

Champion®

Installation Manual



M2.5 Series

DH6000 VHR

Ventless Heat Recovery

DH6000T VHR

Extended Hood-type Ventless Heat Recovery

DH6000

Standard Hood-type

DH6000T

Standard Extended Hood-type



championindustries.com

Issue Date: 8.19.26

Manual P/N 118066 rev. -

Beginning with S/N D250926360 and above

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Printed in the USA

National Service Department

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ATTENTION

The machine data plate is
located at the lower
left corner of the
machine front panel.

INSTALLATION DISCLAIMER

CAUTION:

Plumbing and electrical connections should be made by qualified personnel who will observe all the applicable plumbing, sanitary, and safety codes and the National Electrical Code or the Canadian Electrical Code.

Note:

Water Hammer Arrestor (meeting ASSE-1010 standard or equivalent) to be supplied (by others) in common water supply line at service connection.

Plumbing Notes:

Because of the variation in house-supplied steam and water pressures, steam and water pressure regulating valves, (PRVs) may be needed. (Water PRV is standard on machines with booster).
The PRVs can either be purchased from Champion or obtained locally.

Champion does not endorse using on-demand (tankless) water heating systems, as well as PEX and other plumbing materials that may limit water flow as these could impair machine performance. For optimal results, we recommend using appropriately sized conventional hot water tanks and standard copper water supply lines that adhere to our specifications. Not following these recommendations may void the manufacturer's warranty. Water hardness of 3 grains/US Gal. (0.83 Imp. Gal.) - 5.3 Mg/L or less.

Note:

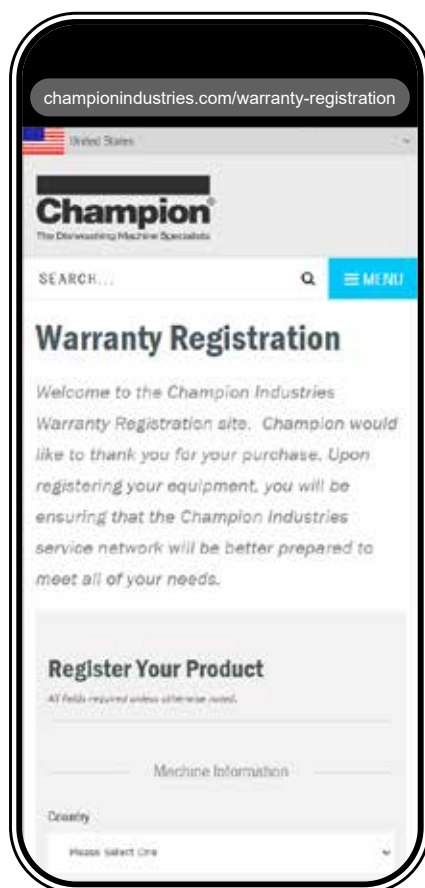
Freezing air must not be allowed to be drawn down into the heat recovery coil when building vent fan is off if direct vent ducting is connected to the machine.

Optional Drain Tempering:

1/2" NPT cold water connection required. 1/2" NPT drain connection from back flow preventer to house drain, (FIELD INSTALLED and PLUMBED).



REGISTER YOUR PRODUCT AND ACTIVATE YOUR WARRANTY



United States



United States

<https://www.championindustries.com/warranty-registration>



Canada

<https://www.championmoyerdiebel.ca/warranty-registration>

- **Use a mobile device to scan the QR code above and connect to:**
- <https://www.championindustries.com/warranty-registration> for the U.S.A.
- <https://www.championmoyerdiebel.ca/warranty-registration> for Canada.

or

- **Enter a URL listed below to connect:**
- <https://www.championindustries.com/warranty-registration> for the U.S.A.
- <https://www.championmoyerdiebel.ca/warranty-registration> for Canada.

or

- FAX the form on page ii or mail the form in a stamped self-addressed envelope to your country address listed below:

United States

WARRANTY REGISTRATION
3765 Champion Boulevard
Winston-Salem, NC 27105

Canada

WARRANTY REGISTRATION
2674 N. Service Road, Jordan Station
Ontario, Canada L0R 1S0

PRODUCT REGISTRATION BY FAX

COMPLETE THIS FORM AND FAX TO:

(905) 562-4618 in Canada
(336) 661-1660 in the USA

PRODUCT REGISTRATION

Model:

Serial Number:

Installation Date : ____/____/____

Company Name: _____

Address: _____ (Street) _____ State/Province _____ Zip/Postal Code

Telephone: () _____ --- _____

Contact: _____

Installation Company: _____

Address: _____

Telephone: _____

Contact: _____

FAILURE TO REGISTER YOUR PRODUCT MAY VOID THE WARRANTY

IMPORTANT IMPORTANT

REVISION HISTORY

Specifications are subject to change based on continual product improvement. Machine owners can request a printed manual by calling 1(800) 858-4477.

Revision Date	Revised Pages	Serial Number Effectivity	Description
8/19/26	All	D250926360	Released First Edition

Limited Warranty

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. If the online warranty is 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 reserve 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 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 to 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, 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:

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



CAUTION

Only qualified personnel familiar with food service equipment should attempt the installation of machine repair parts. Damage or problems associated with improper parts installation will not be covered by the limited warranty.

Installation Codes

The installation of the machine must comply with all local electrical, plumbing, health, and safety codes or in the absence of local codes, installed in accordance with the applicable requirements in the National Electrical Code, NFPA 70, Canadian Electrical Code (CEC), Part 1, CSA C22.1 and the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96.

SAFETY SYMBOLS

The following symbols are used throughout this manual to alert the reader to important information.



WARNING

Warning statements indicate a condition or practice that can result in personal injury or possible death.



CAUTION

Caution statements indicate a condition or practice that can result in damage to the machine or associated equipment.



NOTE

Note statements contain important information necessary for the installation or operation of the machine.

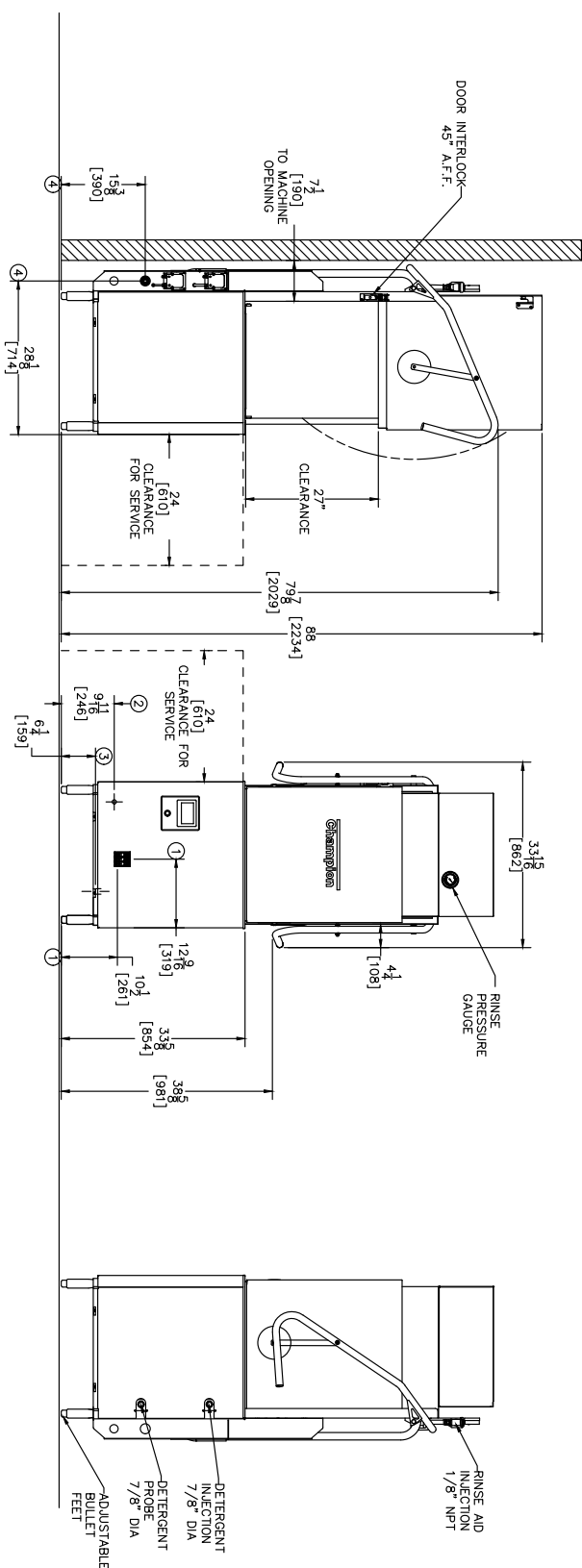
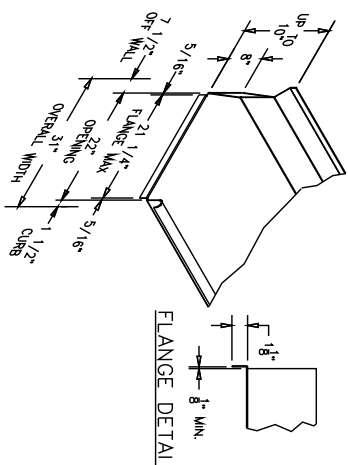


ATTENTION

Attention statements contain information necessary for the installation or operation of the machine.

2

Technical drawing of the front view of the 1000 Series Single-Door Cabinet. The drawing shows a cabinet with a single door and a lock. Dimensions are provided: overall width is 31 inches, overall height is 31 inches, and the door opening is 24 1/2 inches high. The door has a handle and a lock. The text "INSIDE TRACK" is visible on the door. The minimum clearance at the bottom is 18 3/4 inches.



RECEIVING



Inspect the outside of the shipping carton for signs of damage and report any damage immediately to a supervisor. Remove the carton, inspect the dishwasher, and check the inside of the machine for accessories and installation parts.

Register your machine by fax or online as soon as possible.



CAUTION

Be careful when lifting and moving the machine to avoid damage.

PLACEMENT (See Machine Dimensions on previous page.)

1. Compare the installation site utility connections with the dishwasher utility connections to ensure they are the same.
2. Provide 24" [610 mm] on the right and left sides 24" at the front of the machine. The machine entrance should be 33-5/8" [854 mm] above the finished floor.
3. The dishwasher has four adjustable feet for leveling. Level the dishwasher front-to-back and side-to-side.



NOTE

Dishwashers are shipped from the factory for straight-through operation but are field convertible to corner operation.

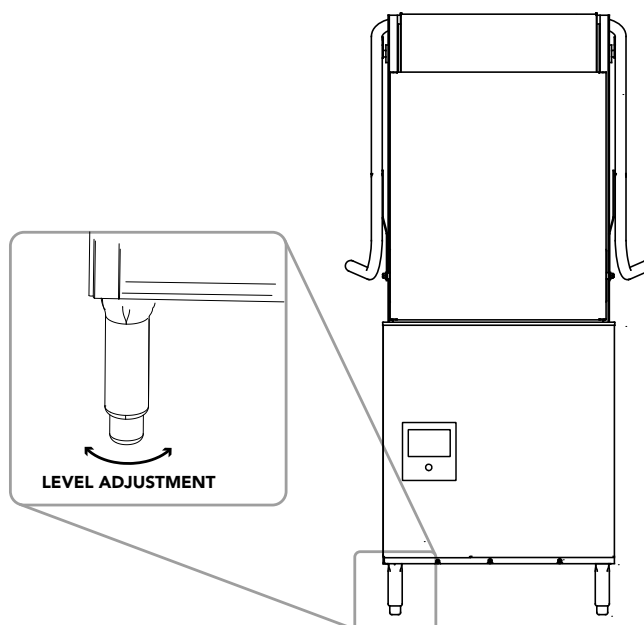


Fig. 1 - Adjustable feet

DISH TABLE CONNECTIONS

Machines are shipped for straight-through operation but can be changed to corner operation.

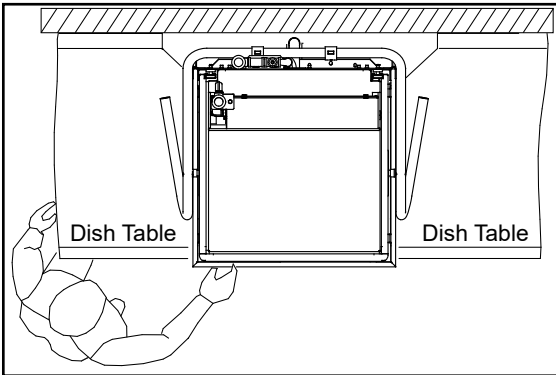


Fig. 2 - Straight-through dish table configuration

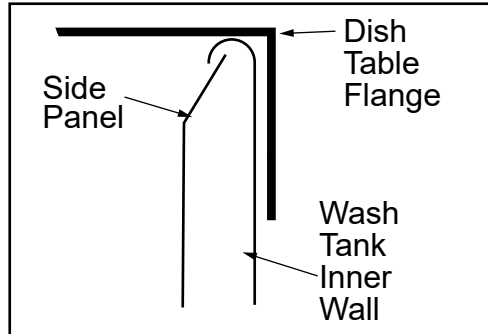


Fig. 3 - Dish table installation



CAUTION

Do not attach the dish tables until the dishwasher is placed in its permanent location.

1. Level the dishwasher and dish tables to the required height.
2. Apply sealant between the table flanges and the wash tank.
3. Fit the dish table flanges over the ends of the dishwasher tank.

CORNER OPERATION TRACK CONVERSION

1. Pull the track assembly straight up out of the machine.
2. Rotate the track 180° and reinstall.
3. Remove the guide attached to the track assembly, save the hardware.
4. Reposition the guide to the right-hand side of the track assembly and secure.

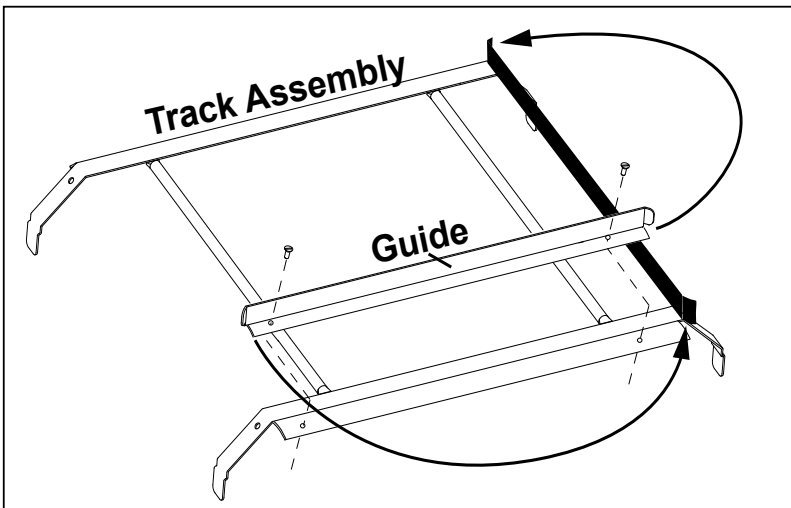


Fig. 4 - Corner track conversion

CORNER OPERATION SPLASH SHIELD

The splash shield prevents water from exiting the machine during the wash and rinse cycles.

- The control panel must be accessible from the front, (Fig. 5).
- Refer to Appendix A, pg. 44 for the corner splash shield installation instructions.

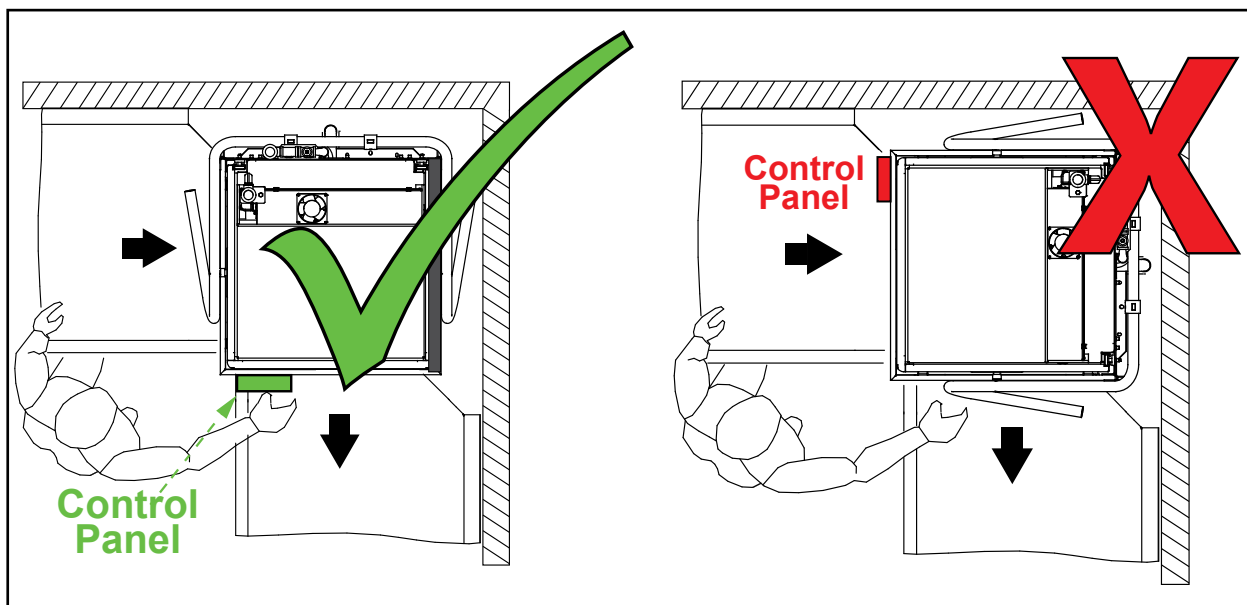


Fig. 5 - Control panel must be accessible from the front.

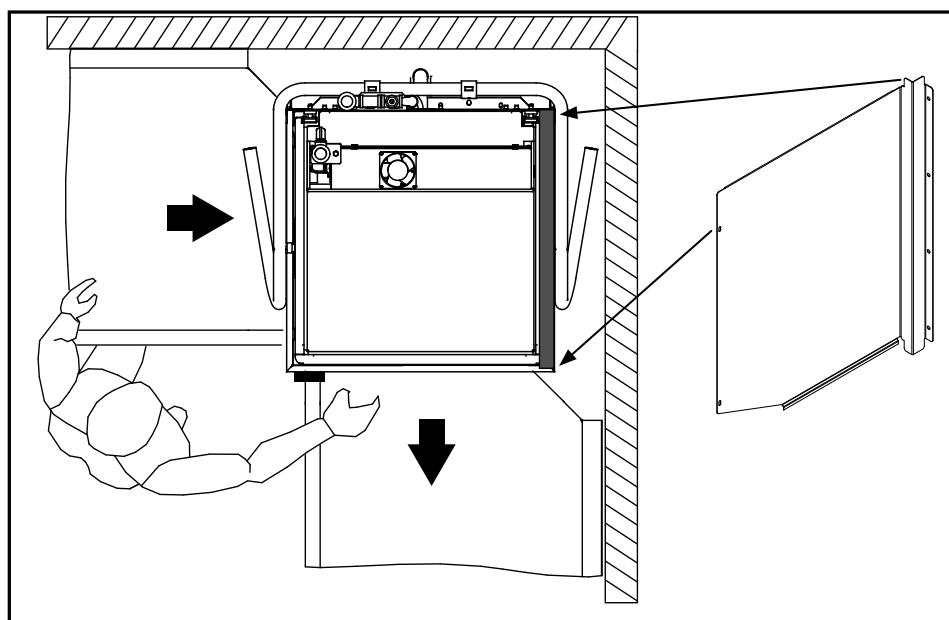


Fig. 6 - Corner splash shield installation.



NOTE

See Appendix A, pg. 44 "Corner Splash Shield Installation Instructions".

WATER CONNECTIONS



CAUTION

To prevent damage to the supply valves, the installing plumber must thoroughly flush debris from the water supply line before connecting it to the dishwasher.
Damage caused by improper installation is not covered by the limited warranty.



DH6000-VHR, DH6000T-VHR INCOMING WATER SUPPLY:

COLD WATER: 3/4" NPT (TEMP. MIN.- MAX.) (50°F/10°C - 75°F/23.9°C)

WATER PRESSURE: MINIMUM 45 PSI/310 kPa DYNAMIC TO MAINTAIN A FLOWING PRESSURE OF 18 PSI DURING THE FINAL RINSE.

WATER HARDNESS: 3 US gpg - 0.83 IMP gpg - 5.3 gr/l or less

RO* WATER TDS:** > 50 ppm/50mg/L. DO NOT USE DI*** WATER.

(*Reverse Osmosis) (**Total Dissolved Solids) (**De-ionized)

Total Chlorides < 30 ppm



DH6000, DH6000T INCOMING WATER SUPPLY:

HOT WATER: 3/4" NPT (TEMP. MIN.- MAX.) (110-140 °F/43-60 °C)

WATER PRESSURE: MINIMUM 45 PSI/310 kPa DYNAMIC TO MAINTAIN A FLOWING PRESSURE OF 18 PSI DURING THE FINAL RINSE.

WATER HARDNESS: 3 US gpg - 0.83 IMP gpg - 5.3 gr/l or less

RO* WATER TDS:** > 50 ppm/50mg/L. DO NOT USE DI*** WATER.

(*Reverse Osmosis) (**Total Dissolved Solids) (**De-ionized)

Total Chlorides < 30 ppm

WATER CONNECTIONS (continued)

Connect the cold water line and adjust the incoming flowing pressure:

1. Connect the incoming water supply line to the line strainer located at the left rear corner of the machine base, (Fig. 7).
2. Loosen the lock nut, (Fig. 7) to adjust the pressure regulating valve, (PRV).
3. Turn the PRV adjustment screw clockwise to increase the flowing pressure. Turn the screw counterclockwise to reduce the flowing pressure, (Fig. 8).
4. Tighten the lock nut after an adjustment.
5. Monitor the pressure gauge to ensure it indicates 18 PSI flowing pressure during the final rinse, (Fig. 9).

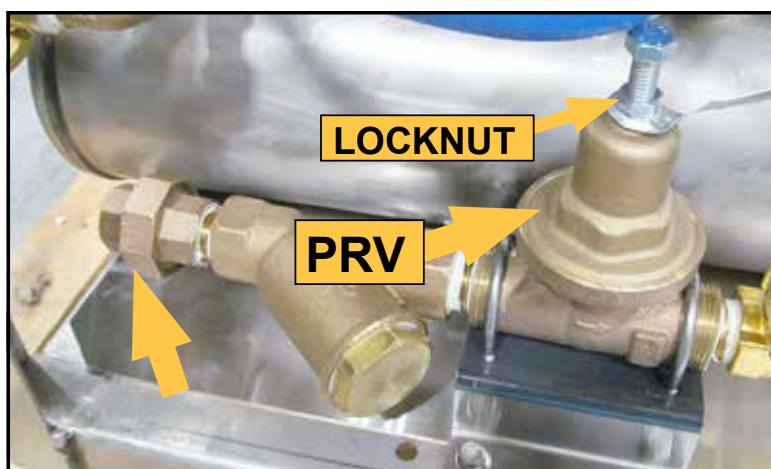


Fig. 7 - 3/4" NPT cold water supply connection

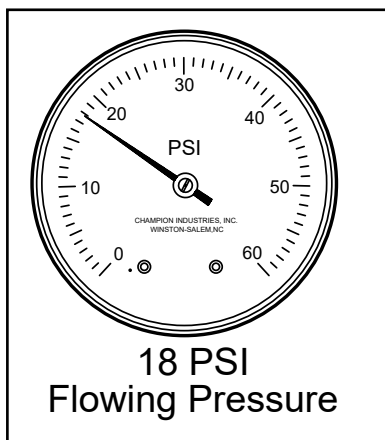


Fig. 9 - Final rinse pressure gauge

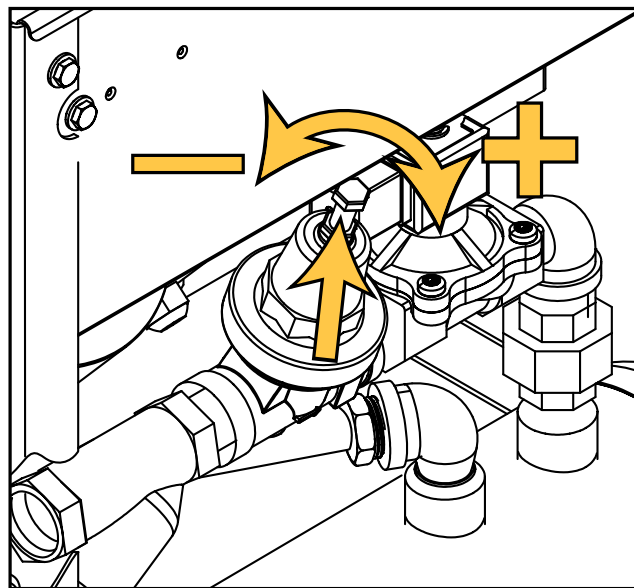


Fig. 8 - PRV pressure adjustment screw

DRAIN CONNECTION

THE 1" NPT GRAVITY DRAIN CONNECTION IS LOCATED NEAR THE CENTER FRONT OF THE MACHINE BASE.



1" NPT DISHWASHER DRAIN CONNECTION

MAXIMUM FLOW RATE: 15.0 US GPM/14.0 IMP.GPM/57LPM
AUTOMATIC ELECTRIC DRAIN VALVE



CAUTION

An automatic electric drain valve controls the drain water flow. Ensure the dishwasher main power is disconnected before connecting the drain line.

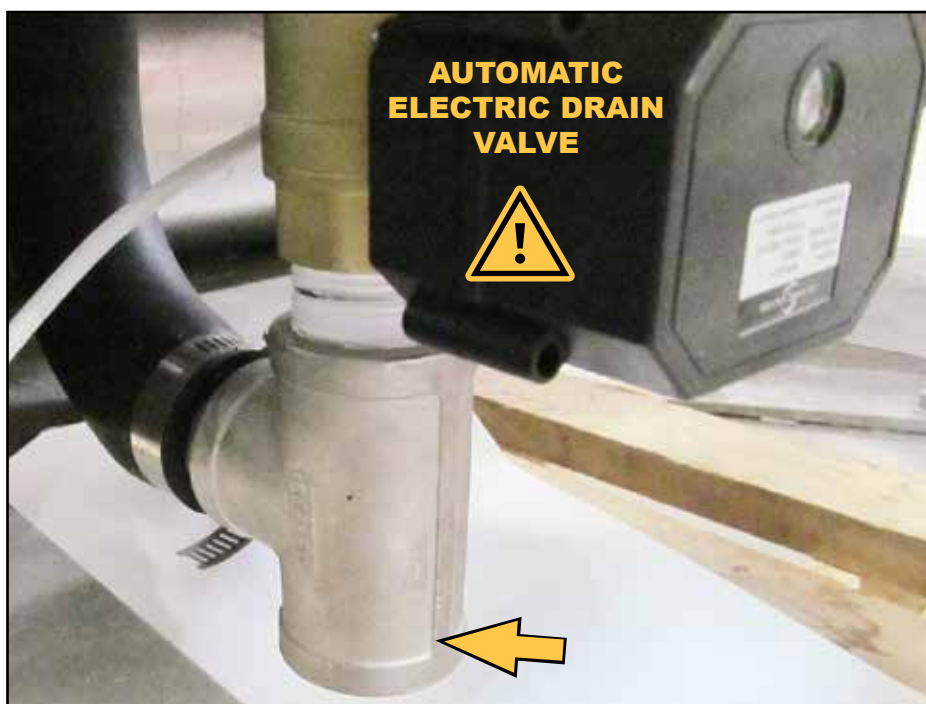


Fig. 10 - 1" NPT gravity drain connection



ATTENTION

The dishwasher drain connection must comply with all local plumbing, health, and safety codes. Damage caused by improper installation is not covered by the limited warranty.

(OPTIONAL) ELECTRIC DRAIN WATER TEMPERING, (DWT)



CAUTION

The cold water supply line must be a dedicated supply connection.
Do not connect the drain water tempering valve to a branch supply line.



INCOMING COLD WATER SUPPLY: 1/2" NPT DEDICATED LINE

(TEMP. MIN.- MAX.) (50°F/10°C - 75°F/23.9°C)

WATER PRESSURE: MINIMUM 20 PSI DYNAMIC

WATER HARDNESS: 3 US gpg - 0.83 IMP gpg - 5.3 gr/l or less

RO* WATER TDS:** > 50 ppm/50mg/L. DO NOT USE DI*** WATER.

(*Reverse Osmosis) (**Total Dissolved Solids) (***)De-ionized)

VISUAL FIELD GUIDE FOR DISHWASHER WATER SUPPLY

DISHWASHER WATER SUPPLY VALVE ASSEMBLY

Cold water only is required. Pipe in similar manner as detailed here.



CAUTION

Machine must have a cold water supply with a minimum dynamic pressure of 46-50 PSI. Do not splice into existing supply lines with filtration feeding other systems.



RECOMMENDATION

A dedicated 3/4" water supply is recommended.



NOTE

All pipe nipples and fittings should be lead-free brass or lead-free chrome plated brass. Ball valves shall be full port, stainless steel with FIP inlet and outlet.



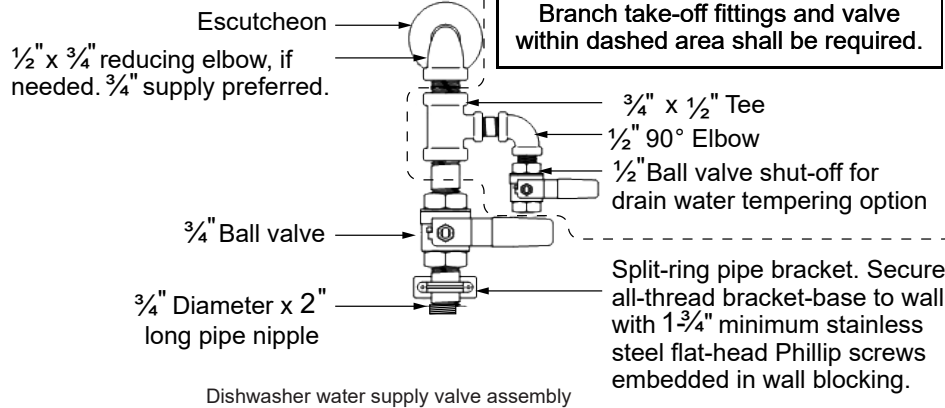
NOTE

Coordinate wall blocking location with the general contractor. General contractor to provide and install wall blocking.



Fig. 11 - Electric Drain Water Tempering Valve, (DWT)

P/N 118075 rev. pre



ELECTRICAL CONNECTIONS



- MACHINES SHIP FROM THE FACTORY AS A 3-PHASE 1-POINT CONNECTION UNLESS SPECIFIED AT THE TIME OF ORDER.
- FIELD CONVERTIBLE FROM 3-PHASE TO 1-PHASE AND/OR 1-POINT TO 2-POINT CONFIGURATIONS.



WARNING

Electrocution or serious injury may result when working on an energized circuit. Disconnect power at the main breaker or service disconnect switch before working on the circuit. Lock-out or tag the breaker to indicate that work is being performed on the circuit.

Power Terminal Block Connections:

1. Refer to Figure 12, and remove the front and right side panels to locate the terminal blocks.
2. Ensure the incoming power matches the Machine Connection Data Plate(s), Figs.13 and 14).
3. A 1-Point connection uses one terminal block, a 2-Point connection uses two terminal blocks.
4. Attach the power cable to the strain relief bracket and route the cable to the terminal block(s).
5. Connect power and reinstall the panels.

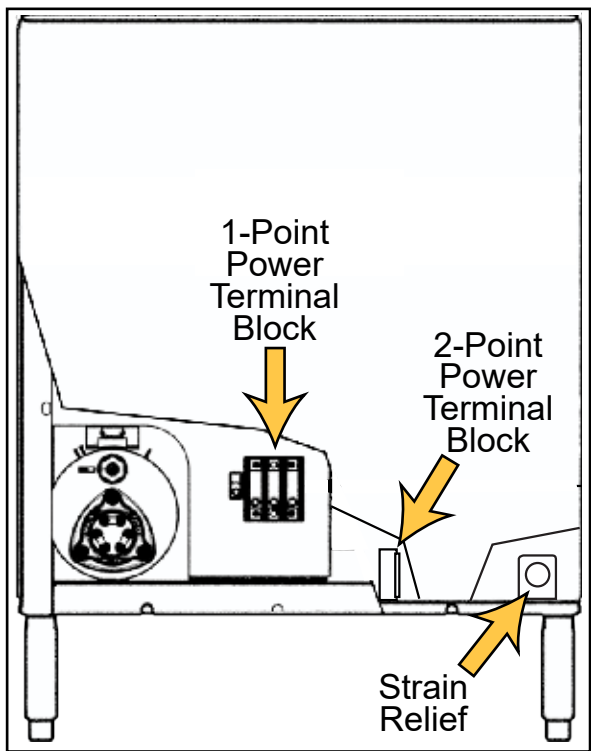


Fig. 12 - Power terminal blocks

Fig. 13 -
1-Point Connection
Data Plate

1-Point Machine Connection Data	
Mod: MDHHD	Series: M2/VL
For supply connection, use copper connectors in accordance with local electrical code. Rated Minimum 90°C (194°F).	
Overcurrent Protection Device: Time Delay or Inverse Time Circuit Breaker	
Minimum Supply Conductor Ampacity	XX
Maximum Supply Overcurrent	XX

Fig. 14 -
2-Point Connection
Machine Data Plate

2-Point Machine Connection Data Plate	
Mod: MDHHD	Series: M2/VL
For supply connection, use copper connectors in accordance with local electrical code. Rated Minimum 90°C (194°F).	
Overcurrent Protection Device: Time Delay or Inverse Time Circuit Breaker	
Minimum Supply Conductor Ampacity	XX/XX AMPS
Maximum Supply Overcurrent	XX/XX AMPS
Volt: XXX-XXX	Ph: X Hz: 60 Amp: XX-XX

Booster Data Plate

2-Point Booster Connection Data Plate	
Mod: MDHHD	Series: M2/VL
For supply connection, use copper connectors in accordance with local electrical code. Rated Minimum 90°C (194°F).	
Overcurrent Protection Device: Time Delay or Inverse Time Circuit Breaker	
Minimum Supply Conductor Ampacity	XX/XX AMPS
Maximum Supply Overcurrent	XX/XX AMPS
Volt: XXX-XXX	Ph: X Hz: 60 Amp: XX-XX

Power Terminal Block Connections: (continued)

- Fig.15 and Fig.16 illustrate the 3-phase and 1-phase power connections.

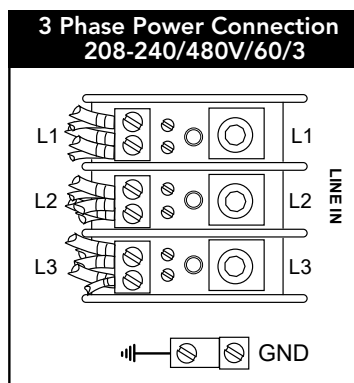


Fig. 15 - Three phase connection

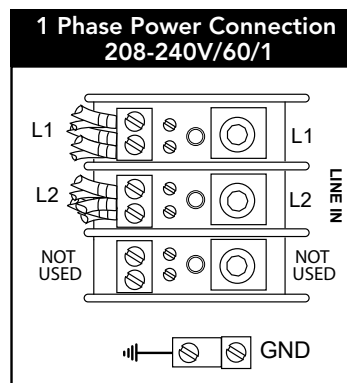


Fig. 16 - Single phase connection

Kit 901242: 1-Point to 2-Point Field Conversion



WARNING

Electrocution or serious injury can result when working on an energized circuit. Disconnect power at the main breaker or service disconnect switch. Lock out or tag the breaker to indicate work is being performed on the circuit.

- Prior to the conversion, contact National Service for the replacement Machine Electrical Connection Data Plates.
- Disconnect main power to the dishwasher and remove the front and right-side panels.
- Locate the booster terminal block mounting bracket on the machine base, (Fig. 17).
- Install the terminal block to the bracket, (Fig. 18).
- Disconnect the booster wires L1, L2, and L3 on the machine power terminal block and route the wires to the booster terminal block.
- Connect the booster line power to the booster terminal block.
- Apply the Machine 2-Point connection data plate over the existing machine data plate.
- Apply the Booster 2-Point connection data plate in front of booster terminal block, (Fig 19).
- Reinstall the panels and apply the new data plate on the lower left corner of the front panel.
- Conversion is complete.



Fig. 17 - Mounting bracket



Fig. 18 - Booster terminal block

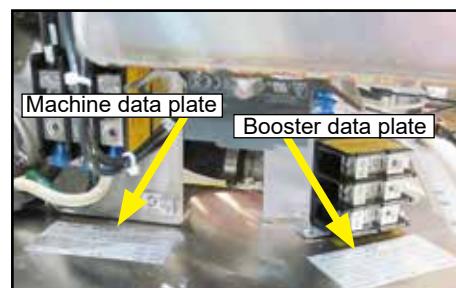


Fig. 19 - Apply 2-Point data plates

CONVERTING A 3 PHASE MACHINE TO 1 PHASE MACHINE

A standard machine ships from the factory for a 3 Phase incoming power supply. The machine is field convertible from 3PH to 1PH without changing the incoming service.

WARNING

Electrocution or serious injury may result when working on an energized circuit. Disconnect power at the main breaker or service disconnect switch before working on the circuit. Lock-out or tag the breaker to indicate that work is being performed on the circuit.

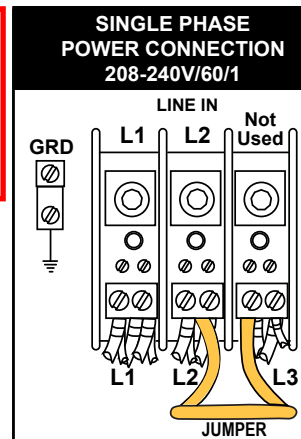


Fig. 20 - Jumper wire

NOTE

The jumper wire and the heater element jumper straps are stowed in the literature package inside the machine.

Follow the steps below to rewire the wash tank heater.

- Step 1:** Turn power off at the main breaker or service disconnect switch.
- Step 2:** Remove the lower front panel. Protect the display cable.
- Step 3:** Connect line power, (L1, L2 and GRD), to the power terminal block, (Fig.20).
- Step 4:** Remove the 3PH L2 jumper strap, (Fig. 21).
- Step 5:** Rewire the wash tank heater for 1PH using two short jumper straps, (Fig. 21).

Refer to Figure 22 below. **STOP** If blue paint is not visible at the 12 o'clock position on the tank heater then immediately contact National Service: In USA - (1) 800 858-4477 / In Canada - (1) 800 263-5798

DO NOT APPLY POWER TO THE MACHINE UNTIL INSTRUCTED.

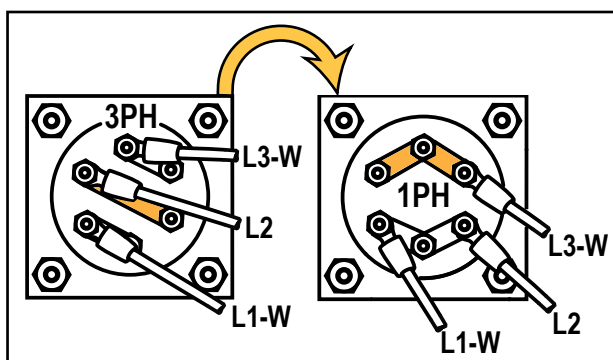


Fig. 21 - Rewire the wash tank heater.

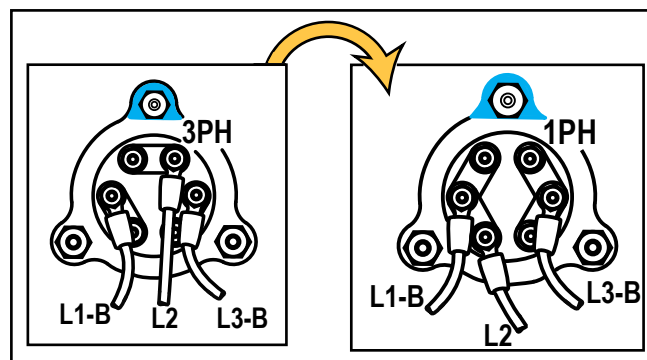


Fig. 22 - Rewire the booster tank heater.

Follow the steps below to convert the booster tank heater:

- Step 1:** Ensure the power is off at the main breaker or service disconnect switch.
- Step 2:** The booster heater is color coded at the top of the heater to ensure it is properly oriented. Immediately contact the factory if the color code is not on the top of the heater, (Fig. 22).
- Step 3:** Reposition the jumper straps and connect the wires as shown in (Fig. 22).
- Step 5:** Ensure (L1, L2 and GRD), are connected to the machine power terminal block, (Fig. 20).

ATTENTION

Cover the old data plates with the data plates stowed in the literature package.

CHAMPION (Optional) DETERGENT/RINSE AID DISPENSING SYSTEM

The Champion chemical dispensing system consists of two pumps, detergent inline sensor, wash tank detergent injection, and rinse manifold rinse aid injection.

DET DETERGENT

- WASH TANK CAPACITY:
10 US GAL/8.3 IMP. GAL/38 L
- DETERGENT INJECTION POINT
- DETERGENT PUMP
- INLINE DETERGENT SENSOR



Fig. 25 - Inline detergent sensor

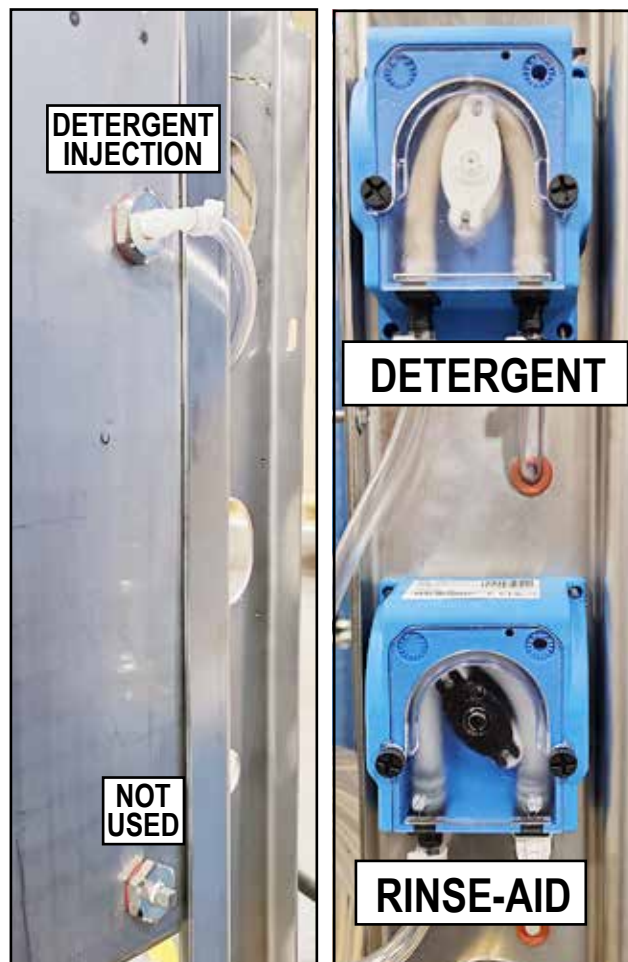


Fig. 24 - Detergent injection

Fig. 23 - Dispensing pumps

R/A RINSE AID

- DISHWASHER MODE RINSE CONSUMPTION/RACK:
0.73 US GAL/0.61 IMP. GAL
/2.76 L
- POT/PAN MODE RINSE CONSUMPTION/RACK:
0.93 US GAL/0.77 IMP. GAL
/3.52 L
- RINSE MANIFOLD INJECTION



Fig. 26 - Rinse manifold

CHAMPION (Optional) DETERGENT/RINSE AID DISPENSING SYSTEM (continued)

CHEMICAL CONTAINER SET UP

1. Detergent and rinse-aid containers should be located as close to the machine as possible and placed on a stand or floor. Do not place containers above the height of the chemical pumps located at the left-side of the machine.
2. The machine is equipped with chemical pick-up tubes. A red label identifies the detergent and a blue label identifies the rinse-aid, (Fig. 27).
3. Make sure each pick-up tube is inserted into its matching chemical container.
4. Check the chemical container levels and replenish as needed.
5. Consult the chemical supplier and always follow the manufacturer's instructions in the proper use and handling of chemicals.

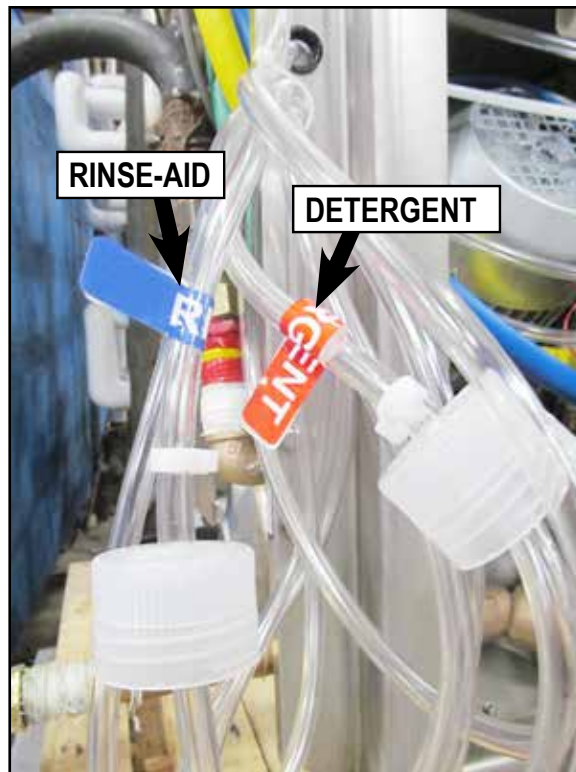


Fig. 27 - Red indicates detergent, blue indicates rinse-aid.



CAUTION

The detergent must be non-chlorinated commercial grade detergent.
Consult the chemical supplier for the proper rinse aid.



ATTENTION

Make sure the pick-up tubes are inserted in their respective chemical containers.
Check the chemical levels and replenish as needed.



NOTE

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

DETERGENT/RINSE AID SYSTEM (BY OTHERS)



CAUTION
Always use a non-chlorinated commercial dishwashing detergent in the machine.

DET

DETERGENT PROVISIONS

- WASH TANK CAPACITY: 10 US GAL/8.3 IMP. GAL/38 L
- TWO 7/8" DIAMETER HOLES ON RIGHT-SIDE OF TANK
- TOP HOLE IS THE DETERGENT INJECTION PORT
- BOTTOM HOLE IS THE DETERGENT SENSOR PORT



Fig. 28 - Ports

DETERGENT SIGNAL

- 120VAC FUSE BLOCK
- 2.0 AMP MAX LOAD SIGNAL CONNECTION.
- LOCATED ON LEFT SIDE OF COMPONENT PANEL
- SIGNAL ENABLED DURING WASH CYCLE.



STOP
Refer to the label shown in Figure 29. If the label is orange, the system is configured for 24VDC and National Service must be contacted before connecting the chemical system.

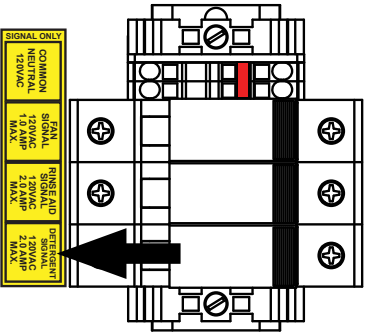


Fig. 29 - Detergent signal connection

R/A

RINSE AID PROVISIONS

- DISHWASHER MODE RINSE CONSUMPTION/RACK: 0.73 US GAL/0.61 IMP. GAL/2.76 L
- POT/PAN MODE RINSE CONSUMPTION/RACK: 0.93 US GAL/0.77 IMP. GAL/3.52 L
- DISHWASHER MODE RINSE CYCLE TIME: 8 SEC.
- POT/PAN MODE RINSE CYCLE TIME: 10 SEC.
- THE INJECTION POINT IS IN THE RINSE MANIFOLD.

RINSE AID SIGNAL

- 120VAC FUSE BLOCK
- 2.0 AMP MAX LOAD
- SIGNAL ENABLED DURING RINSE CYCLE

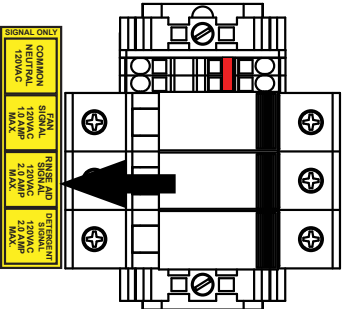


Fig. 31 - Rinse aid signal connection



Fig. 30 - Rinse manifold

VENTILATION



VENT FAN CONTROL PROVISIONS

Vent fan control is supplied by Champion.

- The vent fan signal connection is located on the left-side of the control panel.
 - 120VAC fuse block with fuses
 - 1.0 Amp maximum load
 - Signal is enabled when the green power button is pressed ON to energize the machine.



WARNING:

NEVER CONNECT A VENT FAN MOTOR TO THE SIGNAL CONNECTIONS. CONNECT TO AN EXTERNAL VENT FAN MOTOR CONTROL CONTACTOR (SUPPLIED BY OTHERS).

DAMAGE DUE TO IMPROPER INSTALLATION IS NOT COVERED BY THE LIMITED WARRANTY.

Follow the instructions below to connect an external vent fan motor and contactor:

1. Disconnect all power to the machine.
2. Remove the lower front panel and locate the vent fan signal connections on the left-side of the control panel.
3. Connect one wire of the external vent fan motor contactor to the FAN signal fuse block.
4. Connect the other motor contactor to the COMMON NEUTRAL terminal.
5. Connect the external vent fan motor to the external motor contactor.
6. Reinstall the lower front panel.
7. Restore power to the machine.

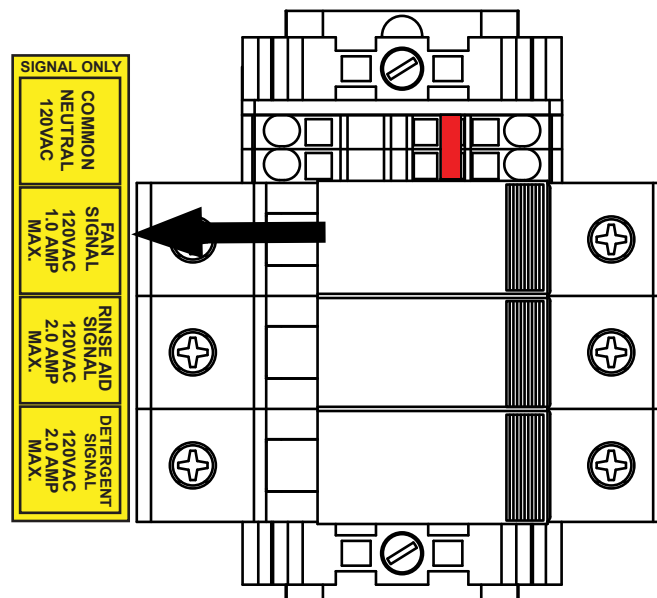


Fig. 32 - Vent fan signal connection

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PLC POWER UP:

1. Check that the chemical containers are full; and the pick-up tubes are installed.
2. Turn the main water supply on.
3. Turn the main power on.
4. Push the green start button, (Fig. 33).
5. The PLC and the HMI will boot, (Fig. 34).
6. The operation (Home) screen with the settings "gears" button will be displayed.

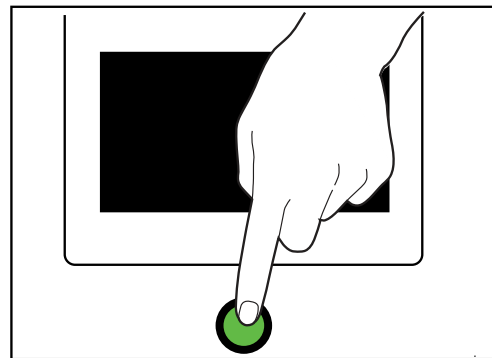


Fig. 33 - Dishwasher power switch

NAVIGATION BUTTONS:



- Press to access settings



- Back-up to previous screen.



- Return to home screen.

1. Moving forward and backward from one screen to another is accomplished by pressing the navigation buttons shown above.
2. The "Home" screen refers to any one of the various HMI screens displayed during machine operation, (Fig. 35).

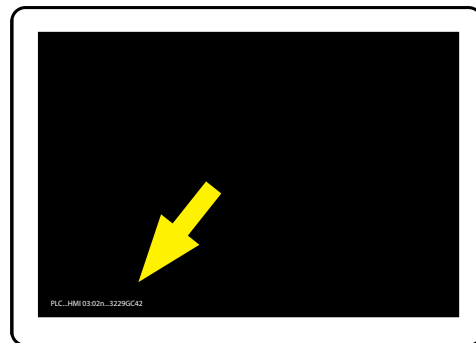


Fig. 34 - PLC boot screen



Fig. 35 - Settings "gears" button

SETTINGS MENU:

I/O - Inputs/Outputs:

- The I/O shows the operating state of components.
- Machine operation can be checked using the I/O screen.



Fig. 36 - Press SETTINGS on the home screen.

To access the I/O screen:

1. Press the SETTINGS button, "gears", on the HOME screen, (Fig. 36).
2. Press the I/O button, (Fig. 37).
3. The I/O screen appears, (Fig. 38).
4. A red light indicates an open (inactive) condition; green indicates closed (active).
5. For example, the green light for DOOR indicates the door is closed. The red light for PUMP indicates the pump is off.



Fig. 37 - I/O button

NOTE

Press the 'Back-up button (◀◀) to return to the Settings menu, (Fig. 38).

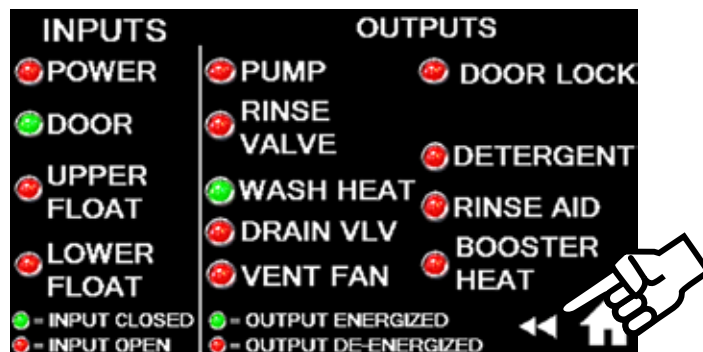


Fig. 38 - I/O SCREEN - Component status

ACTIVE FAULTS:

1. Press the ACTIVE FAULTS button to display operating errors currently present in the machine, (Fig. 39).



Fig. 39 - Active faults button

(Continued on next page.)

SETTINGS MENU: (continued)

ACTIVE FAULTS: (continued)

2. A green light indicates no fault, a red light indicates a fault is active, (Fig. 40).
3. Active faults are displayed on the operator's main screen. See the Operation Manual for details.

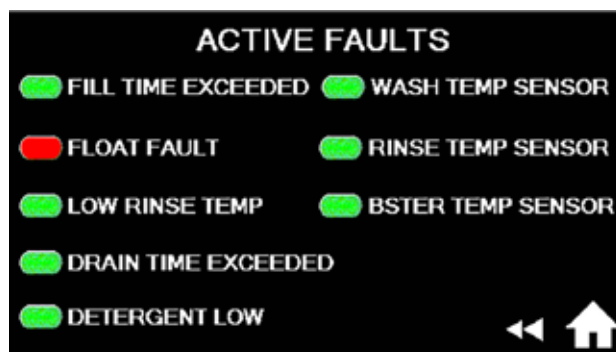


Fig. 40 - ACTIVE FAULTS screen

CYCLE COUNT:

1. Press the CYCLE COUNT button to display the total cycles run since commissioning, (Fig.41, 41a).
2. The cycle count cannot be reset.



Fig. 41 - CYCLE COUNT button



NOTE

Press the 'Back-up button (◀◀).



Fig. 41a - Cycle count display

MANUALS:

1. Press the MANUALS button to display a QR code. Scan the code with a mobile device to access the Operations and Cleaning instructions, (Fig. 42).



Fig. 42 - Manuals

SETTINGS MENU: (continued)



NOTE

Press the 'Back-up button (◀◀).

REVISION:

1. Press the REVISION button, (Fig. 43) to display the program installed version number.
2. The revision version is important for the troubleshooting and repair of the machine.
3. The revision number, (Fig. 43a) automatically changes when a new program is installed.



Fig. 43 - Revision



STOP

The HMI and PLC revision numbers must be identical.

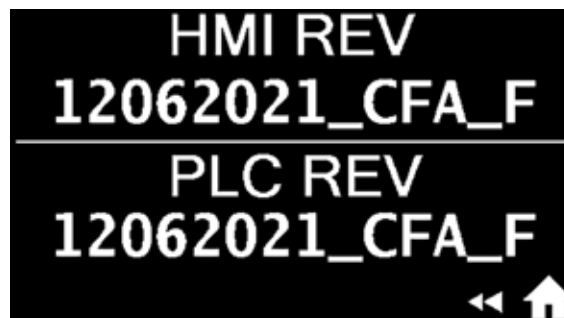


Fig. 43a - Revision Version

START DELIME:

1. Press START DELIME to begin a deliming operation, (Fig. 44).
2. The Start Delime can also be initiated on the Home Screen when the machine is idle.



Fig. 44 - Start Delime

SET UP OPTIONS:

NOTE



The Set Up Options menu allows the user to set the parameters needed for operation. This menu is password protected to prevent accidental or unauthorized changes.

DELIME SETUP:

NOTE



Access to the settings menu is active for 5 minutes. The (---) password must be re-entered after 5 minutes.

1. Press the SETTINGS button on the main screen, (Fig. 45).
2. Press SETUP OPTIONS button, (Fig.46).
3. Press the zero on the ENTER SETUP PASSWORD screen, (Fig. 47).
4. Press (---) and ENT, (Fig. 48).
5. Press DELIME SETUP BUTTON(Fig. 49).



Fig. 45 - Settings button



Fig. 46 - Setup Options menu

NOTE



Contact a supervisor for the actual access code number to enter in the place of (---).

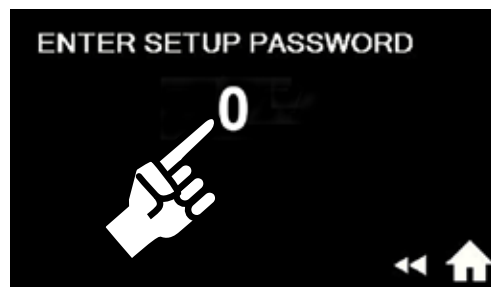


Fig. 47 - Password screen



Fig. 48 - Keypad (Enter --- and ENT).



Fig.49 - Delime Setup button

SET UP OPTIONS: (continued)

DELIME SETUP: (continued)



ATTENTION

The factory default setting for Delime notifications is OFF. Press the DELIME button to ON to enable notifications.

DELIME NOTIFICATION SETUP:

1. DELIME SETUP activates and sets up the delime function.
2. Press the DELIME button. The DELIME SCHEDULE sets the number of hours of machine operation between delime.
3. **HOURS** range = 10–100 hours. The factory default is 100.
4. **WASH DURATION MINUTES** range = 10–50 minutes. The factory default is 30 minutes.
5. **RINSE DURATION MINUTES** range is 10–30 minutes. The factory default is 30 minutes.
6. Pressing "START DELIME", (Fig.50), will begin the process regardless of the notification being on or off as long as the machine is in an idle mode.

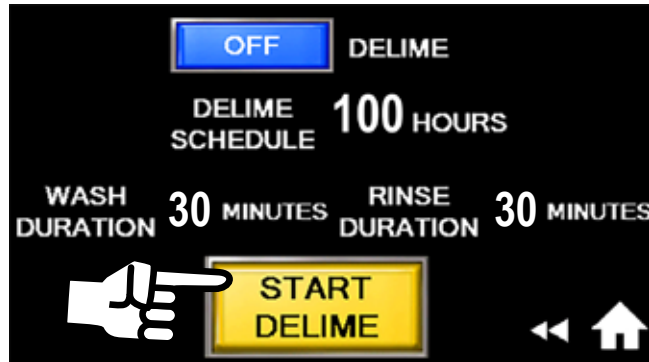


Fig. 50 - Delime Setup menu

To change a value:

1. Press the displayed number.
2. The keypad appears.
3. Press keypad and enter the desired value then press ENT.
4. Repeat for each number as needed.

START DELIME:



Fig. 51 - Settings menu - Start delime button

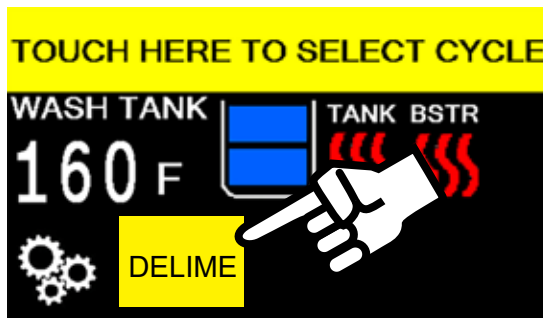


Fig. 52 - Main screen Delime button

1. The Delime operation can be started from three locations:
 - a) Delime Setup screen, (Fig. 50).
 - b) Settings menu, (Fig. 51).
 - c) Home screen, if time to delime has elapsed and machine is idle, (Fig. 52).
2. The delime operation is the same from all locations.



DELIME OPERATION:

- Deliming removes mineral deposits from the machine with a deliming chemical.
- The deliming process is automatic after the chemical is added to the machine.

START DELIME: (continued)

- The Delime process is semi-automatic. The operator must perform actions to prepare the process, then the machine performs the cleaning process automatically.
1. Press the DELIME button, (Fig. 53).
 2. "PROCEED WITH DELIME" screen appears.
 3. Press YES to start delime, (Fig. 54).
 4. Press NO to return to main screen.
 - If the door is open, "CLOSE DOOR TO START" appears, (Fig. 55). The red door icon in the upper right corner of the screen alerts the operator that the door is open.
 - If the door is closed when YES is pressed the screen immediately displays "DRAINING" and the machine drains, (Fig. 56).
 5. Open the doors and clean the pump suction and scrap screens when the machine has drained, (Fig. 57).
 6. "CLOSE DOOR TO FILL" appears. Note the red door icon denoting an open door (Fig. 58). Close the doors. "FILLING" will appear and the machine fills, (Fig. 59).



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



Fig. 53 - Press DELIME button to start

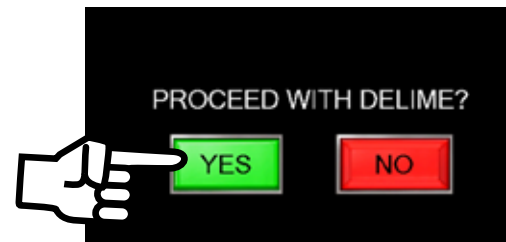


Fig. 54 - Proceed screen



Fig. 55 - Close door to start



Fig. 56 - Machine drains



Fig. 58 - Close door to fill



Fig. 57 - Clean scrap screens

DELIME OPERATION: (continued)



CAUTION:

The deliming process can not be stopped once the deliming chemical is added to the machine. This ensures all chemical is flushed out of the machine.

7. "ADD DELIME CHEMICAL" appears, (Fig. 60). Open the doors and add the deliming chemical in accordance with the manufacturer's instructions.

8. "CLOSE DOOR TO START" appears, (Fig. 61). The red door icon indicates the doors are open.

9. "DELIME RINSE IN PROGRESS" appears, (Fig. 62)

"TIME REMAINING" indicates the length of time the deliming period will run and is set in the Delime Setup menu.

The time in this example is 10 minutes which is displayed in minutes and seconds, (Fig. 62).

10. Deliming time expires at end of the preset time.
11. "DRAINING" appears. Pump stops, drain opens and deliming solution is drained, (Fig. 63).
12. "FILLING" appears. The machine fills with fresh water, (Fig. 64).

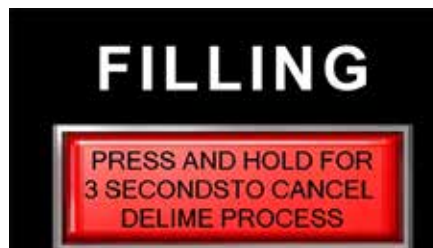


Fig. 59 - Machine fills

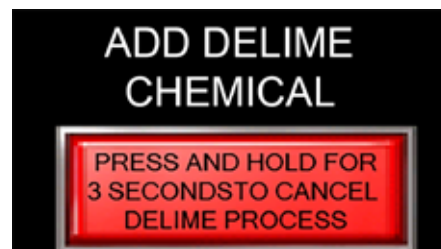


Fig. 60 - Add delime chemical

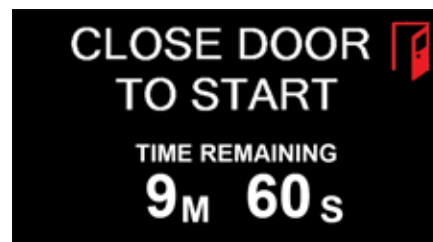


Fig. 61 - Close door to start delime operation

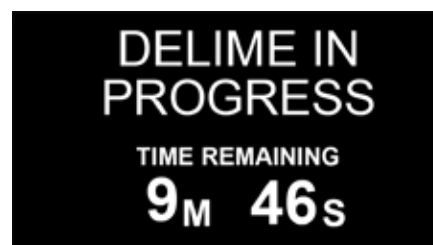


Fig. 62 - Pumps run



Fig. 64 - Fills with fresh water

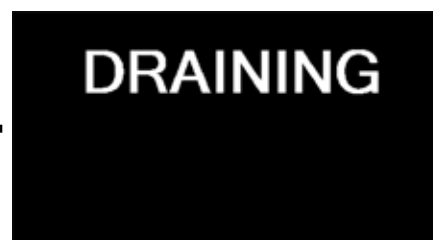


Fig. 63 - Delimer drains



DELIME OPERATION: (continued)

13. "DELIME RINSE IN PROGRESS" appears for the second time to ensure delimer is removed, (Fig. 65).
 14. "DRAINING" appears. Pump stops, drain opens and deliming residue drains, (Fig. 66).
 15. "FILLING" appears. Machine fills, (Fig. 66).
 16. "DELIME RINSE IN PROGRESS" appears for the final time to ensure delimer is removed, (Fig. 67)
- "TIME REMAINING" counts down from the preset 5 minutes, (Fig. 67).
17. "DRAINING" appears, (Fig. 68). The machine drains for the final time.
 18. "DELIME COMPLETE" appears. Press the "CONTINUE" button, (Fig. 69).
 19. The Home screen appears.
 20. The machine fills and returns to normal operation, (Fig. 70).

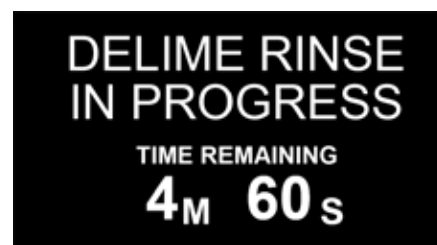


Fig. 65 - Rinses to remove residue



Fig. 66 - Machine drains and refills again

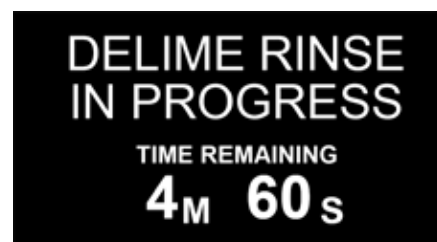


Fig. 67 - Second rinse



Fig. 68 - Machine drains for the final time.

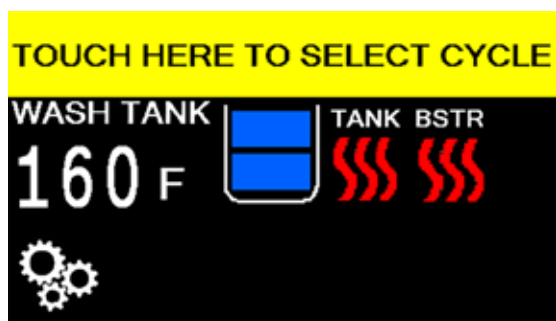


Fig. 70 - Home screen - normal operation

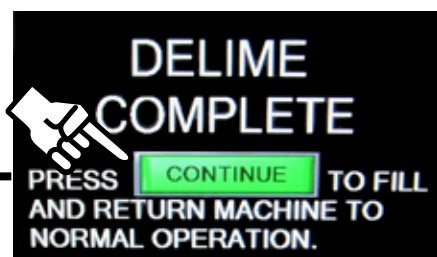


Fig. 69 -
Deline operation is complete.
Return to main screen.

SET UP OPTIONS: (continued)

CHEMICAL SETUP:

1. Press the Chemical Setup button.

DETERGENT SENSORS:

1. Press 'INLINE' button to ON, (Fig. 72),
If the machine is equipped with an inline detergent sensor, (Fig. 73).



Fig. 71 - Press the Chemical Setup button.

DETERGENT and RINSE AID PRIME BUTTONS:

1. Prime buttons manually run the chemical pumps.
2. To prime: insert pick-up hose(s) in the chemical containers.
3. Press and hold a PRIME button to run the pump.
4. Release the button to stop.

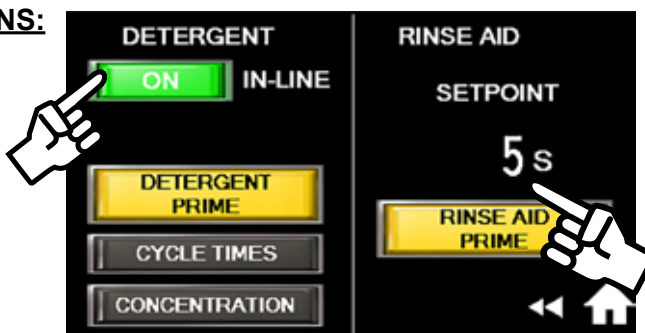


Fig.72 - Inline sensor selected.

SET RINSE AID SET POINT (factory default = 5 secs.):

1. Rinse aid pump runs for a set time in seconds during the final rinse.
2. To change: press "5" as shown in the, Fig. 72) example.
3. The keypad appears.
4. Press CLR, enter a new value, and press ENT.
5. Confirm dose matches chemical manufacturer's requirements.



Fig. 73 - Inline detergent sensor

SET DETERGENT CYCLE TIMES. (Fig. 74):

1. Press "CYCLE TIMES".
To change: Press the number displayed beneath the action, e.g., 40, 30, or 3.
2. The keypad will appear.
3. Select a new value on the keypad, then ENT.
4. Repeat for each value needing change per chemical manufacturer's requirements derived from tank titration testing.

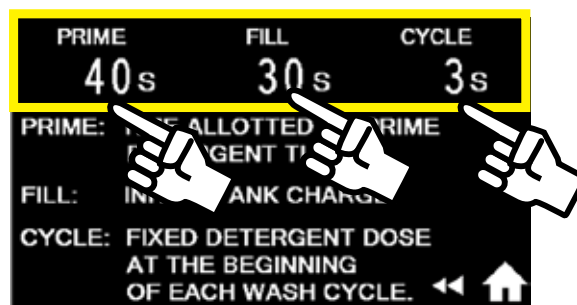


Fig. 74 - Example: Dosage cycle times

SET UP OPTIONS: (continued)

CHEMICAL SETUP: (continued)

SET DETERGENT CONCENTRATION: For Inline Sensor Equipped Machines (Fig. 75).

The detergent dose and the supply based concentration is managed by the time and the conductivity probe(s).

1. Set up by pressing the "CONCENTRATION" button, (Fig. 75), The concentration display indicates the sensor is ON.
2. Set point value sets the conductivity at the point the detergent is present.
3. The factory default "SETPOINT" value is 700. It can be changed by pressing the setpoint number and entering the new value, (Fig. 76).
4. "ACTUAL" is the conductivity detected by sensor.
5. Press DETERGENT PRIME to prime in the event that it is not completely primed, (Fig. 76).
6. Press the Back button (◀◀), to return to the Settings menu, (Fig. 76).
7. Press the 'Home' button, (Fig. 77), to return to the main operation screen.

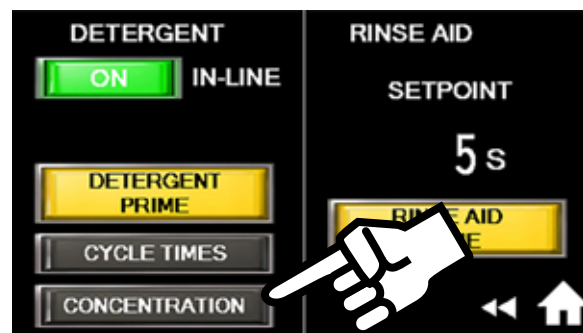


Fig. 75 - Detergent Concentration

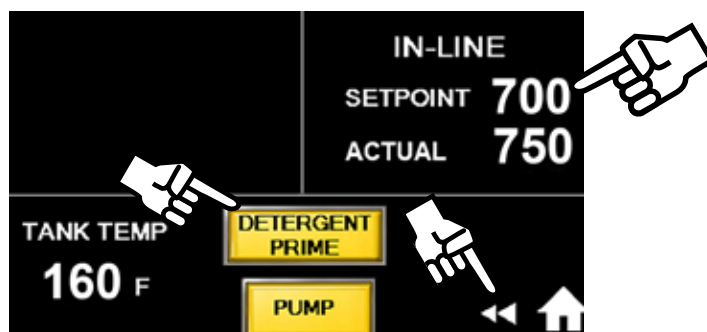


Fig. 76 - Pump button

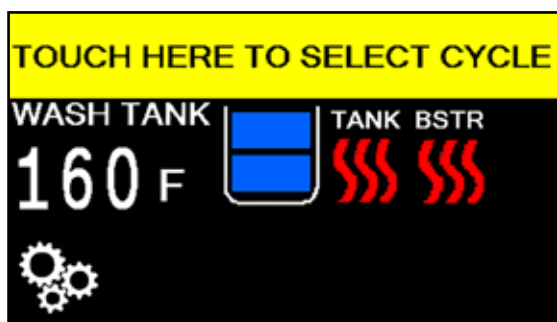


Fig. 78 - Home screen



Fig. 77- Home button

SET UP OPTIONS: (continued)

CHEMICAL SETUP: (continued)

Inline Sensor: Chemical Notification While Filling or Priming

1. If the Inline detergent sensor does not detect chemical within the prime cycle, then a flashing yellow bottle symbol appears on the operation screen indicating a "LOW DETERGENT ALERT", (Fig. 79).
2. Check the chemical supply then press the flashing bottle to run the prime cycle again.
3. The flashing yellow bottle will disappear when the Inline sensor detects chemical.

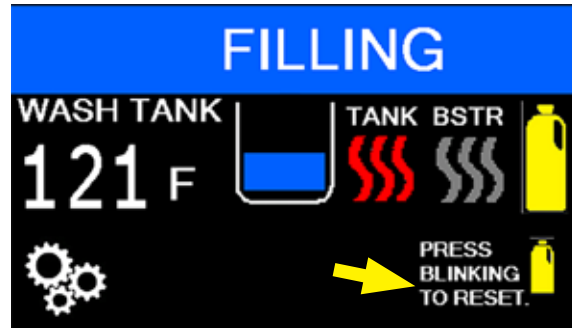


Fig. 79 - LOW DETERGENT ALERT - (flashing bottle)



ATTENTION

The "LOW DETERGENT ALERT" will not reset if the detergent is diluted with water or if the rinse aid is accidentally loaded into the detergent pick-up hose.

Inline Sensor: Chemical Notification While Running Cycles

1. The detergent pump runs for 3 secs. before each wash cycle. If the Inline sensor does not detect chemical after three consecutive cycles, the flashing yellow bottle will appear.
2. Check the chemical supply and press the flashing yellow bottle to reset the alert.

REPEATING LOW DETERGENT ALERT



The flashing yellow bottle will continue to reset and periodically reappear until the alert cause is repaired.

The "LOW DETERGENT ALERT" will not reset if the detergent is diluted with water or the rinse aid combines with the detergent in the detergent tube.

SET UP OPTIONS: (continued)

SLEEP

- During normal operation, if the machine is idle for the programmed time. The HOME screen will display, "SLEEP" and "TOUCH TO WAKE UP", (Fig. 82).
- The wash tank and booster tank heaters and the detergent system are disabled when the machine is asleep.
- The factory default SLEEP setting is OFF, (Fig. 81).
- To setup the SLEEP function:
 1. Press the "SLEEP" button on the Seup screen to access the sleep option, (Fig. 80).
 2. On the next screen, press SLEEP ON or OFF to enable/disable the option, (Fig. 81).
 3. Press the displayed HOURS number value and enter 1-10 hours. This sets the time the machine must be idle before the machine goes to SLEEP,
 4. Touching the screen awakens the machine, (Fig. 82).
 5. The machine returns to normal operation.



Fig. 80 - Press Sleep button

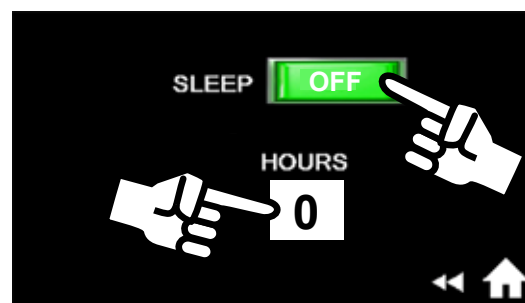


Fig. 81 - SLEEP setup screen.

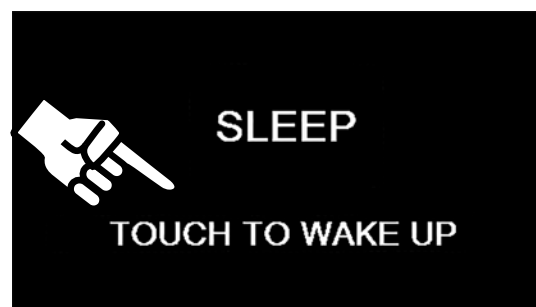


Fig. 82 - HOME screen SLEEP display.

SET UP OPTIONS: (continued)

WATER REFRESH:

- The Water Refresh function ensures the wash tank water remains clean to enhance washability by periodically draining one-third of the water in the wash tank and replacing it with fresh water.
- The factory default "WATER REFRESH" setting is OFF.

1. Press the Water Refresh button ON.
2. Press the set point number and enter the number of cycles before Wash Refresh begins.
3. The Refresh Wash Cycle runs.
4. The next Refresh Cycle runs after the next regular wash cycles are complete.



Fig. 83 - Water refresh button

WATER REFRESH CYCLE:

1. MACHINE washes normally. Drain valve opens at the beginning of rinse and for 15 secs. of the dwell time. The water level will be 1/3 low.
2. The upper float is lowered. During next cycle, the fill comes on to refill tank.
3. Booster temperature is low. Machine enters rinse sentry until booster temperature is satisfied.
4. The screen displays the "WATER REFRESH" alert.
5. Machine drains, refills, and washes normally.

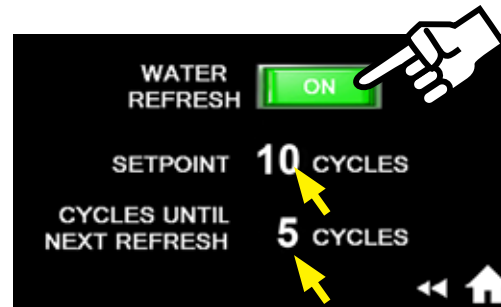


Fig. 84 - Adjustable refresh intervals

FILL TIME EXCEEDED: The maximum time allowed for the machine to fill with water can be set from 10-60 minutes. The default setting is 10 minutes. If the upper float is not satisfied in the time set, then a "FILL TIME EXCEEDED" alarm appears. The default time setting can be changed by touching the numeral, e.g., 10m.



Fig. 85 - Selection buttons

ON FOR CELSIUS: When the button is ON temperatures are displayed in °C with the letter "C". By default, temperatures are displayed in °F with the letter "F" .

ON FOR FRENCH: When the button is ON descriptions are displayed in Canadian French. By default, descriptions are displayed in English.



Fig. 86 - Celsius and French buttons

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Maintenance Menus:

MAINT:

1. Press the SETTINGS button, "gears", to access SETTINGS menu, (Fig. 87).
2. Press the MAINT button, (Fig. 88).
3. The Enter Maintenance Password screen appears.
4. Press 0 and keypad appears (Fig. 89).
5. Press (- - - -), then 'ENT' on the keypad, (Fig. 90).
6. The maintenance menu appears, (Fig. 91).



Contact a supervisor for the actual access code number to enter in the place of (- - - -) shown above.



Fig. 87 - Home screen



Fig. 88- MAINT button



Fig. 90 - Enter password (- - - -).

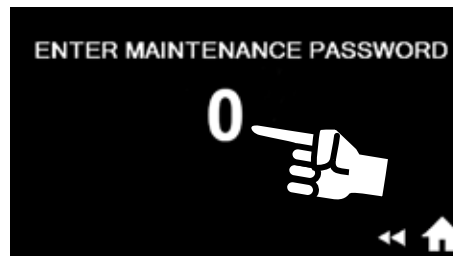


Fig. 89 - MAINT password screen

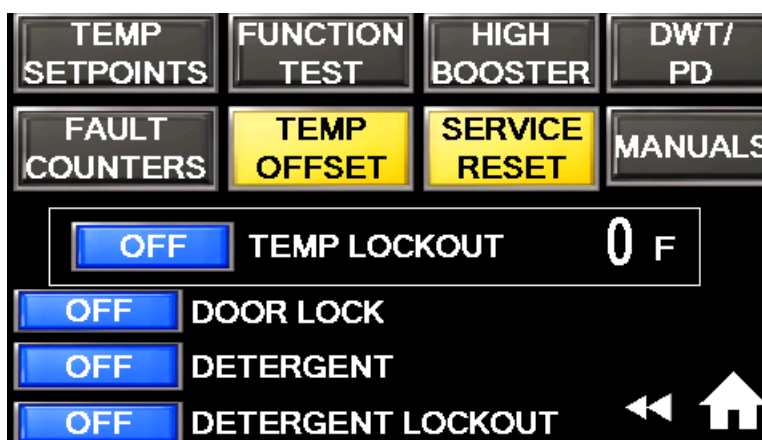


Fig. 91 - MAINT.

(Continued on next page.)

Maintenance Menus: (continued)

TEMP SET POINTS:

1. Press the TEMP SETPOINTS button, (Fig. 92).
2. A menu appears showing the factory default Temperature Set points:
Wash tank - 168°F/76.6°C
Booster - 191°F/88.3°C.
These can be adjusted by pressing the numeric values.
3. Actual Temperatures appear below and indicate the current temperatures during a wash and rinse cycle. These are not adjustable, (Fig. 92a).



NOTE

Press the 'Back-up button (◀◀).



CAUTION

Only a qualified service technician must perform the Function Test.

FUNCTION TEST:

1. Press the Function Test button, (Fig. 93).
2. A menu appears to test the displayed components on the screen. Press and hold the button to test if the component is working.

HIGH BOOSTER:

1. Press the High Booster button, (Fig. 94).
2. Menu appears to display highest recorded booster temperature and any temperature sensor event causing a reading of > 3000. Tap button to test.
3. Contact service agent if problem.

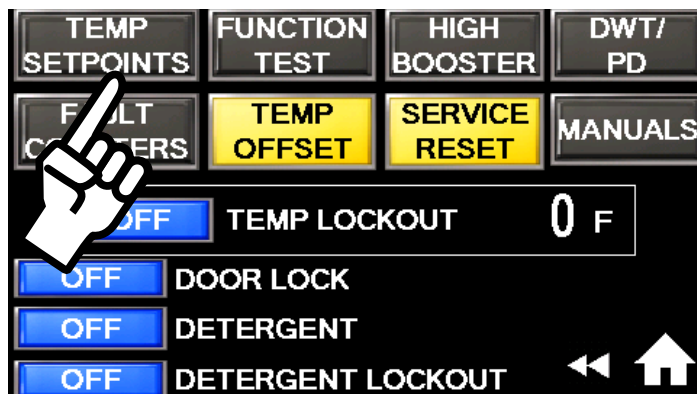


Fig. 92 - Maintenance menu

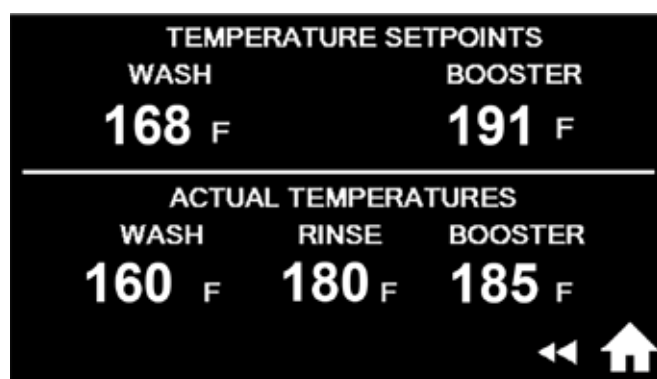


Fig. 92a - Temperature Set points menu

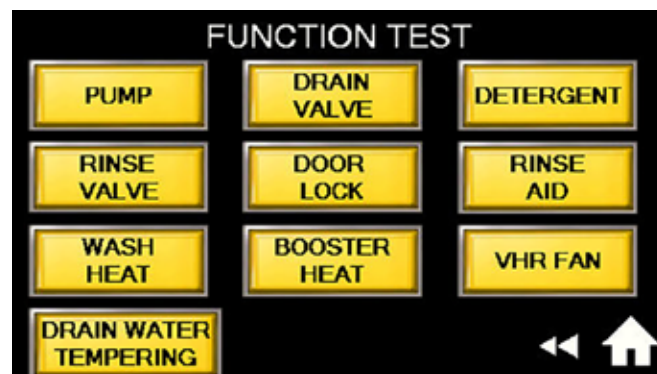


Fig. 93 - Function Test menu

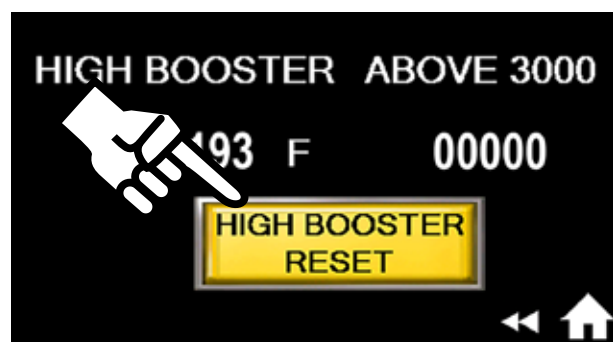


Fig. 94 - High booster menu

Maintenance Menus: (continued)

MAINT: (continued)

FAULT COUNTERS:

1. The Fault Counter shows how many times the machine has a recorded a fault error.
2. Only a technician can reset the fault counters.

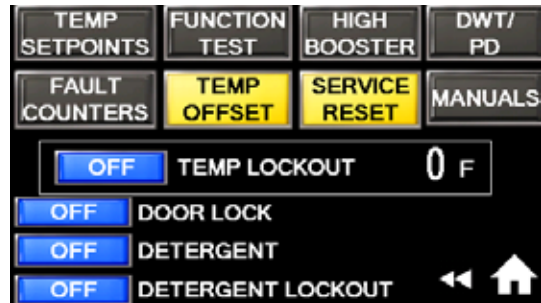


Fig. 95 - MAINT menu

DRAIN WATER TEMPERING (DWT):

(For Optional electric DWT only)

1. Drain water tempering is an option that includes a cold water valve connected to the drain line to cool the water leaving the machine.
2. Refer to (Fig. 96). DWT is installed and configured as needed at the factory. The default settings are OFF. The default time the cold water valve is energized during drain is 1 minute 30 secs. The Default time during the final rinse is a 5 sec. delay followed by a 20 sec. run time.

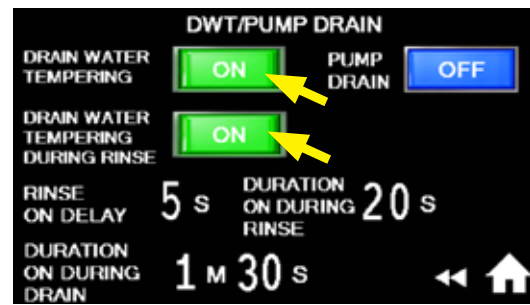


Fig. 96 - Drain water tempering settings



STOP

The functions listed below are used only by service agents to program the operation of a machine if equipped with special options.

TEMP LOCKOUT: When ON, machine will prevent starting a wash cycle when wash tank temperature is below 150°F/65.5°C. The lockout temperature setting is adjustable.

DOOR LOCK: When ON, the door lock switch operates as required.

DETERGENT: When ON, the Optional Champion detergent system is operational.

DETERGENT LOCKOUT: When ON, the machine will not operate if detergent is not detected by the inline chemical sensor.

(Continued on next page.)

FAULT MESSAGES:

- Operation errors are displayed on the main screen with prompts to guide the operator through the troubleshooting procedures and corrective actions.

FILL TIME EXCEEDED:

- If the machine does not fill completely in the allotted time then "FILL TIME EXCEEDED" and a blinking fault icon appear, (Fig. 97 and Fig. 97a).
- Press the  icon and an instruction screen appears. Follow the instructions and press RESET, (Fig. 97b).
- The machine will resume normal operation or the fault screen will reappear.
- Contact a service agent for repair.



Fig. 97 - Normal FILLING operation screen



Fig. 97a - Fault screen with blinking icon

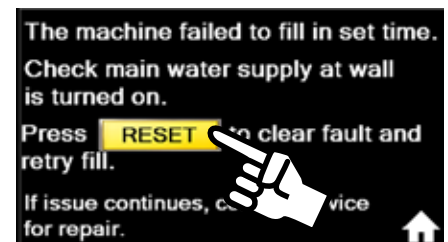


Fig. 97b - Follow instructions on screen

DRAIN TIME EXCEEDED:

- If the machine does not drain completely in the allotted time then "DRAIN TIME EXCEEDED" and a blinking fault icon will appear, (Fig. 98).
- Press the blinking  icon and an instruction screen will appear. Follow the instructions and press ACKNOWLEDGE, (Fig. 98a).
- 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 prompt that the machine is running in a drain fault condition and requires repair, (Fig. 98b).
- Contact a service agent for repair.



Fig. 98- Error screen with blinking icon

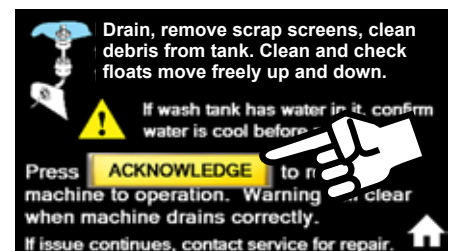


Fig. 98a - Follow instructions on screen



Fig. 98b - Main screen - normal operation with error icon

FAULT MESSAGES: (continued)

FLOAT FAULT:

1. Floats control filling and heating. If a float encounters a problem, then "FLOAT FAULT" and a blinking fault icon will appear, (Fig. 99).
2. Press the  icon and an instruction screen appears. Follow the instructions and press RESET, (Fig. 99a).
3. The machine will resume normal operation or the fault screen will reappear.
4. Contact a service agent for repair.



Fig. 99 - Fault screen with blinking icon

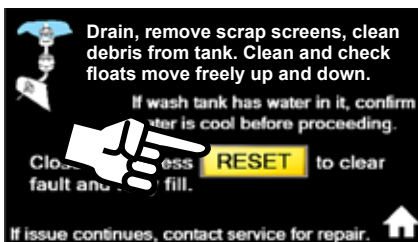


Fig. 99a - Follow instructions on screen

NOTE

The FLOAT FAULT occurs if the upper float is satisfied before the lower float.

TEMPERATURE SENSOR FAULT:

1. If a machine temperature sensor fails including a loose wire connection then the "TEMPERATURE SENSOR FAULT" message appears and the Wash Tank temperature displays **XXXX** indicating the location of the fault, (Fig. 100a).
2. Press the blinking  fault icon and an information screen appears. Press the ACKNOWLEDGE button, (Fig. 100b).
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. 100c).
4. Contact a service agent for repair.



Fig. 100 - Normal "WASHING" screen



Fig. 100a - Temperature sensor fault screen

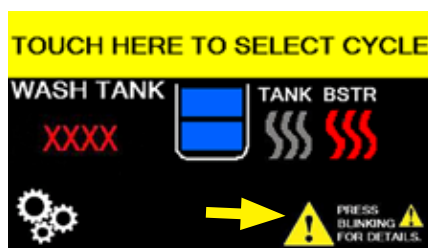


Fig. 100c - Main screen with blinking fault icon

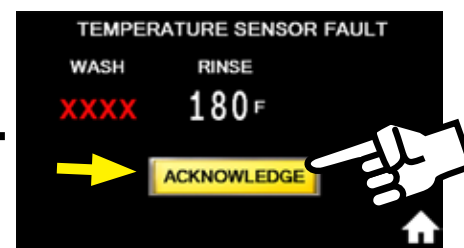


Fig. 100b - Press ACKNOWLEDGE

FAULT MESSAGES: (continued)

OVER TEMP HEATER PROTECTION

The Over Temp Alarm alerts an operator to take immediate action in the unlikely event that a wash tank and/or booster tank heater operates outside its control system. An OVER TEMP condition triggers three rotating screens. The machine ceases operation.

OVER TEMP DETECTED - FIRST SCREEN

- Flashing triangles  indicate there is an issue in a wash or booster tank circuit.
- The issue indicator notifies the service technician which heating circuit is affected.
- Either WASH TANK OR BOOSTER TANK display. Only one displays not both.



Fig. 101 - Over Temp Detected / First display screen

TAKE IMMEDIATE ACTION - SECOND SCREEN

- The operator is instructed to immediately close the doors.
- Once the door is closed, the door lock activates and the rinse valve opens.
- Water flows into the machine to cool the affected heater.



Fig. 102 - Take Immediate Action / Second display screen

FAULT MESSAGES: (continued)

TAKE IMMEDIATE ACTION - THIRD SCREEN

- The operator is instructed to immediately disconnect power at the main breaker or service disconnect switch.
- Immediately call an authorized service technician to reset the machine.
- The door remains locked, the rinse valve remains on, and the drain valve remains closed even if the operator accidentally pushes the green power button off.



NOTE

ONLY A SERVICE TECHNICIAN CAN RESET THE OVER TEMP ALARM.



Fig. 103 - Take Immediate Action / Third display screen

(Continued on next page.)

FAULT MESSAGES: (continued)

ALARM RESET PROCEDURE

SERVICE TECHNICIANS ONLY

Over Temp Heater Protection occurs if the contactor contacts are welded shut when the heater auxiliary relay is open.

Determine the failed heat circuit:

1. With the door closed, restore power to the machine via the main circuit breaker or service disconnect switch.
2. Press the right-hand flashing triangle, the problem circuit(s) are displayed.
3. While the machine is powered on and in the alarm state, visually inspect the contactor(s) plunger. The contactor is welded shut in the closed position if the plunger is pulled down.
4. NOTE: The PLC will not command any heat circuit to activate in the alarm state.



Fig. 110 - Press the flashing triangle to determine failed heat circuit.

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APPENDIXES

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Appendix B: 1-Point to 2-Point Electrical Conversion, Kit P/N 901168	47
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Appendix D: Plumbing Guide for DH6000/T Drain Pump & Mechanical Drain Water Tempering Valve.....	49

INSTALLING DH6000T CORNER SPLASH SHIELD KIT, P/N 901114



CAUTION:

The machine will drain automatically when the dishwasher power is turned off.

KIT PARTS: (1) SHIELD, CORNER SPLASH, P/N 337955, COMPOUND SEALING, P/N 104889, (2) SCREWS, 10-32 X 1/2" TRUSS HEAD, P/N 100097, (2) WASHER, FLAT, 10-32, P/N 107033, NUT, GRIP, 10-32 W/NYLON INSERT, P/N 107966

SPECIAL TOOLS: #21 or 5/32" Drill bit, Electric Drill

1. The splash shield is installed on the right-hand side of the dishwasher, (Fig.1).
2. Turn dishwasher power off; the machine will drain automatically. Open the doors.
3. Lift and remove the track assembly, (Fig. 2).
4. Remove the (4) bolts, locks, and washers securing the right-hand door guide cover. Save the fasteners and discard the cover, (Fig. 3).
5. Install the splash shield between the door guide and the front corner post (Fig. 4). The left side of the splash shield covers the door guide.
6. Apply a small bead of sealing compound to the (4) fasteners saved in step 4. Secure the guide cover end of the splash shield to the machine, (Fig. 5).
7. Locate the mounting holes on the right-hand front corner, (Fig. 6).

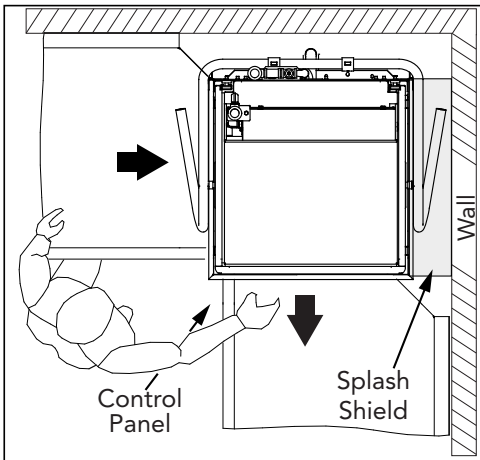


Fig. 1

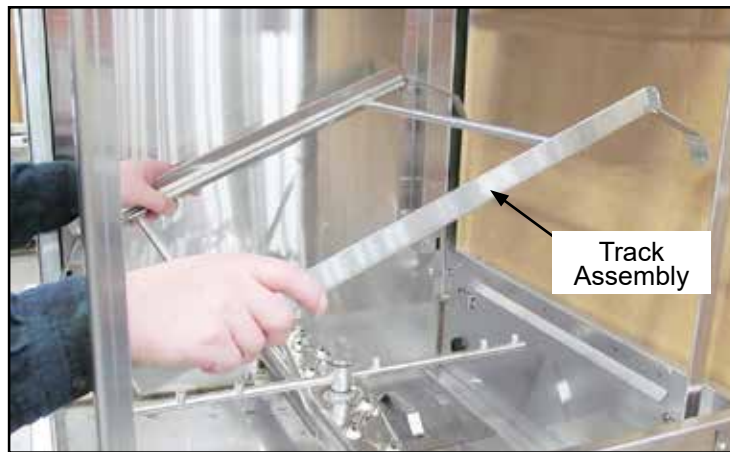


Fig. 2



Fig. 4



Fig. 3

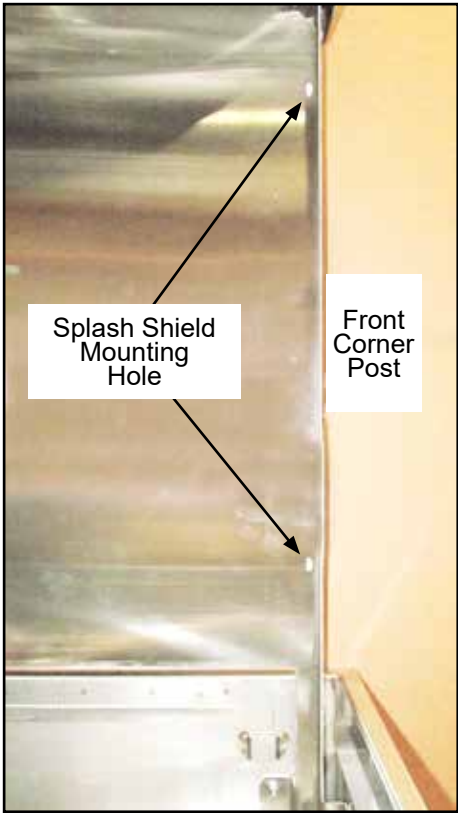


Fig. 6

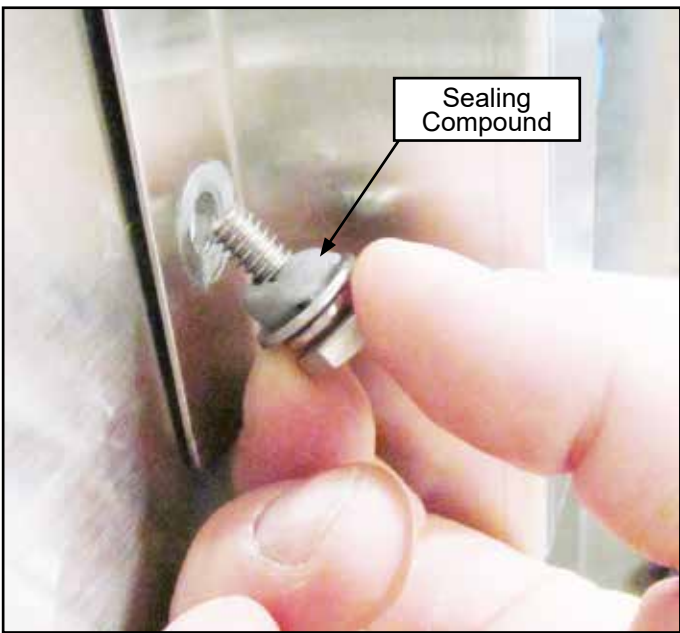


Fig. 5

Appendix A: Installing DH6000T Corner Splash Shield Kit, P/N 901114

8. Using the splash shield as a template, mark and drill two holes in the corner post.
Secure the shield to the post using the 10-32 screws, nuts and washers provided in the kit.



Fig. 7

9. Open and close the doors to ensure there is no interference between the doors and shield.
10. Turn the dishwasher power on to fill the dishwasher.
11. The installation is complete.



NOTE:

The corner posts may be predrilled and will not require the posts to be drilled as described in Step 8.

Champion® Kit P/N 901242, DH6000/T- M2 Series 1-Point to 2-Point Terminal Block Conversion

KIT PARTS:

- (1) P/N 111833, Input Terminal Block
- (2) P/N 100007, Screw, 10-32 x 3/8" Truss Hd.,
- (1) *Label, Matrix 2-Point Electrical Data Plate,
- (1) P/N 117524, Instruction Sheet

*** THE DATA PLATE MUST BE CUSTOM PRINTED AT THE FACTORY AND ADDED TO THE KIT BEFORE SHIPMENT.**



WARNING:

Disconnect all power to the dishwasher before working on the machine.



Fig. 1

1. Check the contents of the kit, (Fig. 1). The new data plates must be included. Contact Champion National Service in USA @ 1-(800) 858-4477 or in Canada @ 1-(800) 263-5798.
2. Disconnect power to the dishwasher and remove the front and right-side panels. Locate booster terminal block mounting bracket on right front of machine base, (Fig. 2).
3. Install terminal block included in the kit to the existing bracket using kit screws, (Fig. 3).
4. Disconnect booster wires L1, L2, and L3 on main power terminal block and route to new booster terminal block and connect.
5. Connect booster line power to new terminal block.
6. Apply "2-Point Machine" connection data plate over the existing data plate and apply the "2-Point Booster" connection data plate in front of the booster terminal block, (Fig. 4).
7. Restore power and check machine operation.
8. Replace panels and apply new machine data plate over existing on lower front panel.
9. Restore power and check operation.
10. Conversion is complete.



Fig. 2 - Mounting bracket



Fig. 3 - Booster terminal block

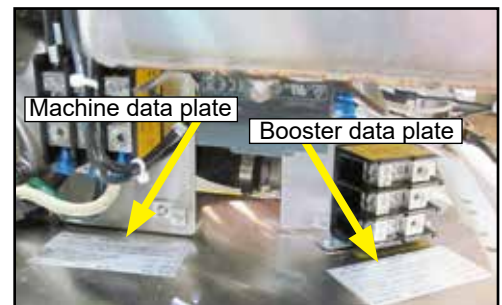


Fig. 4 - Apply 2-Point data plates

ELECTRIC DRAIN VALVE MANUAL OPERATION

VALVE POSITION SIGHT WINDOW

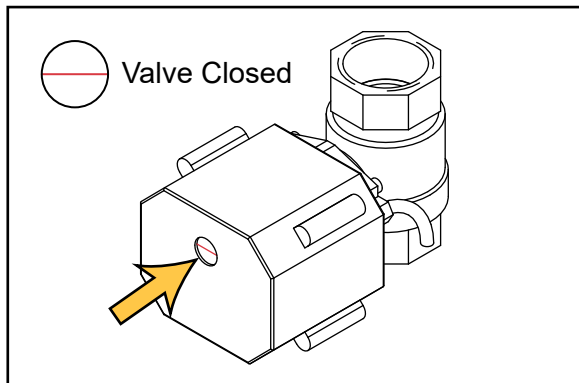


Fig. 1 - Valve position sight window closed

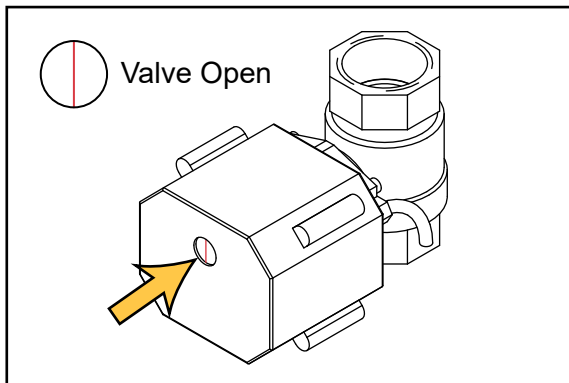


Fig. 2 - Valve position sight window open

STEPS TO ADJUST VALVE POSITION

1. Remove four 2.5mm coil retaining Allen screws (see Fig. 3).
2. Remove the coil from the valve body (see Fig. 4).
3. Using pliers, turn valve body key to adjust valve (see Fig. 5).
4. Reassemble in reverse order.

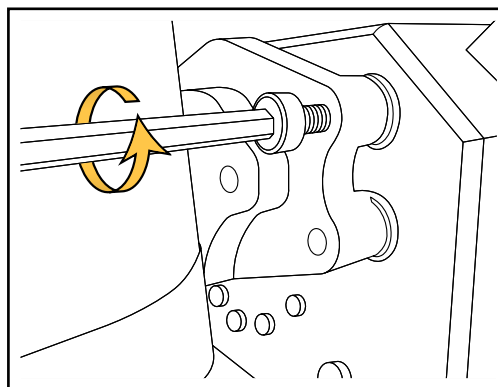


Fig. 3 - Remove Allen screws

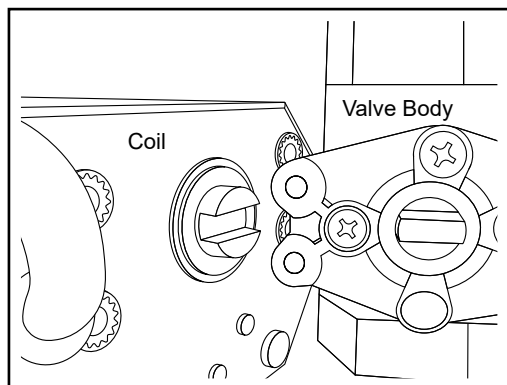


Fig. 4 - Remove coil from the valve body

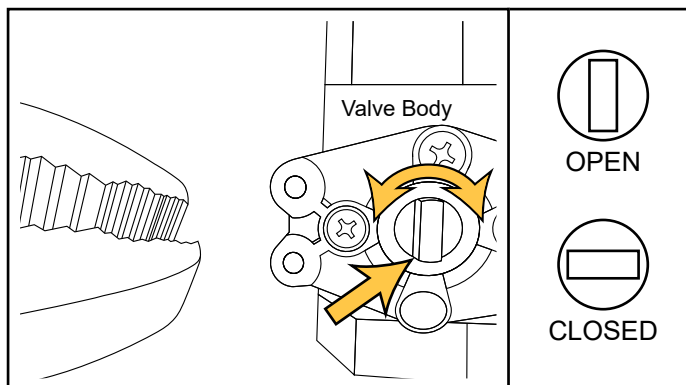


Fig. 5 - Turn valve body key with pliers

Champion®

Plumbing Guide for DH6000/T Drain Pump & Mechanical Drain Water Tempering Valve



All plumbing connections must be made by qualified personnel familiar with warewashing equipment in accordance with all local sanitation, safety, and plumbing codes.



All plumbing connections **MUST** be positioned to allow the unit to be moved for servicing.

DO NOT: *

- * Add extension to drain hose.
- * Remove or modify syphon loop.
- * Substitute the supplied 3/4" NPT drain hose adapter fitting.

WYE fitting (supplied by others).
Use supplied 3/4" NPT drain hose adapter.

Vented drain line

Finished floor

Drain Tempering Valve Assembly
(Mount to wall with supplied wall bracket.)

Not to exceed 6 FT.

18" Optimum
(not to exceed 5 FT.)

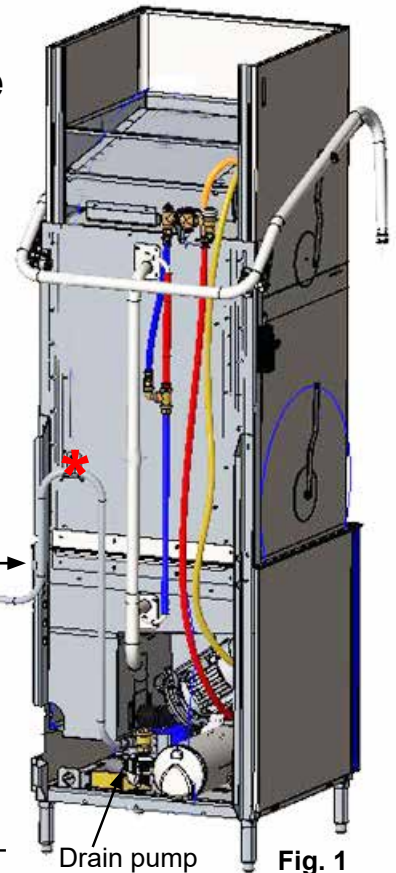


Fig. 1

ASSEMBLY INSTRUCTIONS

Drain Water Tempering Valve Assembly

- 1 Assemble the drain water valve parts, (see page 2).
- 2 Mount assembly using wall bracket. (Fasteners supplied by others.)
- 3 Install 1" drain hose (5 FT. supplied) to 1" side of cast Tee-fitting.
- 4 Install 3/4" drain hose from machine to 3/4" side of cast Tee-fitting.
- 5 Install WYE fitting in a vented drain line.
- 6 Install 3/4" NPT hose barb adapter fitting into WYE fitting.
- 7 Connect 1" drain hose (5 FT. supplied) to WYE fitting.
- 8 Connect dedicated 1/2" NPT cold water supply to Line Strainer.

DEDICATED
1/2" NPT COLD
WATER LINE
55-75°F, 46-50 PSI

Vented drain

3/4" NPT
drain hose
barb adapter
(required)

WYE fitting
(supplied by
others).

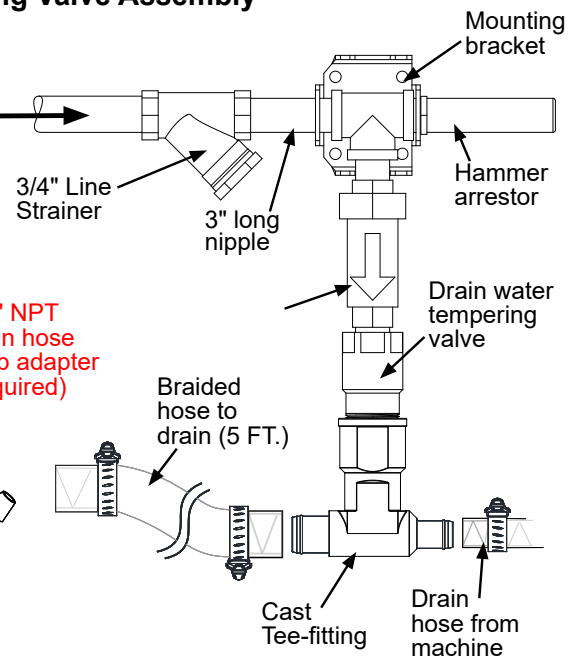
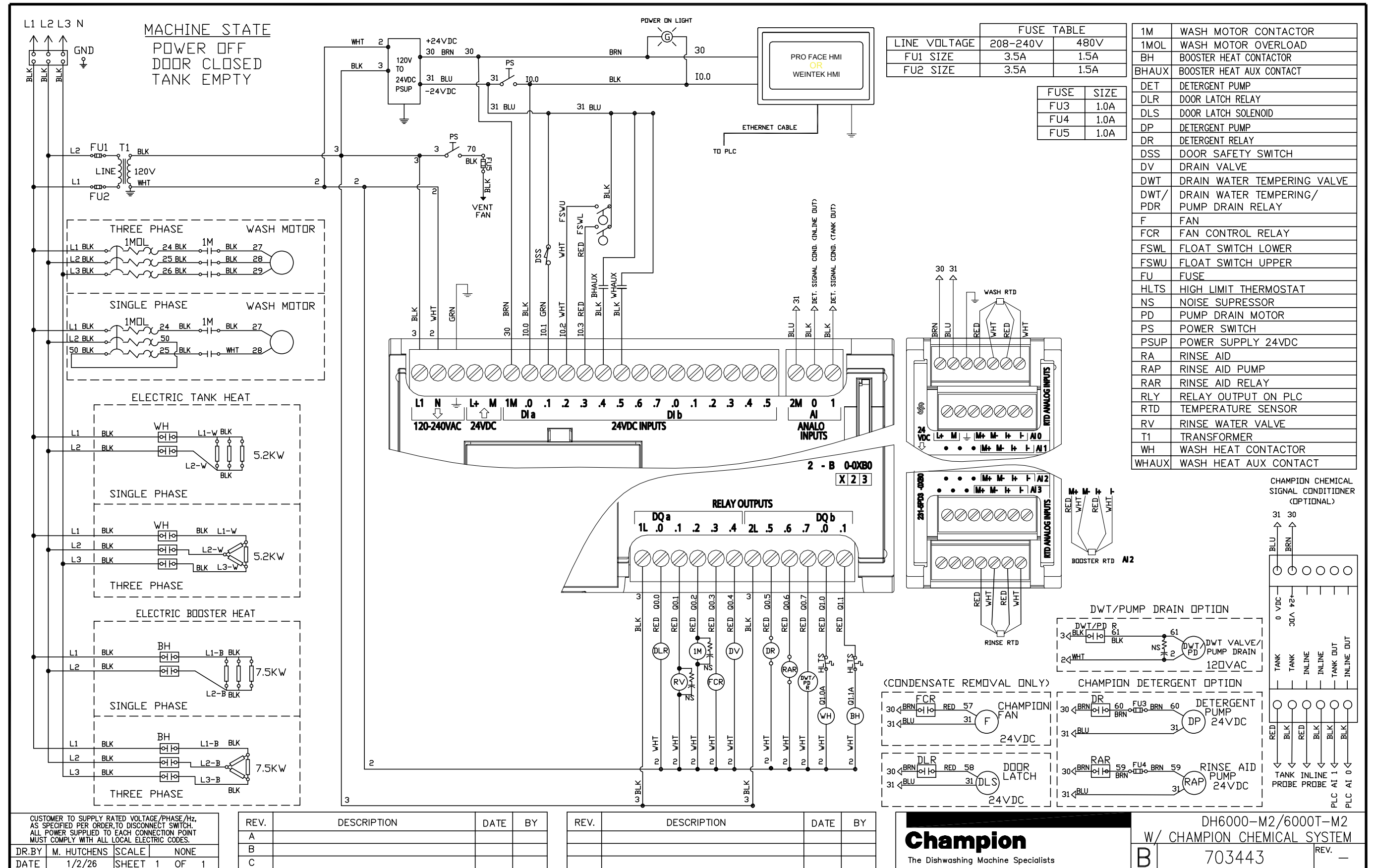


Fig. 2

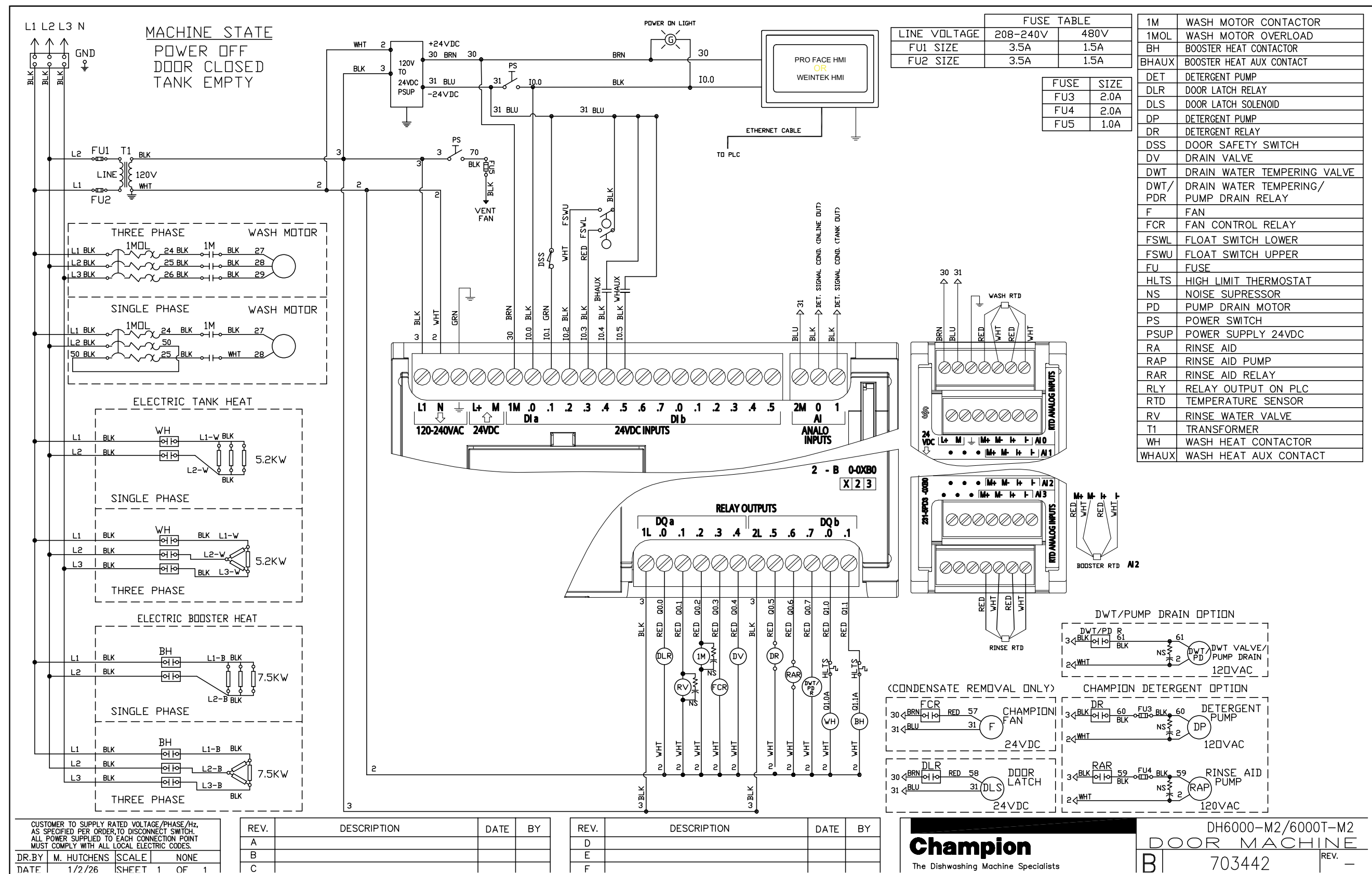
Electrical Schematics

703443/B: DH6000/DH6000T- without Champion Chemical System 51

703442/B: DH6000/DH6000T- with Champion Chemical System 52



Electrical Schematic - without Champion Chemical System



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