minute' selection, the cycle will complete a 2 minute wash cycle instead of restarting a 1 minute cycle.

9. 'RINSING' appears in the message bar at the end of the wash cycle. The rinse temperature, (a), must be between 180-195°F/82.2-90.5°C to achieve proper sanitization. 'TIME REMAINING' indicates the time left in the total cycle. Refer to Cycle Times on page 3 for time increments.



FOR VHR MACHINES ONLY

10. 'DWELLING' appears in the message bar when the rinse cycle time ends. The wash pump and final rinse spray are off during this time. Open doors and remove dish rack.
11. **OPTIONAL VHR MACHINES ONLY:** After the dwell cycle, VHR machines display 'RECOVERY' in the message bar for 30 seconds as a vent fan cools and exhausts air from the wash cabinet. Open doors and remove dish rack when the door latch unlocks.



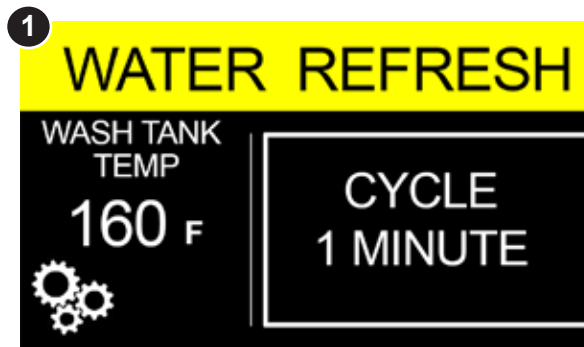
12. The display screen returns to the start point for the next cycle. Note the red door icon indicates the door is open.
13. The display indicates 'SLEEP' if the machine is idle for an extended period of time. The tank and booster heat de-energizes to conserve energy. Touch the screen to wake up.

BASIC OPERATION

Water Refresh

WATER REFRESH: The Water Refresh feature ensures wash tank water remains clean by periodically draining one-third of the water in the wash tank and replacing with fresh water.

1. The dishwasher cycle time is going to extend for several minutes.
2. As it does, the drain valve opens at beginning of rinse for 15 secs. of the dwell time. The water level in the tank will be low by one-third. The upper float will be low.
3. During next cycle, the fill will come on and replenish the water level.
4. The booster temperature will be low and the machine will enter a rinse sentry mode for a short time until booster temperature is satisfied.
5. The Main screen will display 'WATER REFRESH'.
6. The machine then drains, refills and washes normally.



Machine is in 'Water Fresh' mode



Machine is in normal wash mode

CLEANING

- Clean the machine at the end of each meal period or after every 8 hours of continuous operation and at the end of the day.

**CAUTION:**

Dishwasher surfaces may be hot. Use caution when cleaning the machine.

To clean the dishwasher:

1. Push the power button OFF. The electric drain valve will open and the machine will drain. The drain valve will remain open for 10 minutes. Refer to Appendix A for instructions to manually open the drain valve. Pushing the power button on and then off will open the drain valve for another 10 minutes.



Fig. 5 - Drain valve

2. Open the door and flush the interior with fresh water.
3. Remove the upper and lower wash and rinse spray arms and flush with clean water.
4. Check the rinse spray arm nozzles. If necessary, remove the end plugs and clean the nozzles with a piece of wire. Flush the arms clean and replace the end plugs.
5. Remove the scrap screens and pump strainer. Flush and back flush the screens in a sink. Do not strike the screens against hard surfaces.
6. Clean the drain in the bottom of the wash tank.

CLEANING (continued)

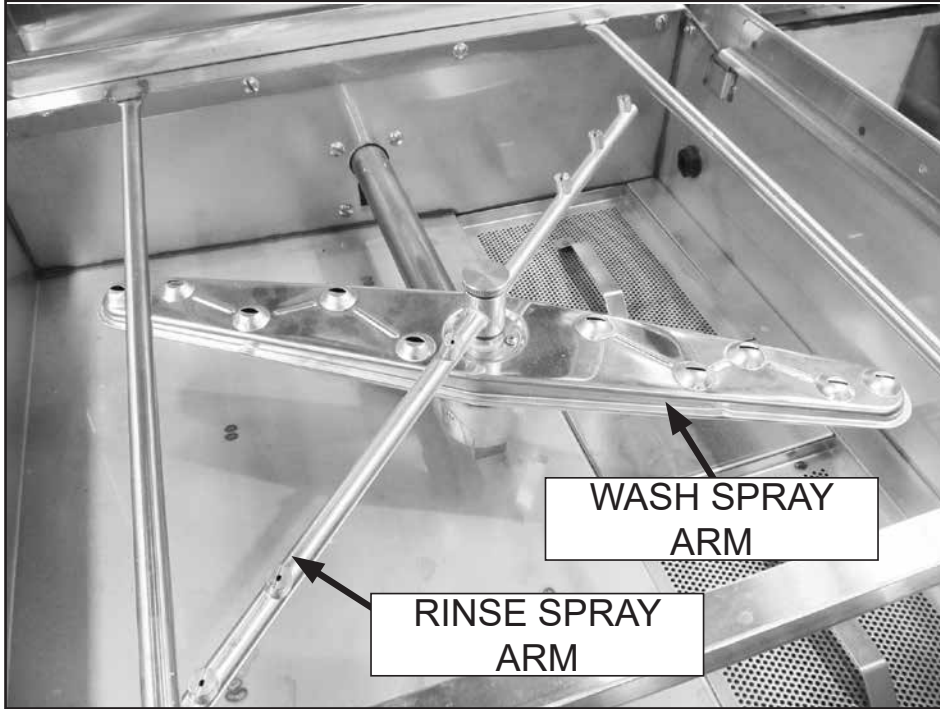


Fig. 6 - Wash and rinse arms

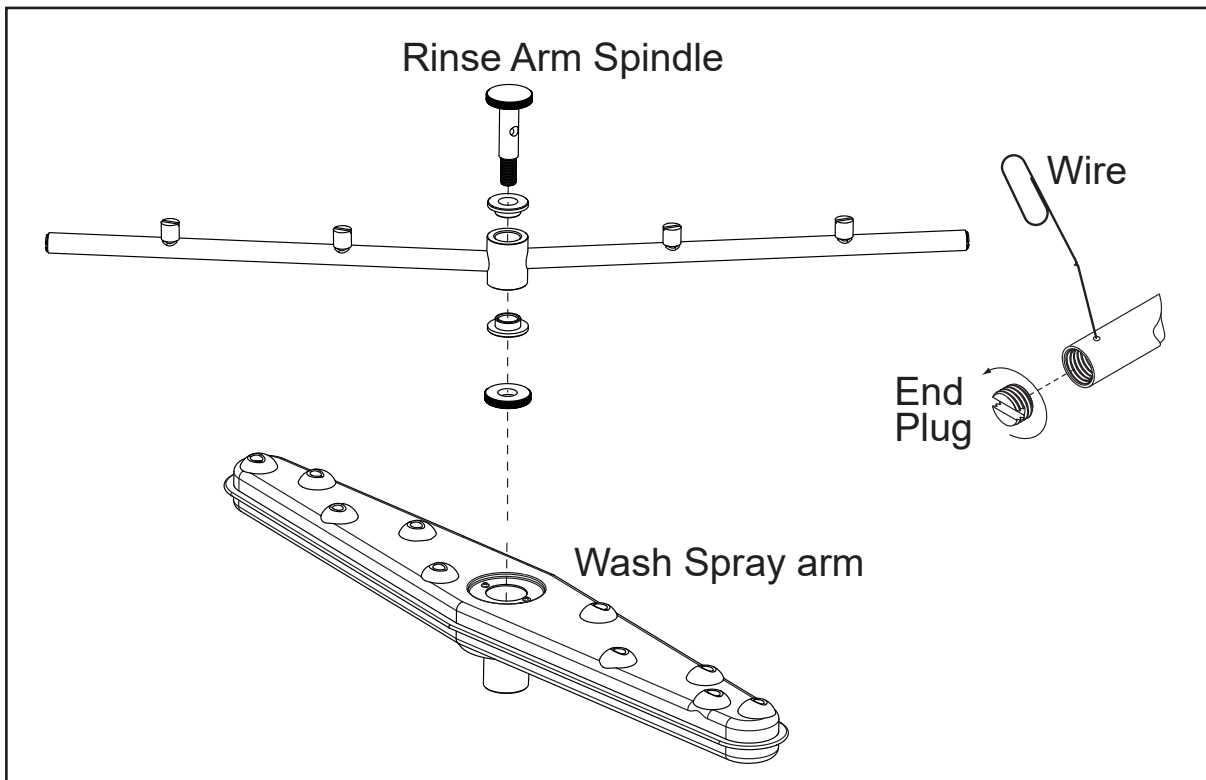


Fig. 8 - Cleaning rinse arm

CLEANING (continued)

1. Clean the drain in the bottom of the wash tank.
2. Clean the float switch.
3. Wipe the interior with a soft cloth.
4. Reinstall the scrap screens and spray arms making sure the spray arms spin freely.
5. Wipe the machine exterior clean with a soft cloth and mild detergent.

DO NOT FLUSH THE EXTERIOR OF THE MACHINE WITH WATER.

6. Leave the doors open to aid overnight drying.

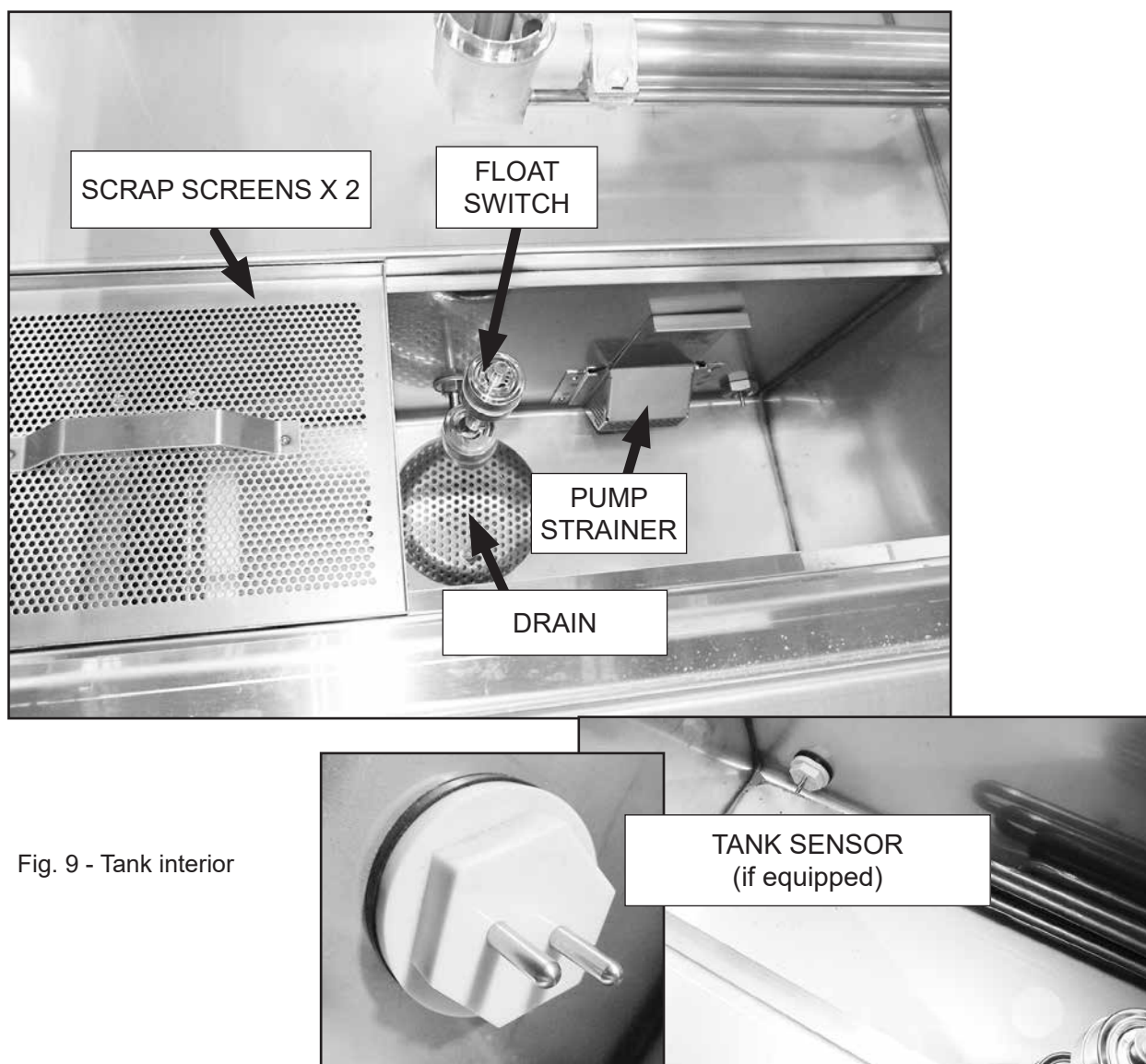


Fig. 9 - Tank interior

DELIME



CAUTION: Follow the chemical supplier's use and handling instructions. Wear protective clothing, including eye protection when handling chemicals.

- Deliming removes mineral deposits from the machine with a deliming chemical.
- Time intervals between delime operations are pre-programmed in the machine and are adjustable by a supervisor or authorized service technician.
- The deliming process is automatic after the chemical is added to the machine.



1. A yellow icon with DELIME in the center appears when it is time to delime the machine. Press the DELIME button.
2. The 'PROCEED WITH DELIME' screen appears. Press 'NO' to return to the main screen. Press 'YES' to start the delime process.



3. If door is open, 'CLOSE DOOR TO START' appears. The red door icon in the upper right corner of the screen alerts the operator that the door is open.

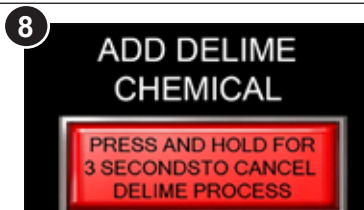
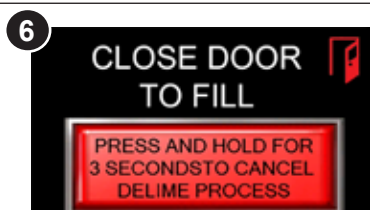


NOTE: Press and hold the red button for three seconds to cancel delime and return to the main screen.

4. If continuing with deliming, 'DRAINING' appears and the machine drains.
5. Open the doors, remove the screens and clean them a remote sink. Reinstall the screens.

(continued on next page)

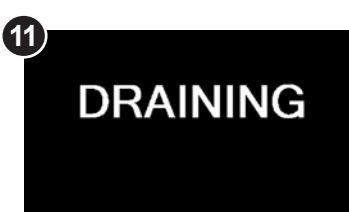
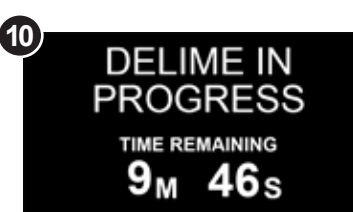
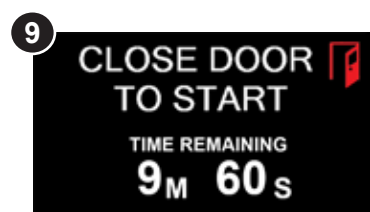
DELIME (continued)



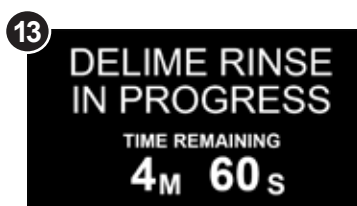
6. 'CLOSE DOOR TO FILL' appears. Holding the red button 3 secs. will cancel delime.
7. 'FILLING' appears on the screen and machine fills automatically.
8. 'ADD DELIME CHEMICAL' appears. Open doors and add delime chemical in accordance with the chemical supplier's instructions.



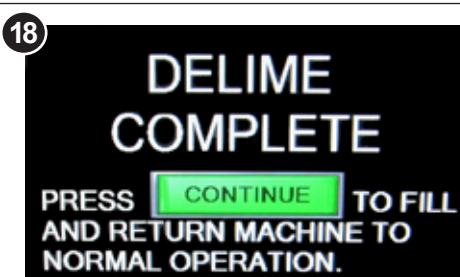
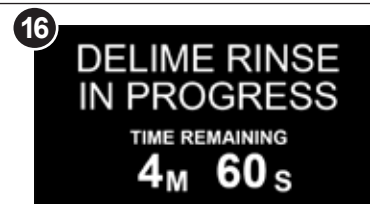
NOTE: The delime process cannot be stopped once the delime chemical is added to the machine. The door lock prevents the doors from opening.



9. 'CLOSE DOOR TO START' appears after the doors are closed. 'TIME REMAINING' shows the countdown timer indicating, in this example, that the delime is 10 minutes.
10. 'DELIME IN PROGRESS' appears indicating the delime process is underway.
11. 'DRAINING' appears indicating delime is complete and machine is draining chemicals.



12. 'FILLING' appears as machine refills with fresh water.
13. 'DELIME RINSE IN PROGRESS' appears as machine rinses chemical residue.
14. 'DRAINING' appears as residues are drained.
15. 'FILLING' appears as machine fills for a second time.



16. Machine rinses a final time.
17. Machine drains a final time.
18. 'DELIME COMPLETE' appears. Press 'CONTINUE' button to resume normal operation.

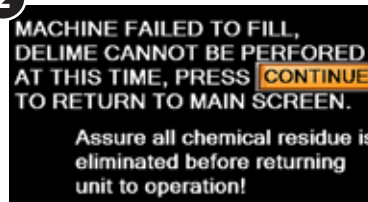
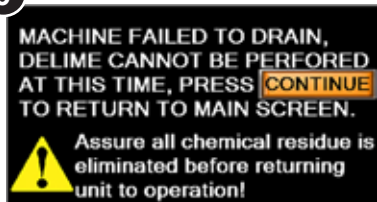
DELIME

Delime Faults



CAUTION: Follow the chemical supplier's use and handling instructions. Wear protective clothing, including eye protection when handling chemicals.

- Rarely does the machine experience a fault during the delime process. Follow the screen instructions below:

1 	2 	3 
- Machine delime process performs several filling cycles. - A fill fault displays the message, ' MACHINE FAILED TO FILL...' The delime operation stops. Important: all delime residue must be flushed from the machine before continuing. Press 'CONTINUE' to return to the main screen. - The machine returns to main screen with the 'DELIME' button displayed. The delime operation does not have to be initiated but the button will continue to appear until delime is completed.		
4 	5 	6 
- Machine delime process performs several drain cycles. - A drain fault displays the message, ' MACHINE FAILED TO DRAIN...' The delime operation stops. Important: all delime residue must be flushed from the machine before continuing. Press 'CONTINUE' to return to the main screen. - The machine returns to main screen with the 'DELIME' button displayed. The delime operation does not have to be initiated but the button will continue to appear until delime is completed.		
7  - Power loss during a delime procedure stops the deliming. Find the cause of the power loss. - Press the green dishwasher power button ON. - Press 'CONTINUE' to resume the delime process from where it stopped.		

DETERGENT SENSORS

Built-in Systems by Champion

- There are two types of built-in detergent systems:
 - Inline sensor, detergent injector, detergent pump; and rinse-aid pump (not shown).
 - Inline sensor, tank sensor, detergent injector, detergent pump; and rinse-aid pump (not shown).
- Components are shown below.
 - Detergent injector is located on the right-side of machine, Fig.10.
 - Inline sensor is located on the left-side of machine behind the lower front panel, Fig 10a.
 - Detergent pump is located on the left-side of machine behind the lower front panel, Fig.10b.
 - Tank sensor, (if equipped), is located inside on the right-side of machine, Fig.10c.



Fig.10 -
Detergent injector (right-side)

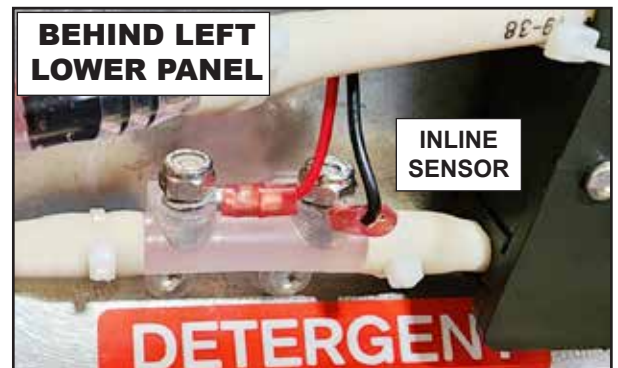


Fig.10a - Inline sensor (left-side)

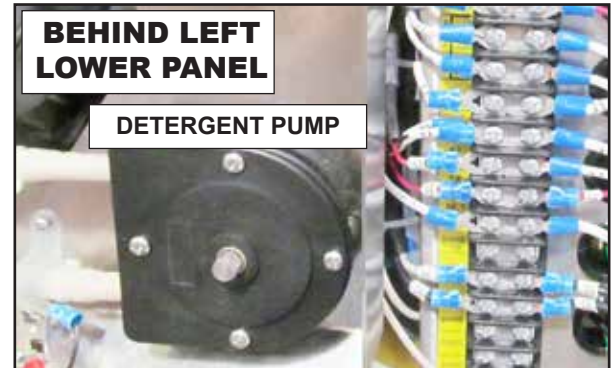


Fig.10b - Inline Detergent pump (left-side)



Fig.10c -
Tank sensor (if equipped)
(right-side)

Continued on next page.

DETERGENT SENSORS (continued)

Tank Sensor Only (if equipped)

- If the detergent system is supplied by others, the machine will include:
 - Detergent injector is located on the right-side of machine, Fig. 11.
 - Tank sensor is located on the right-side of machine, Fig.11a.



Fig.11 -
Detergent injector (right-side)



Fig.11a -
Tank sensor (if equipped)
(right-side)

LOW DETERGENT NOTIFICATION

- A low detergent notification indicates the machine did not receive the proper detergent dose. The problem may be chemical supply containers, kinked tubing, pump or sensor.
1. If the detergent sensor does not detect sufficient levels or the correct chemical, then a flashing yellow bottle symbol appears on the operation screen indicating a LOW DETERGENT condition.
 2. Check the chemical container.
 3. Check the tubing for kinks or leaks.
 4. Press the flashing yellow bottle to reset the alarm.
 5. The flashing yellow bottle will disappear when the sensor detects chemical.

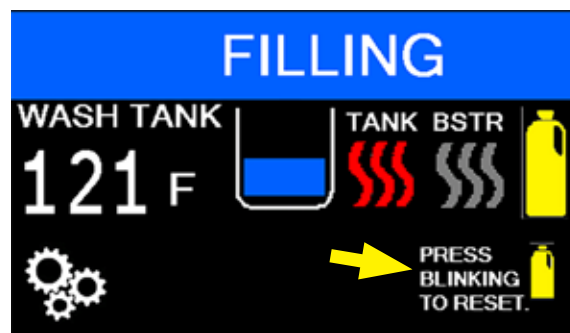


Fig.12- LOW DETERGENT (flashing bottle)



Repeating 'LOW DETERGENT NOTIFICATION':

The flashing yellow bottle will continue to reset and periodically reappear until the detergent sensor is satisfied. The dishwasher will continue to operate.

TEMPERATURE SENSOR FAULT:

1. If a machine temperature sensor fails, then the "TEMPERATURE SENSOR FAULT" message appears and the Wash Tank temperature displays **XXXX** indicating the location of the fault, (Fig.13a).
2. Press the blinking  fault icon and an information screen appears. Press the ACKNOWLEDGE button, (Fig. 13b).
3. The machine will resume operation. The main screen in this example, has a blinking  fault icon indicating the wash tank sensor is in a fault condition, and the tank heater is de-energized,  (Fig.13c).
4. Contact a service agent for repair



Fig. 13 - Normal "WASHING" screen.

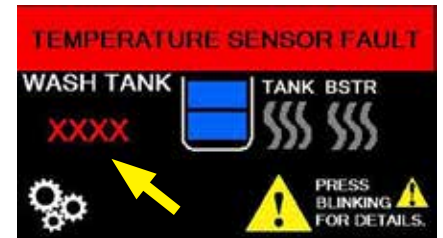


Fig. 13a - Temperature sensor fault screen.

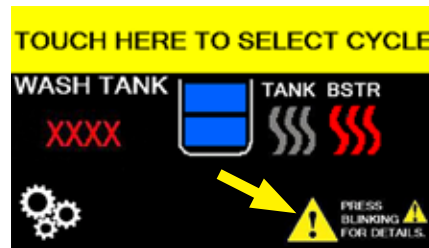


Fig.13c - Main screen with blinking fault icon.

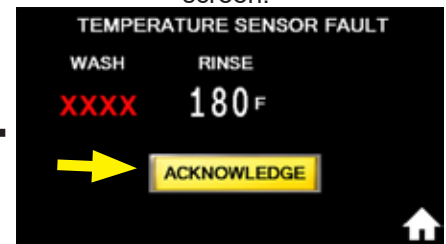


Fig.13b - Press ACKNOWLEDGE.

FILL TIME EXCEEDED FAULT:

1. If the machine does not fill completely in the allotted time then 'FILL TIME EXCEEDED' and a blinking fault icon appear, (Fig.14a).
2. Press the  icon and an instruction screen appears. Follow the instructions and press RESET, (Fig.14b).
3. The machine will resume normal operation or the fault screen will reappear.
4. Contact a service agent for repair.



Fig.14 - Normal FILLING operation screen

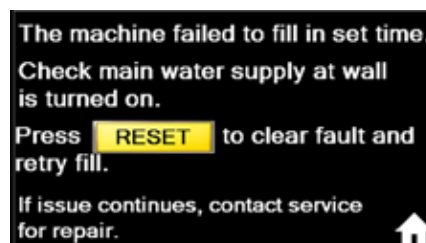


Fig.14b - Follow instructions on screen.

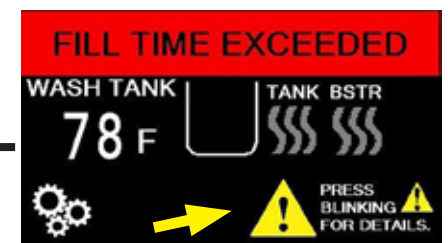


Fig.14a - Fault screen with blinking icon

DRAIN TIME EXCEEDED FAULT:

1. If the machine does not drain completely in the allotted time then 'DRAIN TIME EXCEEDED' and a blinking fault icon appear, (Fig.15).
2. Press the blinking  icon and an instruction screen will appear. Follow the instructions and press 'ACKNOWLEDGE', (Fig.15a).
3. If the drain fault is corrected, then the machine will resume normal operation; however, if the fault is not corrected, the machine will resume normal operation with the blinking icon as a reminder the machine is running in a drain fault condition and requires repair, (Fig.15b).
4. Contact a service agent for repair.

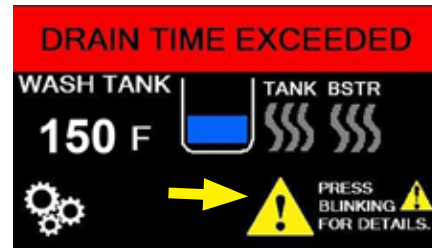


Fig.15 - Error screen with blinking icon



Fig.15a - Follow instructions on screen



Fig.15b - Main screen - normal operation with error icon

FLOAT FAULT:

1. The floats are devices inside the machine that control filling and heating. If a float encounters a problem, then "FLOAT FAULT" and a blinking fault icon appear, (Fig.16).
2. Press the  icon and an instruction screen appears. Follow the instructions and press RESET, (Fig.16a).
3. The machine will resume normal operation or the fault screen will reappear.
4. Contact a service agent for repair.



Fig.16 - Fault screen with blinking icon.

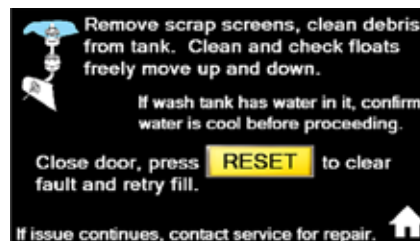


Fig. 16a - Follow instructions on screen.

TROUBLESHOOTING CHART

Condition	Cause	Solution
Dishwasher will not run.	Door open/bad door switch. Power off/overload tripped. Cycle not selected	Close door completely. Check breaker on panel. Select 1,2,4 or 6 min. cycle.
Low or no water.	Main water supply is off. PRV setting incorrect. Line strainer clogged. Valve or float defective.	Open supply valve. Set to 18 PSI flowing. Contact service agent. Contact service agent.
Chemicals not feeding	Chemical supply low. Pick-up tube clogged. Supply tubing damaged. Supply tubing kinked. HMI setting incorrect Squeeze tube worn.	Refill chemical container. Flush tube with warm water. Replace tubing. Straighten tubing. Contact supervisor. Replace squeeze tube.
Poor wash results.	Wares incorrectly loaded in dish rack. Clogged screens. Clogged spray arms. Chemical injectors not feeding. Wash temperature or final rinse temperature low	Reposition wares or reduce amount of wares. Clean screens. Clean spray arms. Check/clean sensors. Check incoming water temperature. Contact Service Agent.
Dishwasher won't heat	Defective temperature sensor Defective float	Contact service agent.
Dishwasher will not drain.	Drain screen. Drain valve defective. Building drain clogged.	Clean screen. Contact Service Agent, open drain valve manually to drain. Contact Building Maintenance.
Doors will not open.	Door latch jammed or defective. Machine is deliming.	Check door latch or call for service. Normal operation.
Excessive steam is escaping the Heat Recovery System.	Recovery coil or fan defective.	Contact service agent.

MAINTENANCE SCHEDULES

Daily Maintenance

- Check the chemical container levels.
- Make sure the water supply is on and the drain is clear of debris.
- Clean the machine.
- Check all of the wash arm and rinse arm spray jets and clean as necessary.
- Check the digital display for damage.
- Make sure the dish racks are in good condition.

Weekly Maintenance

- Inspect the water and the drain lines for leaks.
- Check underneath the dishwasher for leaks.
- Make sure the floor drains are clear of debris and handle the machine drain flow.

Monthly Maintenance

- Check and delime machine if required.
- Replace damaged scrap screens.
- Replace worn spray arm bearings.

Yearly Maintenance

Contact your authorized service agent for a preventive maintenance inspection.

Lubrication

There are no lubrication points or schedules for this dishwasher.

P/N 117014 ELECTRIC DRAIN VALVE MANUAL OPERATION



Type 1 - Without adjusting knob

Valve Position Sight Window



Valve
Closed



Valve
Open

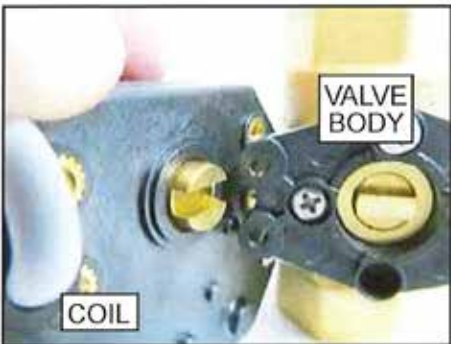


Type 2 - With adjusting knob



1

Remove four 2.5mm allen screws & remove coil from valve body.



2

Note valve position is shown closed.



3

Turn valve body to adjust valve.



OPEN



CLOSED

4 Reassemble in reverse order.

1

Pull adjusting knob out.



2

Rotate knob to open or close the valve.



3

Make sure the sight glass indicates the desired position.

Push the knob in.



