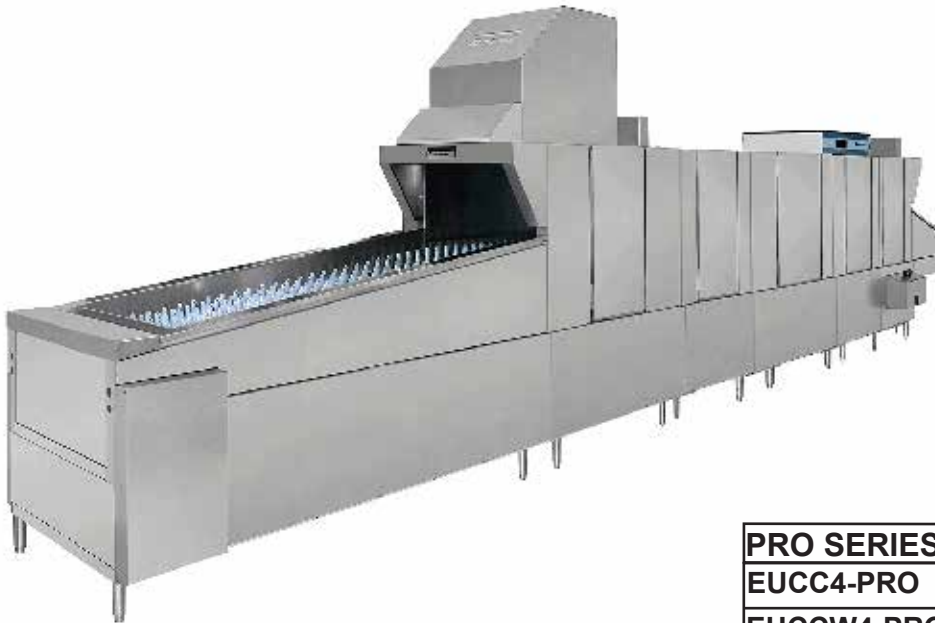


# Champion<sup>®</sup>

## Installation Manual



### Flight Series Upright Conveyor Dishwasher

PRO SERIES		
EUCC4-PRO	EUCC6-PRO	EUCC8-PRO
EUCCW4-PRO	EUCCW6-PRO	EUCCW8-PRO



championindustries.com

Issue Date: 6.30.25

**Manual P/N 117170 rev. A**

Beginning with S/N J20094452 and above

3765 Champion Boulevard  
Winston-Salem, NC 27105  
(336) 661-1556 Fax: (336) 661-1979  
Toll-free: (800) 858-4477

2674 N. Service Road, Jordan Station  
Ontario, Canada L0R 1S0  
(905) 562-4195 Fax: (905) 562-4618  
Toll-free: (800) 263-5798

Printed in the USA

## National Service Department

In Canada:

Toll-free: 1(800) 263-5798

Tel: (905) 562-4195

Fax: (905) 562-4618

In the USA:

Toll-free: 1(800) 858-4477

Tel: (336) 661-1556

Fax: (336) 661-1660

### ATTENTION:

The model number, serial number, voltage, Hz and phase are necessary to identify your machine.

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

Please have this information ready when you contact Technical Support.



## Installation Codes

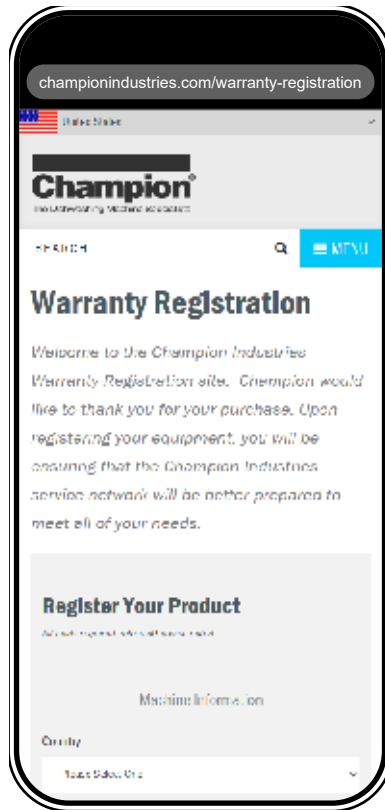
The installation of the machine must comply with all local electrical, plumbing, health, and safety codes or in the absence of local codes, installed in accordance with the applicable requirements in the National Electrical Code, NFPA 70, Canadian Electrical Code (CEC), Part 1, CSA C22.1 and the Standard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

### NOTE:



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

# Three ways to REGISTER YOUR PRODUCT



- Use your mobile device to scan the QR code above and connect to <https://www.championindustries.com/warranty-registration>.

**or**

- Enter <https://www.championindustries.com/warranty-registration> into your browser.

**or**

- Use the fax form on the next page.

# 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 in the USA and 1(800) 263-5798 in Canada.

Revision Date	Revised Pages	Serial Number Effectivity	Description
9.18.20	All	J20094452	Released First Edition
6.30.25	14-15	J20094452	Revised electric drain valve operation

# 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](http://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 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,, 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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## PLUMBING AND ELECTRICAL DRAWING, (P&E)

- WHEN THE MACHINE IS EQUIPPED WITH BLOWER/DRYER SYSTEM, FOP NORMAL, SEE DIMENSION. THE OVERHUNG VENTILATION SHOULD BE INCREASED BY 600 C.F.M.

NOTES:  
1. ADEQUATE AIR EXHAUSTS SHOULD BE PROVIDED BY QUALIFIED AIR AND VENTILATION PERSONNEL. FOR THE MAXIMUM WASH AREA.  
2. ALL VERTICAL DIMENSIONS TAKEN FROM FLOOR ARE WITH MACHINE ADJUSTED TO LOWEST POSITION.

**TABLE "A"**

	"A"	"B"	"C"
ELECTRIC DATA			
55 KW ELECTRIC TANK HEAT	100	50	45
32 KW ELECTRIC BOOSTER	100	50	45
25 KW ELECTRIC BLOWER	70	30	33

ALL ELECTRICAL CONNECTIONS MUST COMPLY WITH THE NATIONAL ELECTRICAL CODE AND/OR LOCAL ELECTRICAL CODES.

NOTE: ONLY APPLICABLE UTILITIES ARE CIRCLED.

**UTILITIES**

ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	ELECTRIC TANK HEAT	6	DRAIN
2	ELECTRIC BOOSTER	7	3/4" NPT BOOSTER
3	ELECTRIC BLOWER	8	VENTS
4	ELECTRIC HEATED BLOWER/DRYER	9	LOAD END: 300 CFM AT 1/4" S.P.
5	STANDARD PEG TYPE CONVEYOR BELT	10	UNLOAD END: 800 CFM AT 1/4" S.P.
6	2" NPT ELECTRIC HEATED BLOWER/DRYER	11	

**PLUMBING AND ELECTRICAL CONNECTIONS DRAWING - P & E**

**GENERAL NOTES**

One set must be marked with your approval and/or comments and returned before order is released for production.

BY DATE

**Champion**  
The Connecting Division

**SAMPLE**

**UTILITIES**

ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	55 KW ELECTRIC TANK HEAT	6	DRAIN
2	32 KW ELECTRIC BOOSTER	7	3/4" NPT BOOSTER
3	ST. ENCLOSURE PANELS ALL FOUR SIDES	8	VENTS
4	STANDARD PEG TYPE CONVEYOR BELT	9	LOAD END: 300 CFM AT 1/4" S.P.
5	2 HP. ELECTRIC HEATED BLOWER/DRYER	10	UNLOAD END: 800 CFM AT 1/4" S.P.
6		11	
7			
8			
9			
10			
11			



## UNPACKING

- Upon receipt, inspect the machine and its shipping containers for damage.
- Immediately contact the carrier and save all packing material for inspection.
- Accessories and hardware kits are shipped inside the machine. Do not discard anything stored inside the machine.
- Do not remove any labels attached to the machine before assembly is complete.



### NOTE:

Immediately register the machine warranty by scanning the QR code located on the machine control cabinet, by fax using the fax form at the front of this manual, or at the Champion Industries website at <https://championindustries.com/warranty-registration>.

## INSPECT THE INSTALLATION SITE

- Make sure the machine will pass through all doors, passageways and ceilings.
- Check the level and condition of the floors before placing the machine.
- Compare the size and location of the utilities, (water, electric, drain, ventilation etc.), and make sure they agree with the P&E and the machine.
- Test the electrical service(s) to ensure they correspond to the machine requirements.

## PLACING THE MACHINE



### CAUTION:

**Remove the front panels. Inspect the bottom of the machine and note the location of piping before removing the machine sections from the pallets.**

- Place the machine sections near their final locations leaving space between them for final assembly.
- Note the height of each section. The floor may not be level so final leveling will depend on variations in the floor.

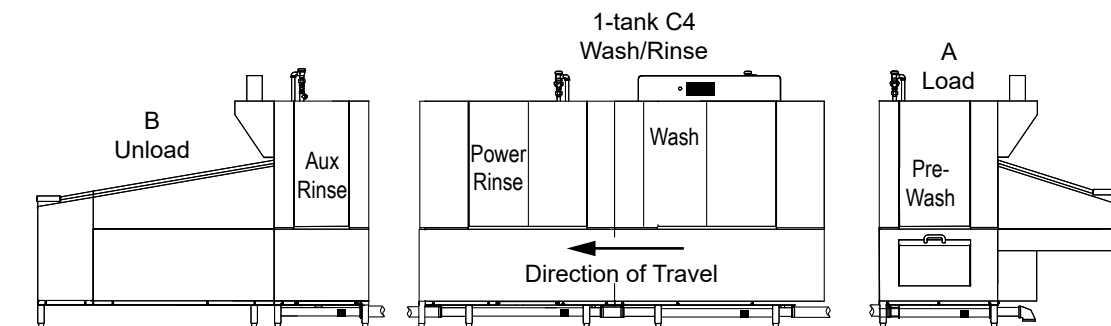
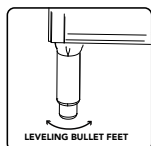


Fig. 1 -

*Position the sections leaving working space between them.*



## ASSEMBLING THE TANK SECTIONS



### STOP:

Place the "C" (Wash/Rinse) Section in its final location and level it first.

- Turn the adjustable feet in completely and determine which section is highest due to floor variance. Adjust the "C" section height to accommodate the variation. Do not adjust the "C" section too high.
- Move the "A" section to the "C" section making sure the base and hood bolt holes line up. LEVEL SECTION "A" TO MATCH "C".



### CAUTION:

**Make sure foam gasket is applied on all four sides of the section opening.**

- Using the sealant (Fig.2), supplied in the hardware kit, apply a 1/2" bead around the foam gaskets. Sealant should squeeze out of the joints when tightened.
- There are three bolts along the base (Fig. 3), and twenty bolts around the hood. Use 5/16 x 3/4" bolts for the hood and 1/2 -13 x 1" for the base. Tighten the bolts in a manner that ensures the sections mate evenly.



Fig. 2 -  
1/2" Silicone Bead

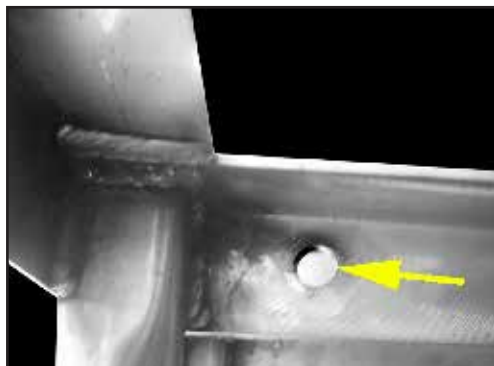


Fig. 3 -  
Base Mounting Hole



### CAUTION:

The conveyor tracks inside the machine must also be aligned as the sections are leveled. The tracks have a small amount of adjustment if needed.

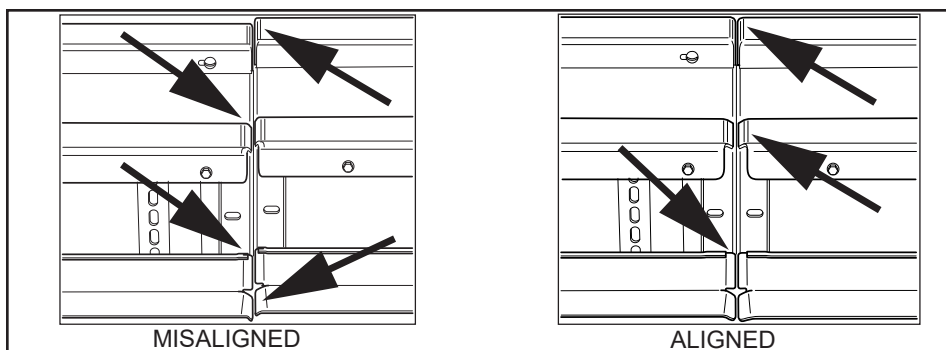


Fig. 4 - Conveyor tracks must be aligned

- Repeat this process for the remaining sections making sure to check levels and adjust the legs so they all touch the floor.

## U-CLIPS

The dishwasher section joints inside the dishwasher must be capped by a U-CLIP specifically designed to seal the joints and prevent leaks between the dishwasher sections.

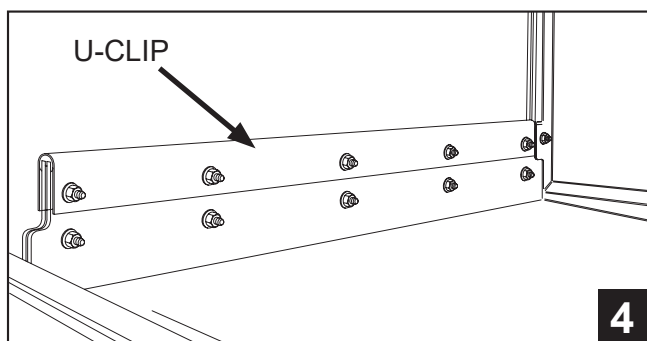
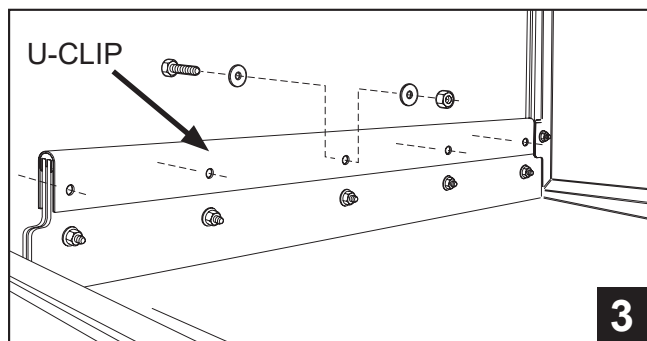
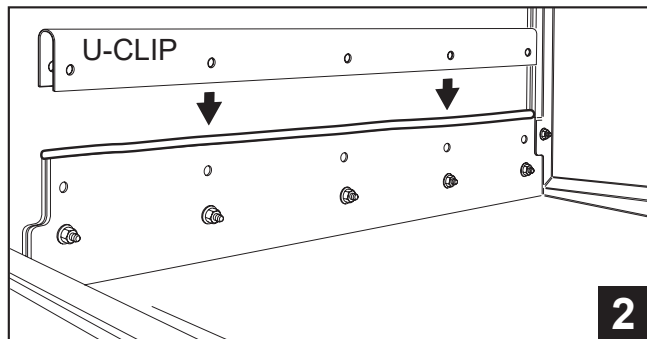
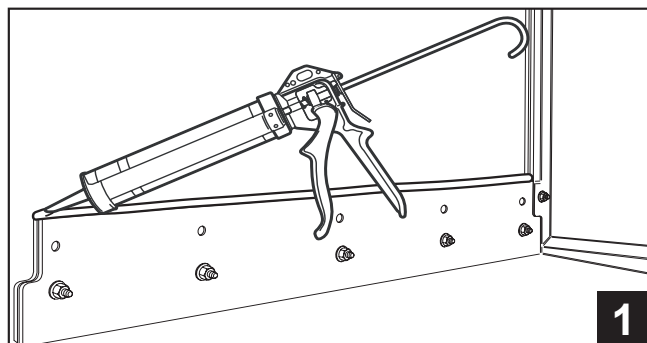


### STOP:

Make sure the section joints have a foam gasket installed. If the gasket is missing, then the sections must be broken, a gasket installed, siliconed and then the sections bolted and re-leveled.

- Follow the steps below to install the section joint U-CLIPS.

1. Apply a 1/2" bead of silicon at the section seam.
2. Slide the U-CLIP over the section joint. Align the bolt holes.
3. Bolt the U-CLIP using 5/16-18 x 1" bolts, washers and locknuts included in the hardware kit.
4. Wipe any excess silicon that may have squeezed out of the U-CLIP joint.



## ASSEMBLING THE CONVEYOR BELT



### CAUTION:

Moving conveyor parts can cause injury.  
Use caution when assembling the belt



### NOTE:

The conveyor belt is usually installed in the tank sections prior to shipment but may on occasion be shipped separately on pallets. The following instructions explain the procedure to install the belt in the field.

The load and the unload sections of the dishwasher have removable panels.

1. Start at the unload end of the machine and note the location of the top and side panels
2. Lift the unload top panel up and off.
3. Lift the end panel straight up. Note the guides on the sides of the hood as you remove the panel.
4. Lift the side panels off the right and left sides.
5. Lift the end panel straight up and off the unload end of the machine. Remove the retaining bolts and remove drive gear cover.
6. Set the panels and covers aside in a safe location.

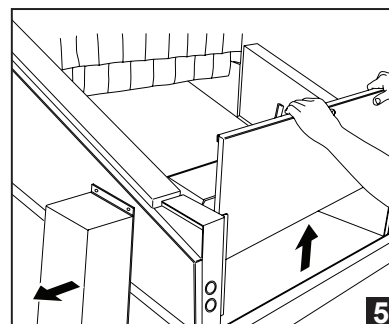
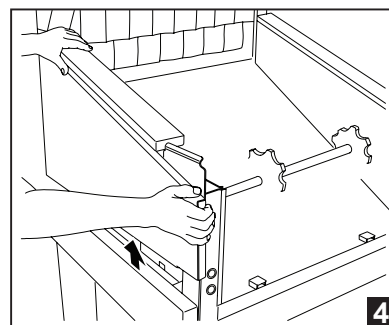
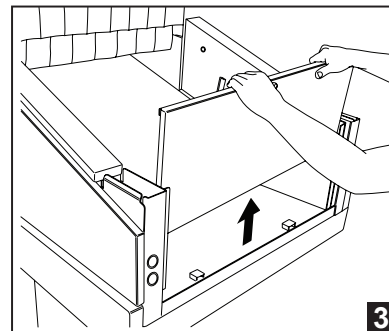
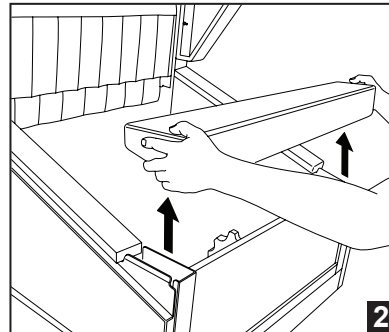
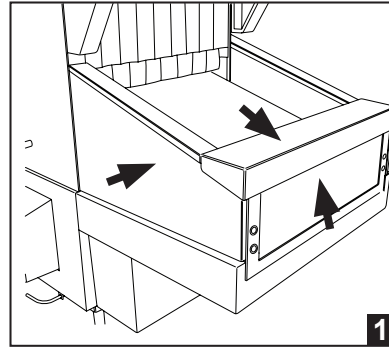
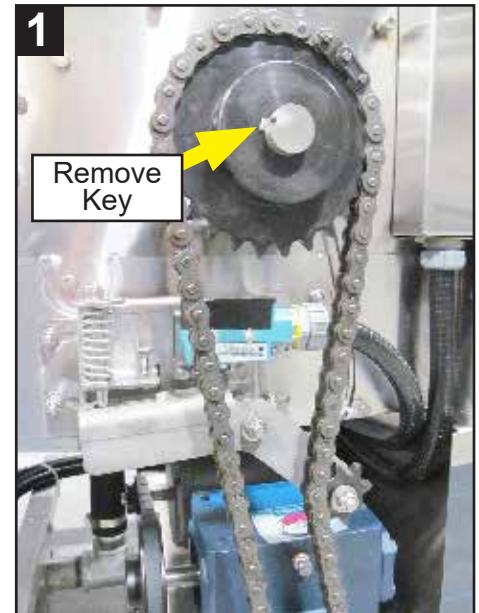


Fig. 5 - Belt peg notches face the load end.

Perform the following procedure to assemble the belt:

1. Remove the drive sprocket key so the shaft freewheels.
2. Start at the unload end of the machine and unroll a belt section around the end sprockets until about 1.5 feet of belt rests on the conveyor upper track.
3. From the load end, unroll another section toward the load end.
4. Use an assembled portion of the belt as an assembly guide.
5. Join the sections together by feeding a conveyor rod through the links, spacers and rollers. Install a cotter pin on each end of the rod.



*Remove the drive sprocket key.*

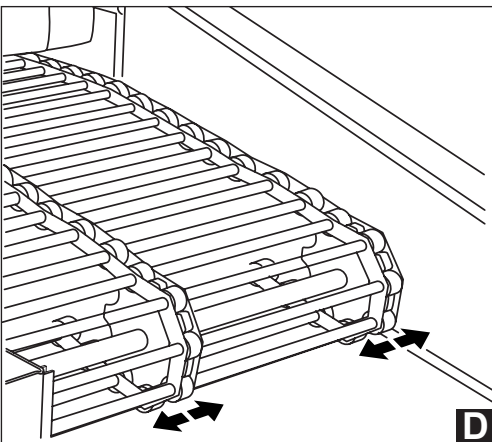
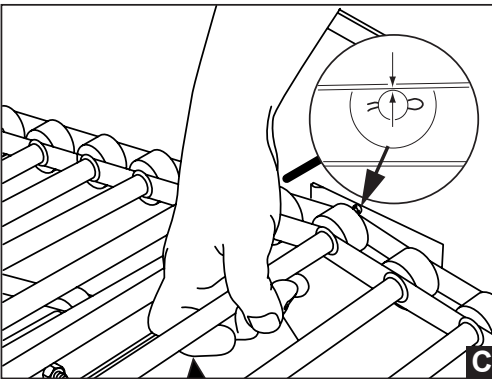
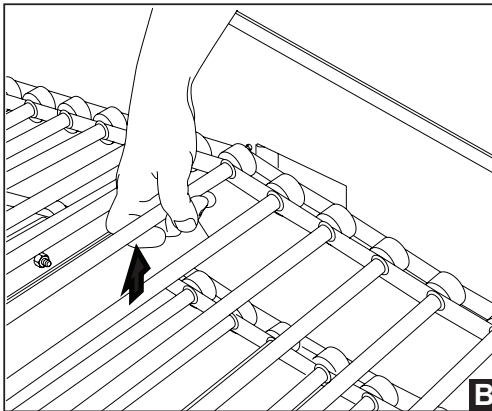
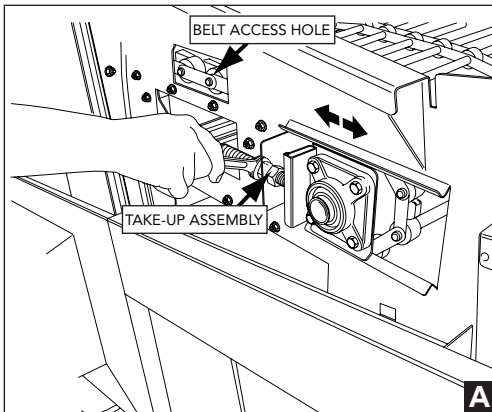


*Roll the first section of conveyor belt from the unload section toward the load section.*



*Connect the conveyor belt sections with a rod, spacers, and washers included in the hardware kit.*

## ADJUSTING THE CONVEYOR BELT

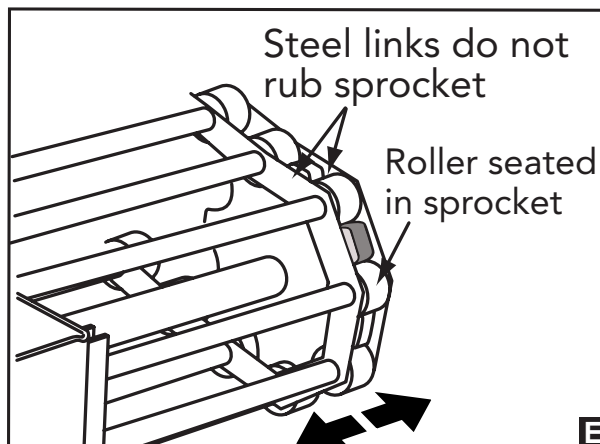


1. The take-up assemblies adjust belt tension. They are located on each side of the load end conveyor shaft. (A).
2. Loosen the adjusting bolt locknuts then turn the adjusting bolts CW to tighten the belt.
3. Make sure the belt tension is even on both sides.
4. Adjust the belt tension as you manually remove the slack in the bottom portion of the belt.
5. Check the belt tension by lifting the upper conveyor belt at the load end of the dishwasher (B).
6. The proper belt tension is achieved when the top of the conveyor belt rods are even with the top of the belt access hole. (C).
7. Tighten the adjusting bolt locknuts to hold the belt adjustment.
8. Check that the conveyor belt tracks evenly on the conveyor drive sprockets during operation.
9. Adjust the take-up assemblies as required. (D).
10. Proper tracking requires that the rollers seat evenly in the conveyor belt drive sprockets.
11. The belt metal links must not rub the sides of the belt sprockets. (E).
12. Replace the key in the drive sprocket.



### CAUTION:

Do not overtighten the belt.





## ADJUSTING THE CONVEYOR JAM SWITCH

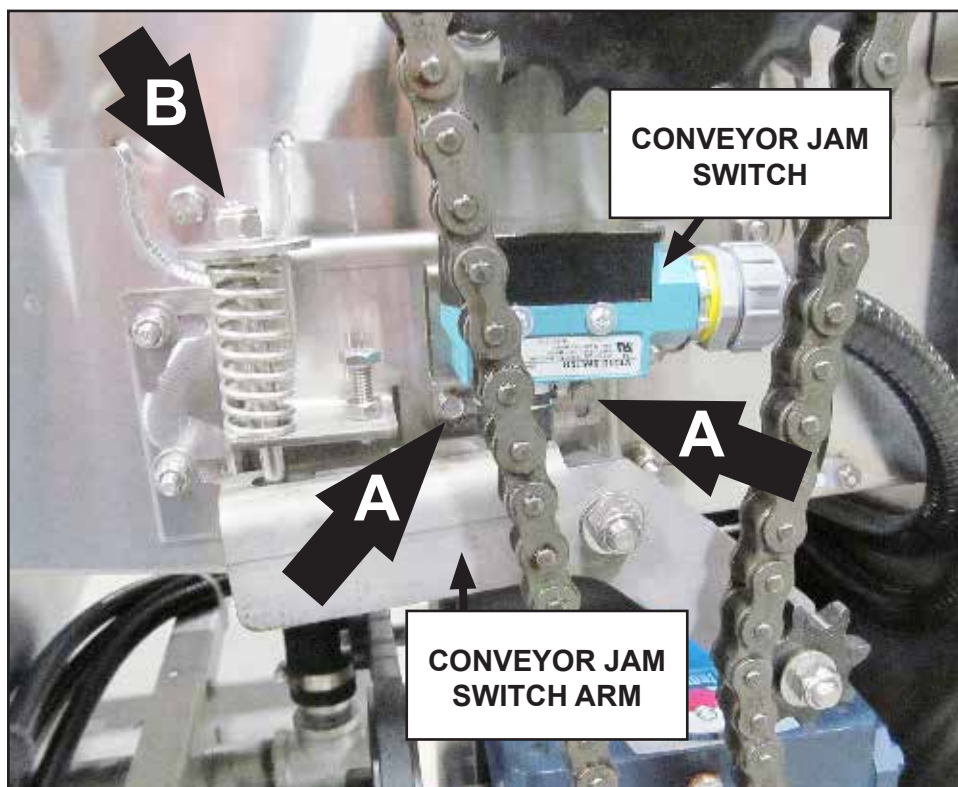
**CAUTION:**

Moving conveyor parts can cause injury.  
Use caution when assembling the belt

The conveyor anti-jam switch is located at the unload end of the machine and is adjusted after the belt is installed and the conveyor is running.



1. Check the conveyor jam switch arm to ensure the arm applies tension on the chain. Adjust the tension spring nut (B) if required.
2. With the conveyor belt running, hold the belt to with approximately 165 lbs. force to stop the belt.
3. The conveyor jam switch should stop the belt drive.
4. If it does not, then loosen the switch mounting bolts, (A), and slightly move the switch upward.
5. Apply stopping force to the belt and continue to adjust the switch position until the belt stops when resistance is applied according to Step 2 above.
6. Re-install the drive cover.



## OPTIONAL VARIABLE FREQUENCY DRIVE, (VFD).

- The VFD controls the speed of the AC conveyor drive motor.
- Refer to the Diagnostics Manual, P/N 117173, for the VFD programming instructions.



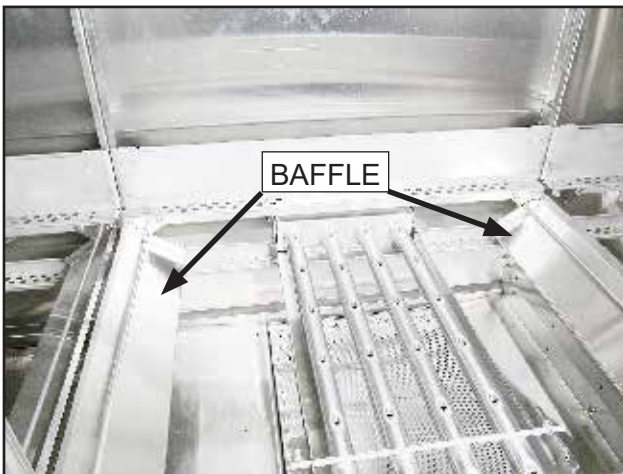
*Fig. 6 - VFD*



*Fig. 7 -  
The VFD is located behind the drive motor.*

## CHECKING THE BAFFLES

- Tank baffles direct water back into the tank. The belt should not interfere with their movement.
- Make sure the baffles move up and down without interference.



*Fig. 8 - Baffles shown with belt removed.*



*Fig. 9 - Baffles should move freely.*



## CONNECT CROSS-FLOW PIPING

- Stainless steel crossflow piping between the tanks are connected by hoses.
- Hoses are pushed back and secured on one end of the piping.
- Loosen the hose clamps and re-position the hoses evenly on the piping.



*Fig. 10 - Crossflow piping.*

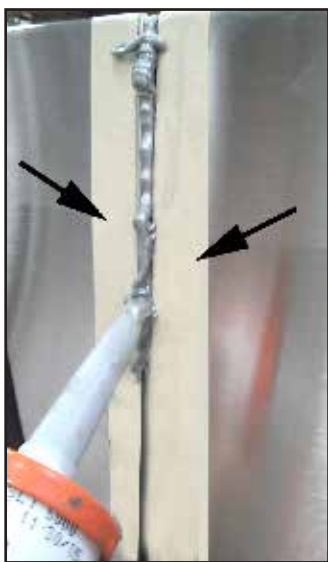
## SEALING SECTION JOINTS

- Dishwasher sections must be sealed with the foodgrade sealant provided with the machine. Perform the following procedure to seal the joints.



*Fig. 11 -  
Ensure tank sections are level.*

- Check sections and make sure they are level (Fig. 11).
- Mask the joints with quick-release tape and apply a bead of sealant (Fig. 12).
- Wipe excess sealant with a damp cloth or paper towel (Fig. 13).
- Remove masking tape to finish the section seal (Fig. 14).
- Sealant should fill the joint evenly. (Fig. 15).



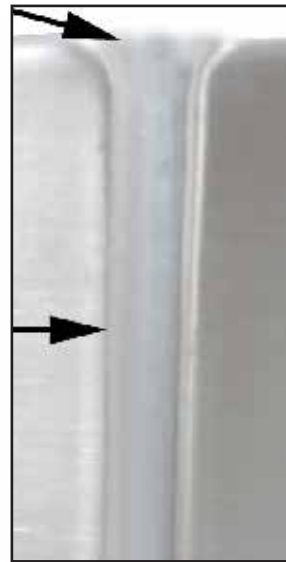
*Fig. 12 -  
Mask joint and apply  
sealant.*



*Fig. 13 -  
Smoothly remove  
excess sealant.*



*Fig. 14 -  
Remove masking  
tape.*



*Fig. 15 -  
Sealant fills  
joint evenly.*

# PLUMBING CONNECTIONS

## Hot Water Connection



**HOT  
WATER**



**CAUTION:** The installing plumber must flush debris from the water supply line before connecting it to the dishwasher.

- **MINIMUM 3/4" NPT HOT WATER SUPPLY LINE.**

- Hot water supply connection is located underneath the unload section of the machine.
- Install a 3/4" or larger shut-off valve in the supply line as close to the machine for servicing
- Refer to the machine data plate located on the top-mounted control cabinet for the proper flowing pressure. Adjust the PRV to maintain the listed flowing pressure when the machine is running.
- A water hardness of 3 Grains/US Gal./0.83 Imp. Gal./5.3 L or less is recommended.



**NOTE:**  
A water hammer arrestor (meeting ASSE-1010 standard or equivalent, (supplied by others), and installed in the common water supply line at the service connection.

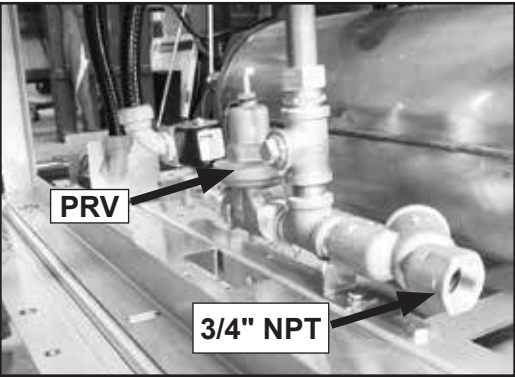


Fig. 16 - Electric heat.

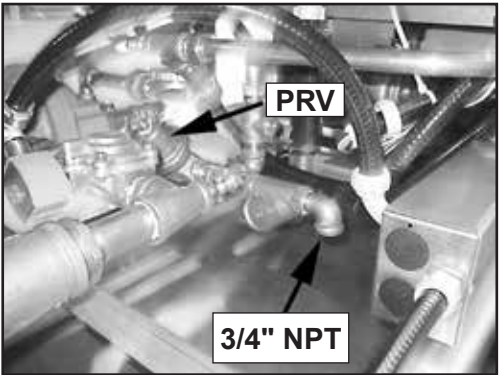
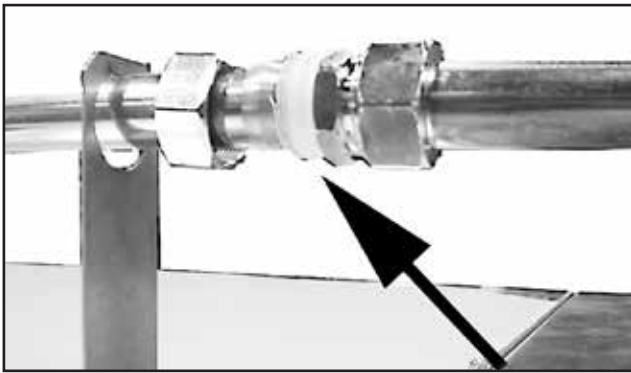


Fig. 17 - Steam heat.

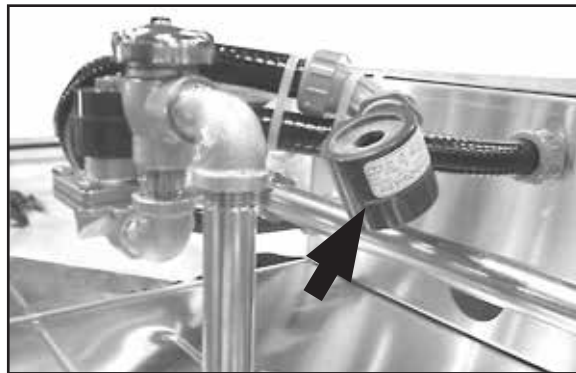
BOOSTER RISE °F/°C	MINIMUM INCOMING WATER TEMPERATURE	MAXIMUM INCOMING SUPPLY FLOWING PRESSURE	MINIMUM/MAXIMUM OPERATING FLOWING PRESSURE
40°F/22°C RISE	140°F/60°C	60 PSI 414 kPa	20-22 PSI 138-152 kPa
70°F/39°C RISE	110°F/ 43°C	60 PSI 414 kPa	20-22 PSI 138-152 kPa
NO BOOSTER	180°F/ 82°C	60 PSI 414 kPa	20-22 PSI 138-152 kPa

## PLUMBING CONNECTIONS (continued)

- **CONNECT WATER LINE COMPRESSION FITTINGS USING TEFLON TAPE. ENSURE FITTINGS ARE TIGHT (FIG. 12).**
- **REMOVE SHIPPING TIES AND INSTALL SOLENOID COILS ON THE WATER SUPPLY VALVES (FIG. 13).**
- **ASSEMBLE THE FLUSHING NOZZLE PIPING LOCATED ON THE LOAD END OF THE MACHINE (FIG. 14).**



*Fig. 18 - Connect compression fittings.*



*Fig. 19 - Connect water solenoid coils.*



*Fig. 20 - Connect flushing nozzle piping.*

## PLUMBING CONNECTIONS

### Cold Water Connection Drain Water Tempering, (DWT)



**COLD  
WATER**



**CAUTION:** The installing plumber must flush debris from the water supply line before connecting it to the dishwasher.

- **1/2" NPT COLD WATER SUPPLY LINE**

MINIMUM INCOMING  
WATER TEMPERATURE

**36°F/2°C**

MAXIMUM INCOMING  
SUPPLY PRESSURE

**60 PSI/414 kPa**



**NOTE:** Install a 1/2" NPT or larger shut-off valve in the cold water supply line as close to the dishwasher as possible for servicing.



*Fig. 21 - DWT 1/2" NPT cold water connection.*

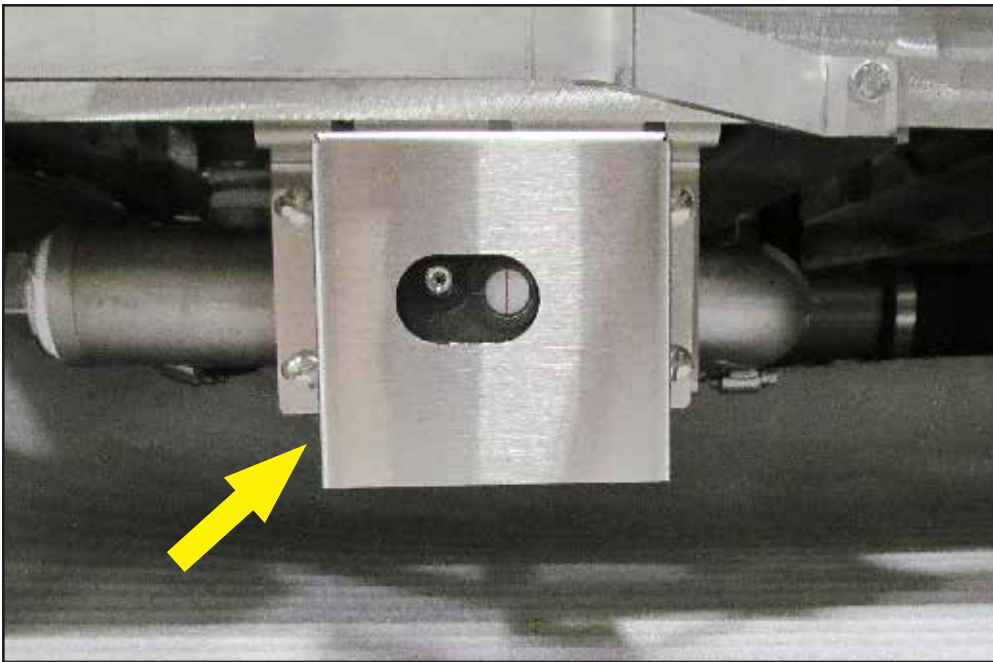
## DRAIN CONNECTION



### DRAIN

- GRAVITY DRAIN - 2" NPT CONNECTION.

- Gravity Drain - 2" NPT connection located at the load end of the machine.
- Max flow is 62 US Gal./Minute
- Use a direct or indirect connection to the building drain in accordance with all local codes.
- The automatic electrically operated drain valves are open when the dishwasher power is OFF and closed when the power is ON.



*Fig. 22 - Electric drain valve.*



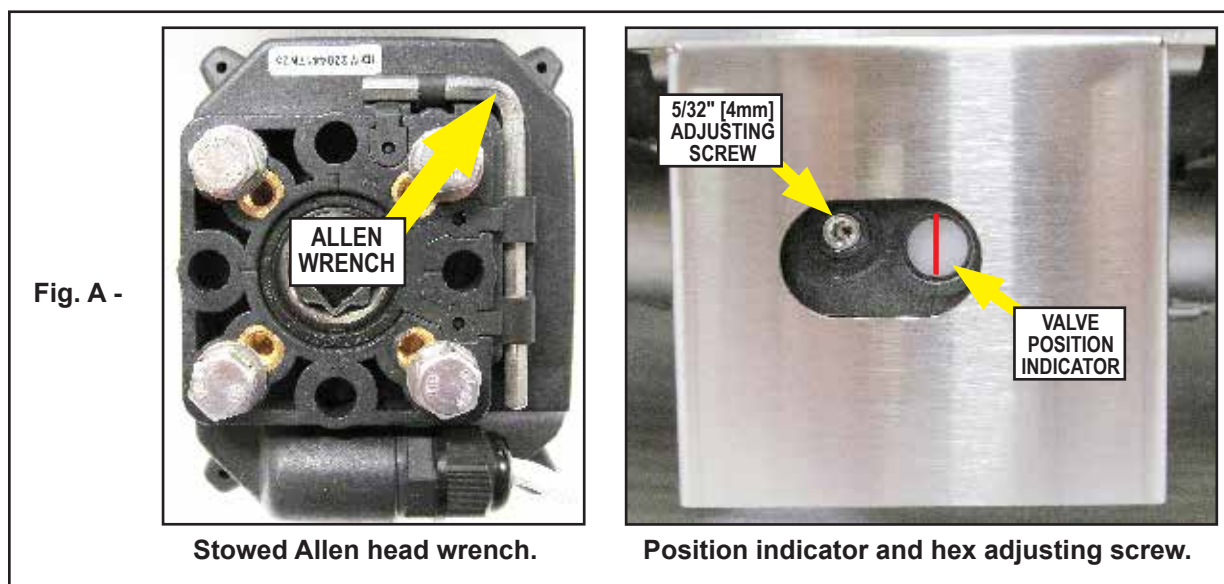
## ELECTRIC DRAIN VALVE MANUAL OPERATION



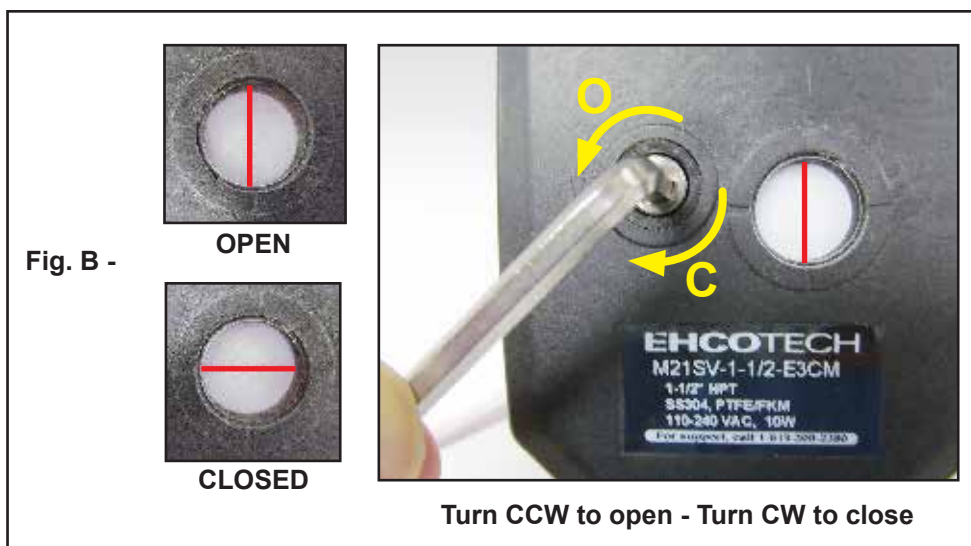
### NOTE:

The machine drain valves open and close at the same time; therefore, turning the machine power off completely drains the machine.

1. The automatic electric drain valve has an adjusting screw to manually open and close it.
2. A stainless steel cover with a view window protects the valve.
3. The valve is equipped with a (red line) valve position indicator, and a 5/32" [4mm] Allen head hex adjusting screw, Fig. A.
4. An Allen wrench is stowed on the back of the drain valve, Fig. A.



5. Insert the Allen wrench into the adjusting screw and turn CCW until the indicator red line is in vertical to open the valve.
6. Turn the screw CW until the red indicator line is horizontal to close the valve.



## ELECTRICAL CONNECTIONS



The installation of the dishwasher 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.



### WARNING:

Electrocution may occur when working on energized circuits. There may be more than one power source connected to the machine. Disconnect power at the main breaker or service disconnect switch, then lock out and tag all circuits to indicate that work is being performed.

- **COMPARE THE ELECTRICAL SUPPLY WITH THE MACHINE ELECTRICAL CONNECTION DATA PLATE BEFORE CONNECTING POWER TO THE MACHINE.**
- **THE CONNECTION DATA PLATE IS ADJACENT TO THE INPUT TERMINAL BLOCK.**

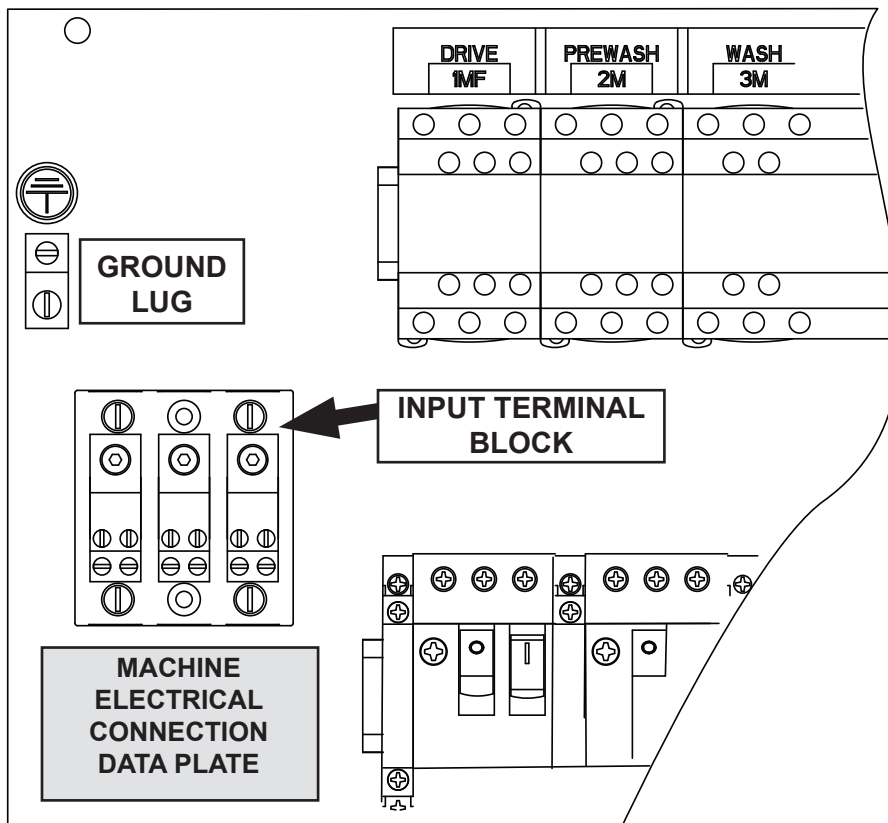


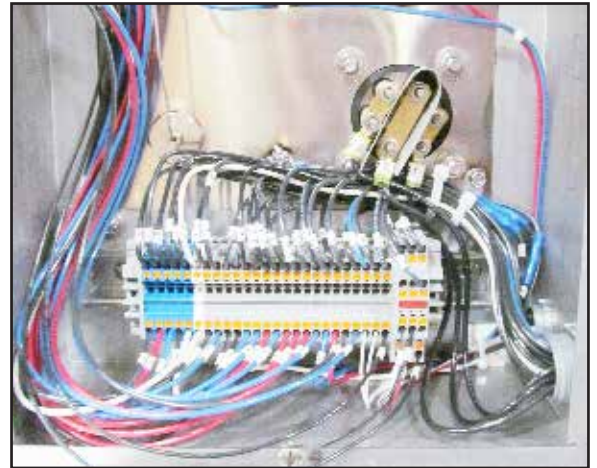
Fig. 23 - Input power block.



## TANK SECTION INTERWIRING



- Connecting wires between the tank sections are disconnected and the sealtite conduit is rolled back to the appropriate section.
- The terminal boxes are located on the center base of each section.
- When the tank sections are completely joined, the conduit is rolled back to the adjacent tank and the wires reconnected as required.
- Terminal block terminals are marked with the corresponding numbers in the conduit wires.



*Fig. 24 - Tank section terminal block.*

## CHANGING MOTOR ROTATION

- All motors are phased the same at the factory.
- Reverse L1 and L2 at the input terminal block to change motor direction of all motors.
- Fig. 23 shows the rotation arrow label on a rear pump housing.

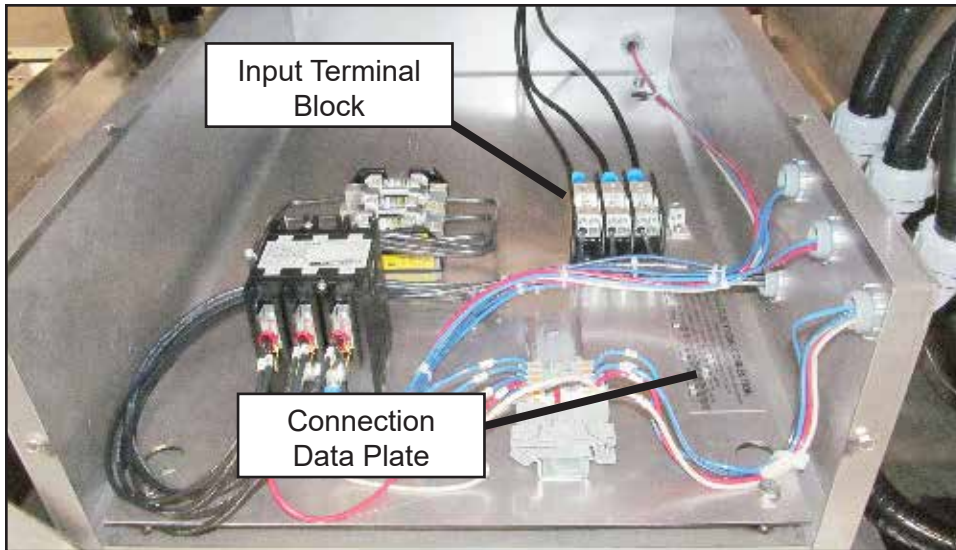


*Fig. 25 -  
All motors are phased the same at the factory.*

## ELECTRIC BOOSTER CONNECTION



- The electric booster cabinet is located at the unload end of the machine.
- The booster cabinet is a separate power connection from the dishwasher.
- Check the Machine Electrical Connection Data Plate before connecting power to the input terminal block.



*Fig. 26 -  
Electric booster power cabinet.*

## STEAM CONNECTION



**STEAM**



**STOP:** Consult the P&E supplied with the machine for exact steam requirements.

- MINIMUM 2" NPT main steam supply line. Wash tank = 1" NPT and external booster = 3/4" NPT.
- Steam connection located at the unload end of the machine.
- High pressure steam supply is 10-30 PSI, low pressure is 7-10 PSI.
- Steam condensate line for the machine is 3/4" NPT, 1/2" NPT for booster.
- Condensate lines must be gravity drain with no back pressure. A condensate lift pump may be required if line is above the machine base.



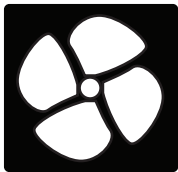
*Fig. 27 - Main Steam Supply Line is 2" NPT*

## Consult the P&E for Specific Consumption Requirements

### Examples of steam consumptions

- **(Example Only)** TANK HEAT: lbs./hr. = 125 LBS.HR. @ 15 PSI.
- **(Example Only)** STEAM BOOSTER: lbs./hr. = 120 LBS./HR. FOR 70°F @ 15 PSI.

VENTILATION - VENT HOOD FAN CONTROL



Standard model installations using an approved vent hood may require a vent fan signal. This signal is supplied by the dishwasher control circuit. A qualified installer must connect a signal circuit to the fuse holder and a common neutral terminal provided.



**CAUTION:** To prevent damage to the dishwasher do not connect the vent fan motor to Line Power 120VAC, 0.5 Amp fused connection terminals. Damage to any component caused by improper installation is not covered by the limited warranty.

The fused 120VAC Line Power only supplies an external vent fan contactor (supplied by others), and is limited to 0.5 AMP maximum load. The 120VAC is powered whenever main power is on.

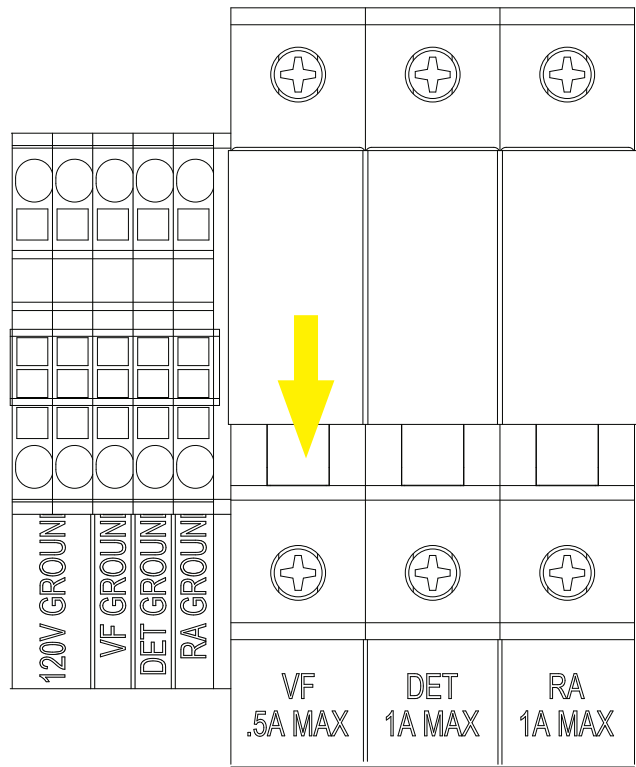
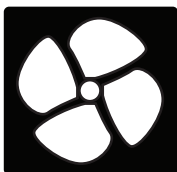


Fig. 28 -  
Vent Fan fuse block is located  
inside the top control cabinet.

## VENTILATION - PANT LEG DUCT SETTING



- Load end = 200 CFM @ 1/4" SP, 71L/sec.
- Unload end = 400 CFM @ 1/4" SP, 189 L/Sec.
- Minimum of six air changes per hour is recommended.
- Two 4" x 16" vent stack with adjustable dampers are supplied with machine.

**NOTE:**

Loosen the wing-nut holding the damper handle and turn it to open or close the damper to adjust the steam exiting the machine.

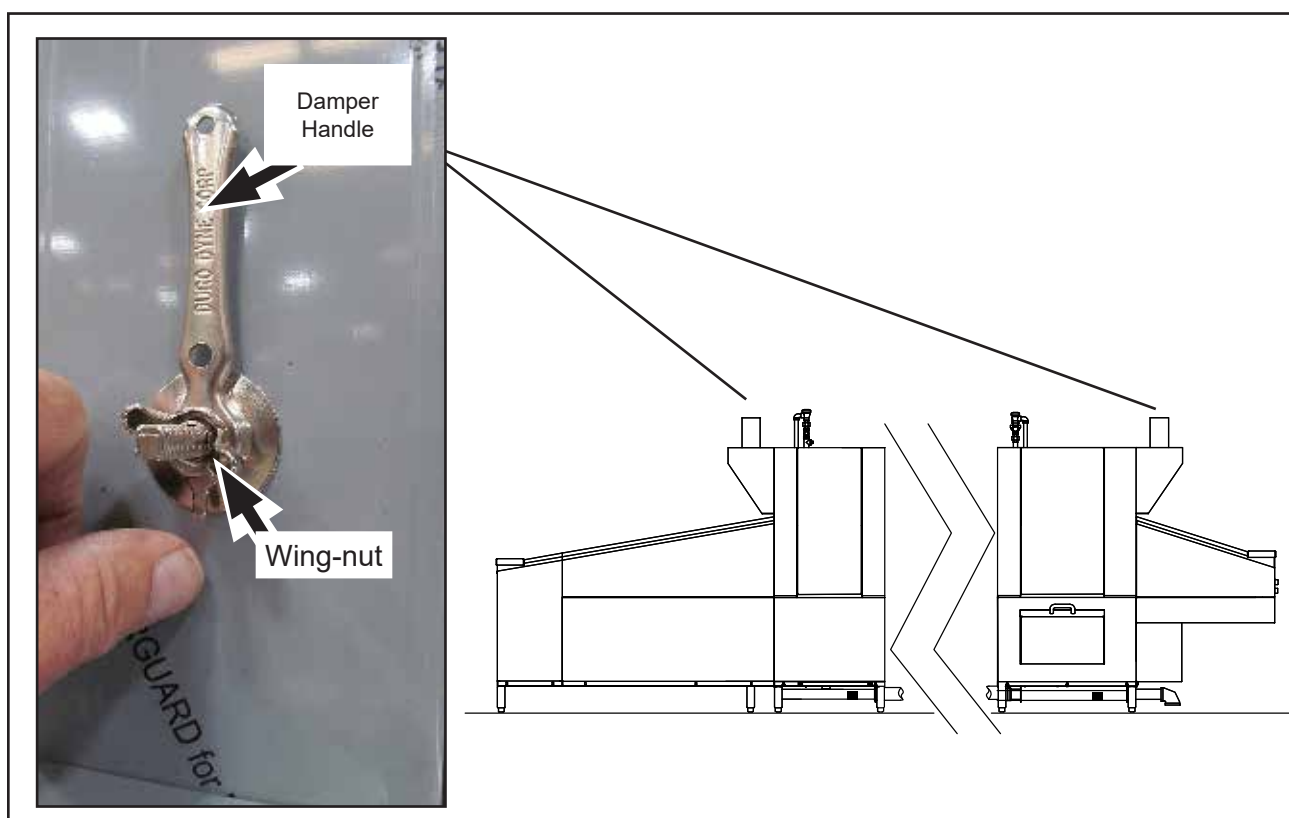


Fig. 29 - Vent ducts.

# DETERGENT DISPENSER CONNECTION



- Use a non-chlrinated commercial grade detergent.
- A 7/8" diameter hole for a detergent sensor is provided in the wash tank.
- Detergent injection point supplied by others.
- A fused 120 VAC 0.5 A max load detergent signal connection is provided inside the top-mounted control cabinet.
- The detergent signal is enabled whenever the dishwasher power is on.

WASH TANK CAPACITIES (US GAL.)		
TANK SIZE	MODEL	
	EUCCW	EUCC
C4	38	31
C6	24	19
C8	38	31



**NOTE:**  
Consult the chemical supplier for the proper detergent and the detergent injection point.

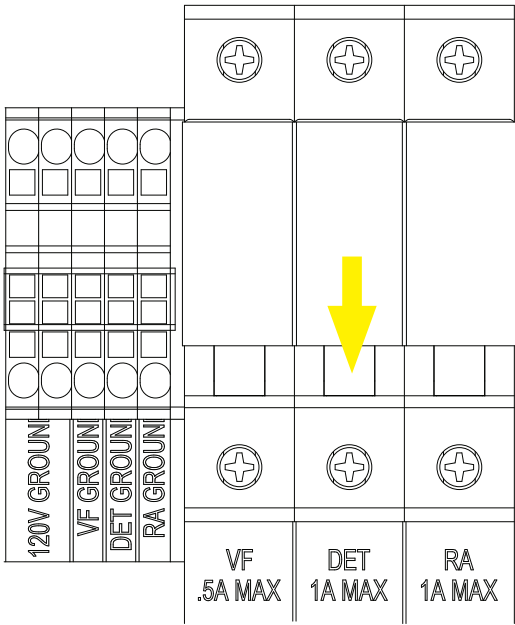


Fig. 30 -  
Detergent fuse block is located inside the top control cabinet.

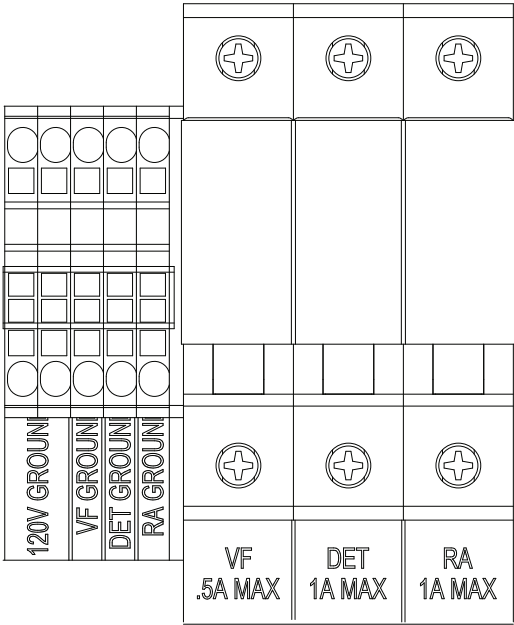


Fig. 31 -  
Detergent sensor location provided in side of wash tank.

# RINSE-AID DISPENSER CONNECTION

**R/A**

- RINSE-AID CONSUMPTION = 58 US GAL./HR.
- 1/8" NPT PIPE PLUG PROVIDED IN FINAL RINSE PIPING.
- FUSED 120VAC 1.0 AMP MAX LOAD RINSE AID SIGNAL CONNECTION IS PROVIDED INSIDE THE CONTROL CABINET.



**NOTE:**  
Consult the chemical supplier for the proper  
rinse-aid.

Fig. 32 -  
Rinse-aid fuse block is located inside  
the top control cabinet.

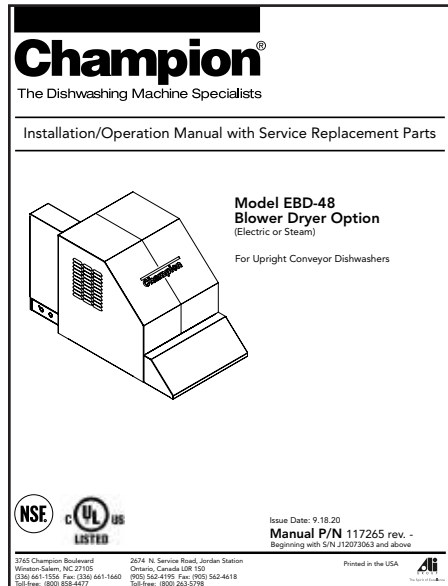


Fig. 33 -  
Rinse-aid injection point.



## OPTIONAL BLOWER DRYER ASSEMBLY

- The Upright Conveyor Dishwasher may be equipped with an electric or steam heated blower dryer to aid in drying.
- Refer to the Model EBD-48 Blower Dryer Manual, P/N 117265, shipped with the dishwasher.



*Fig. 34 -  
Blower Dryer Manual*

## OPTIONAL HRU HEAT RECOVERY Unit

- The Upright Conveyor Dishwasher may be equipped with Heat Recovery Unit to capture exhaust heat for final rinse water heating.
- Refer to the Model HRU Manual, P/N 117266, shipped with the dishwasher.



*Fig. 35 -  
HRU Manual*



