INSTALLATION

FT900 SERIES DISHWASHERS

MODELS ML-110668-U covers all of the following models:

FT900
FT900BD

FT900S
FT900SBD

FT900D
FT900DBD

FT900SD
FT900SDBD

FT950
FT950BD



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Do not throw out any loose parts. These may be required for installation or operation.

NOTES FOR THE INSTALLERS

Read the entire installation manual before installing the machine.

1. Do not use a forklift to move or unskid machine sections.
2. Do not throw out any loose parts. These may be required for installation or operation.
3. Electrical Connections:
    - Make sure line voltage matches the machine data plate located on the control box.
    - Make sure wiring connections to terminal block match the diagram inside the control box cover.
    - Make sure the pilot circuit transformer is set to the correct voltage. Refer to Voltage Adjustment, page 22.
4. Level center section in operating position. **Center section must be level end to end and front to back.** Refer to Leveling the Center Section, pages 7, 8.
5. Conveyor: Refer to the Conveyor Assembly section of the installation manual. **After installation, the conveyor must run continuously for 15 minutes and then be checked for alignment. Adjust if necessary and rerun for another 15 minutes. Then recheck alignment and retighten locknuts on take-up unit when finished.**
6. Make sure all curtains and drainback pans are in operating positions. Refer to the Curtain and Drainback Pans section, pages 31 – 34.
7. Check all water and steam unions for tightness.
8. Regarding drain installation, make sure that drain piping is free of any leaks. With drain pipes positioned for operation, move hose clamps out and against each side of the drain tee. Refer to Installing the Drain Pipe, page 17.
9. Give the operation manual to the owner.

How to Reduce the Clearance Height of the Control Box During Move-In

This procedure will reduce the overall height of the dishwasher by 1 1/8" to allow it to travel through a low-height corridor or doorway.

1. Remove upper shipping hinge by unscrewing two 5/16-18 bolts, lockwashers, washers and nuts.
2. Remove lower shipping hinge by unscrewing two U-bolts and one other 5/16-18 bolt with lockwashers, washers and nuts.
3. Save all removed materials.

⚠ WARNING The control box must be securely supported by at least two people while its mounting studs are being shifted to lower slots of the shipping braces.

The rear of the main control box (Fig. 1) is attached to the two shipping braces on the center section by four 5/16-18 threaded studs, lockwashers, washers and nuts. The shipping braces have slots that allow the control box to be lowered by 1 1/8".

4. While two people securely support the main control box, remove the four 5/16-18 nuts and lockwashers from the main control box's rear studs that project through the shipping braces.
5. At least two people should CAREFULLY CONTROL and withdraw the main control box's rear studs from the center section's shipping braces. Lower the main control box's threaded studs to the next lower slots. Refasten the main control box's threaded studs with the same 5/16-18 bolts, lockwashers and nuts removed in step 4.
6. Move the dishwasher past all low-height corridors or doorways.
7. Reverse steps 5, 4, 2 and 1 to return the main control box to its shipping condition for proper installation.

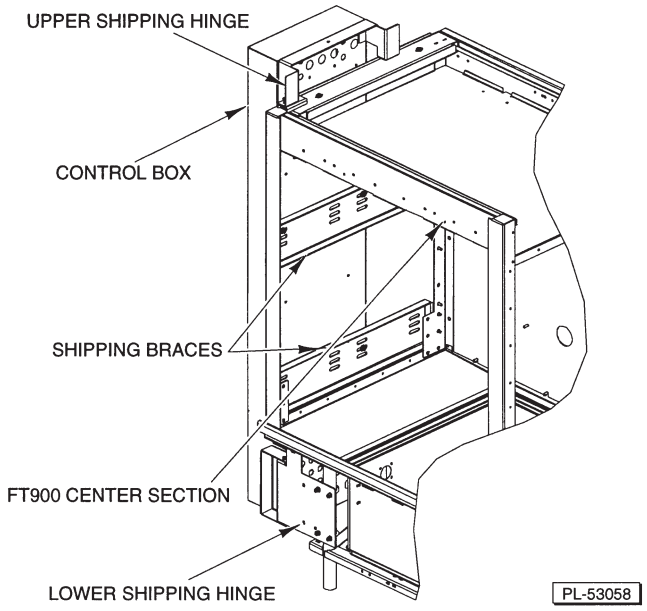


Fig. 1

UNPACKING

Immediately after unpacking the dishwasher, check for possible shipping damage. If the machine is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Before installation, test the electrical service to make sure it agrees with the specifications on the machine data plate located on the control box. The electrical diagram is located inside the control box door.

Strainer baskets, strainer pans, pump inlet strainers and wash arms are taped and shipped in place. Remove tape, but retain all parts in their proper places. If any parts are temporarily removed during installation, return them to their proper places after installation is complete.

Before installing, check to make sure that necessary electrical, plumbing and exhaust accommodations are provided at the installation location. Take measurements of site's plumbing, electrical and exhaust connections; then take corresponding measurements of the machine to make sure all connections are correctly mated. If necessary to lower control box during move-in, slotted holes are provided on the control box shipping braces to allow adjustment for clearance height. Refer to page 5.

REMOVING EACH SECTION FROM ITS SKID

NOTICE Do not use a forklift to move or unskid machine sections. Doing so may result in damage to the machine.

1. Remove the lag bolts that are securing the crossmembers to the front and rear runners.
2. Remove the lag bolts from the leg shipping brackets.
3. Carefully raise one end of the section just enough to slide the skid rails from under it and remove the leg shipping brackets.
4. Repeat steps 1 through 3 at the other end.
5. Thread the feet into the legs as far as possible; then back out three full turns. Standard legs have 3" threaded studs for maximum adjustment. If special feet were ordered with extra long leg shanks to accommodate a highly sloped floor, install them where the low points in the floor occur at leg locations on the machine before setting the unit on the floor.
6. Open all inspection doors and remove all wrapped parts and boxes from inside each machine section.
7. Remove any packaging, tape, wire and bracing from each section. Remove all rear and lower panels.
8. Verify that shipping tape has been removed from all floats in each tank and that the floats are free to operate properly.

NOTE: Do not throw out any loose parts. These may be required for installation or operation.

LOCATION

Allow adequate space for machine installation and operation. Place the machine sections close to their final position. Allow space to work on the ends of the center section.

Review, but do not remove, tags or labels. Remove tags after installation is complete.

POSITIONING THE CENTER SECTION

Use a chalk line on the floor to align the machine along its complete length.

With each section in its approximate final position, determine which section is at the high point on the floor. **Machine assembly begins after the center section has been leveled to a height that compensates for the floor height of the other sections.**

LEVELING THE CENTER SECTION WITH SLIDING DOORS

With the center section is in its final operating position, it must be leveled at a height that allows the other sections to be level.

- Level the center section along its length by placing the level at various points along the tank support rails (Fig. 2) and threading the feet in or out as required.
- Level the center section front to back by placing the level on top of the chamber at each end (Fig. 3).



Fig. 2

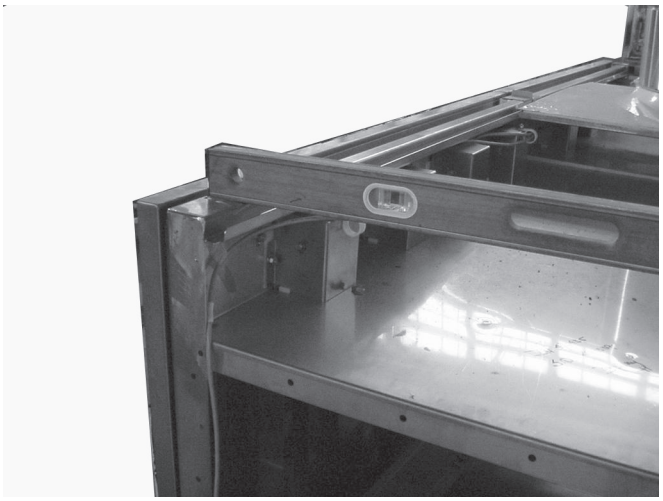


Fig. 3

LEVELING THE CENTER SECTION WITH HINGED DOORS



Fig. 4

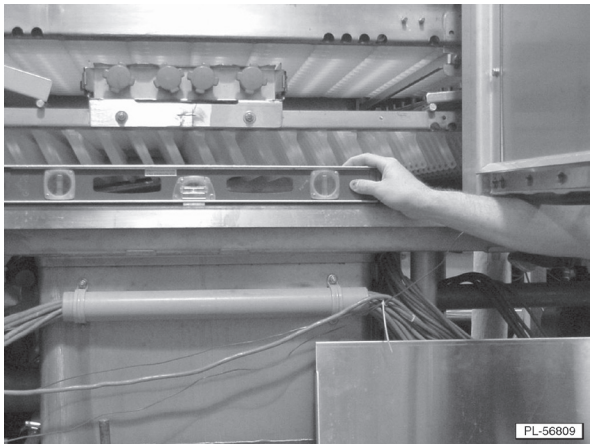


Fig. 5

For center sections with hinged doors (Fig. 4), leveling is an important installation function because it could affect door operation and cause leaks once the machine is operating.

- Level the center section along its length by opening the doors and placing the level between the doors along the tank support rail (Fig. 5) or on top of the chamber front (Fig. 6). Do not check level on top of doors. Adjust the feet in or out as required to level.
- Continue to level the center section front to back by placing the level across the top corners of the chambers on both ends of center section (Fig. 7).
- **NOTE:** Do not adjust doors until the machine is completely assembled and ready for initial testing with the pumps running.

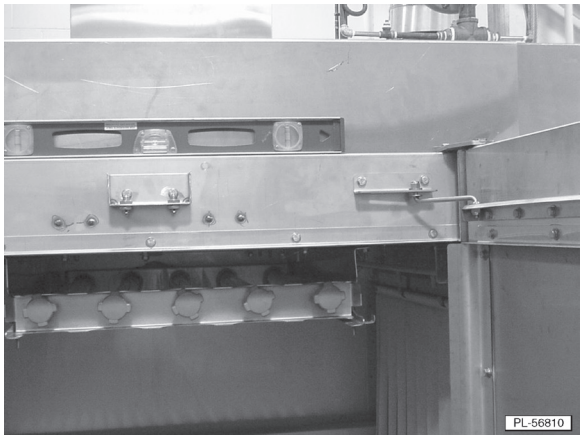


Fig. 6

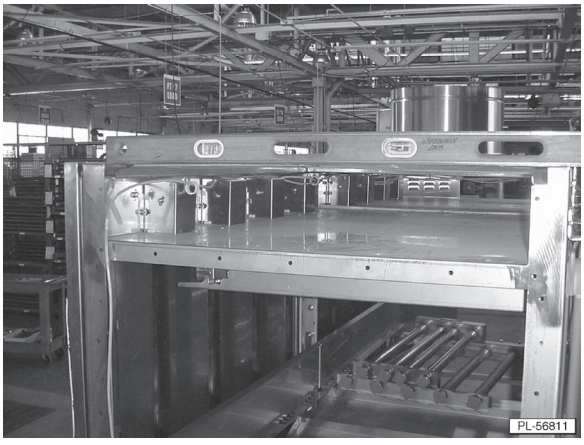


Fig. 7

ASSEMBLY

ROTATING CONTROL BOX 90 DEGREES

The main control box is shipped with upper and lower shipping hinges connected to the center section. Loosen the control box from the shipping braces and remove the shipping braces. Use the upper shipping hinges (Fig. 8) to rotate the control box 90 degrees. Do not remove the upper shipping hinges until after the unload and center sections are joined.

Pull the control box out about 1" to allow mating of center and unload sections without interference with studs projecting from rear of control box.

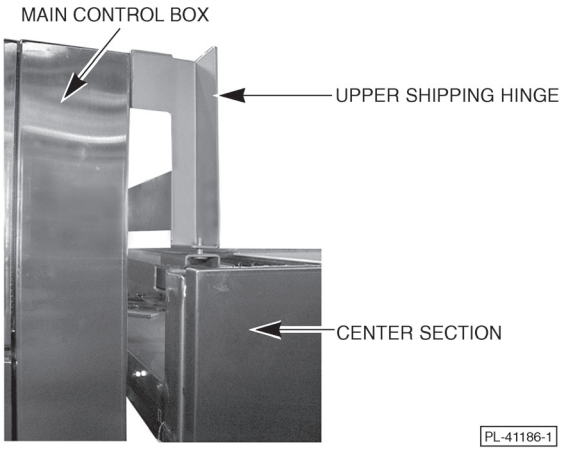


Fig. 8

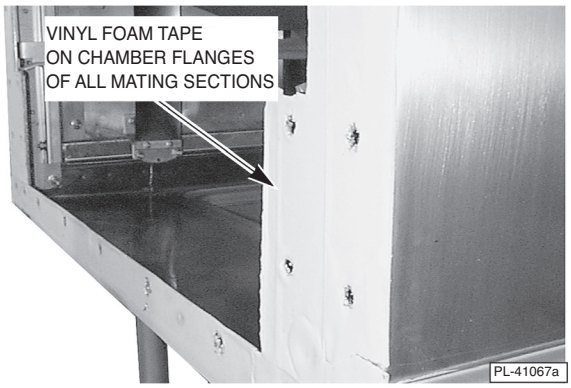


Fig. 9

INSTALLING FOAM TAPE ON CHAMBER FLANGES & CONTROL BOX MOUNTING SURFACE

Cut strips of vinyl foam tape to fit the top, bottom and sides of the chamber flanges of the load, unload and both ends of the center section to make a good seal (Fig. 9). Apply foam tape, provided, to unload section where the rear perimeter of the control box will be mounted.

POSITIONING THE ADJACENT LOAD OR UNLOAD SECTIONS

Move the adjoining (load or unload) section to within several inches of the prepared end of the center section. Adjust the feet of the section adjacent to the *leveled center section* so tank supports are the same height. Peel the protective paper from the vinyl foam tape and move the second section to its final position. Be very careful that mating components connect and fit together properly.

NOTE: On models FT900, FT900D, and FT950, insert the flowback pipe in the coupling on the prewash tank so the notched end faces the wash tank coupling. Refer to page 16 and Fig. 21.

LEVELING THE LOAD AND UNLOAD SECTIONS

The tank support rails should be level across the entire length of the machine (Fig. 5). Sections to be mated should be level front to back (Fig. 7). Refer to page 8.

- Abutted sections are parallel; the foam tape line is vertical (Fig. 10).
- All adjoining components of the two sections are exactly in line with each other.
- Top corners of adjoining sections are the same height.

JOINING THE SECTIONS TOGETHER

On models FT900D and FT900SD, remove the dual rinse pan support brackets before joining the two sections at the unload end together. Reinstall the dual rinse pan support brackets in their original shipped positions after the two sections at the unload end have been joined.

Use drift pins to align the holes in the horizontal and vertical chamber flanges of the mated sections. Use C-clamps to hold the sections in position while bolting the chamber front and back flanges together (Fig. 11). Exercise care to avoid tearing the foam tape seal.

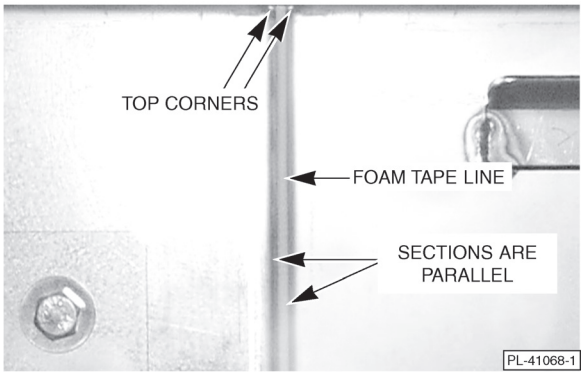


Fig. 10

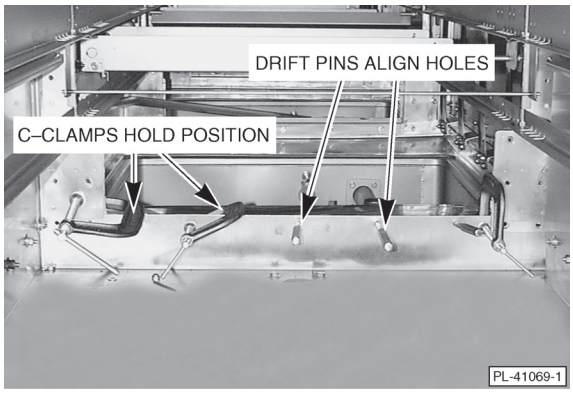


Fig. 11

NOTICE When installing a blower-dryer unload section, remove the air deflector pans. Do not stand, sit or lie on them. Blower-dryer performance could be compromised.

INSTALLING THE CURTAIN BAFFLES — TOP OF CHAMBER FLANGES

Install one curtain baffle on each side of the top of the chamber flanges where sections are being joined using appropriate fasteners and Permagum, supplied (Fig. 12).

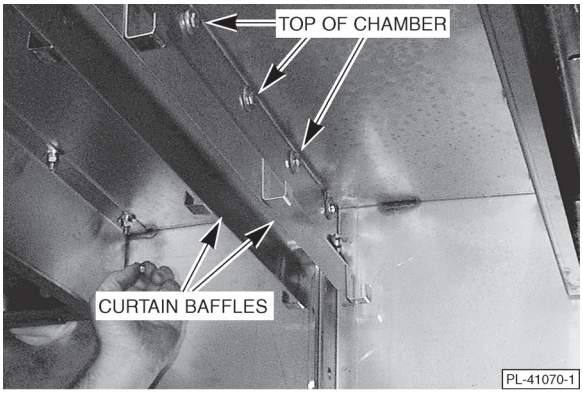


Fig. 12

CHAMBER FLANGE AND BOLT ASSEMBLY AT EACH SECTION JOINT				
Description	**Qty.**	**Bolt Size**	**Assembly Order**	**Instructions**
Short Bolt - Use except where Long Bolts or Large Bolts are required.	21	1/4-20 x 1"	[Bolt, Washer] [Washer, Lockwasher, Nut]	Use Permagum on insides of washers on both sides of chamber flanges.
Long Bolt - Use on Saddle Joints and End Caps	11	1/4-20 x 1 1/8"	[Bolt, Washer] [Washer, Lockwasher, Nut]	Use Permagum on insides of washers on both sides of saddle joints and End Caps
Large Bolt - Use behind conveyor side rails.	4	5/16-18 x 1 1/8"	[Bolt, Washer] [Washer, Lockwasher, Nut]	Use Permagum on insides of washers on both sides of conveyor side rails.

INSTALLING THE SADDLE JOINT — BOTTOM OF CHAMBER FLANGES

1. Seal the tank end flanges where sections join, using a saddle joint and two end caps.
2. Place the saddle joint over the tank end flanges and make sure that all bolt holes are aligned. After verification, remove components.
3. Cut five strips of 1/2"-wide Permagum equal to the length of the saddle joint.
4. Put Permagum on the outside faces of the tank flanges: one strip horizontally at the bottom on both sides, one strip horizontally over the holes on both sides and one strip on top where the two flanges butt together (Fig. 13).

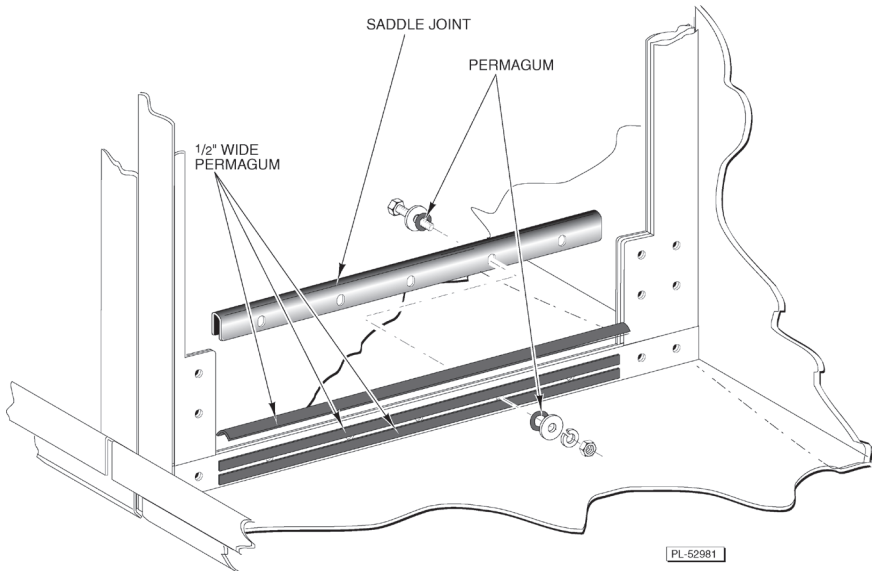


Fig. 13

5. Position the saddle joint over the Permagummed tank flanges and align the bolt holes using drift pins (or punches).
6. Bolt the saddle joint to the bottom tank flanges with the three long bolts, nuts, washers and lockwashers provided.
7. Use Permagum on insides of washers on both sides to make an adequate seal. You may have to use a C-clamp on the saddle and saddle caps to get the hardware started.

NOTE: For ease of installation, do not put Permagum inside saddle joint.

SADDLE INSTALLATION FOR SPLIT LOAD OR SPLIT UNLOAD SECTIONS

Follow steps 1 through 7 on page 11 when installing split load sections or split unload sections; the two end caps shown in Fig. 15 are not used when load or unload sections are shipped split.

INSTALLING THE END CAPS — BOTTOM OF CHAMBER FLANGES

1. Fit end caps into position using drift pins and mark lines at their ends. Remove the end caps.
2. Apply a single layer of Permagum to the flange edges, where the top of the end caps will cover.
3. Cut the strips of 1/2"-wide Permagum and apply (Fig. 14) in a double layer over the chamber flanges, where the front edge of the front end cap and the rear edge of the rear end cap are marked.
4. Cut strips of 1/2"-wide Permagum and apply in a single layer where the bottom of the end caps will be located (Fig. 14).
5. Over the rest of the chamber flanges, where the three side holes of the end caps will be located, apply a strip of foam tape up and over to both sides.
6. Cut strips of 1/2"-wide Permagum and apply in a single layer up and over the inside end of the end caps on both sides, where marked (Fig. 14). Apply a strip of foam tape over the Permagum.

NOTE: For ease of assembly, do not put Permagum inside end caps.

NOTE: Flare end cap as shown (Fig. 17) for ease of assembly.

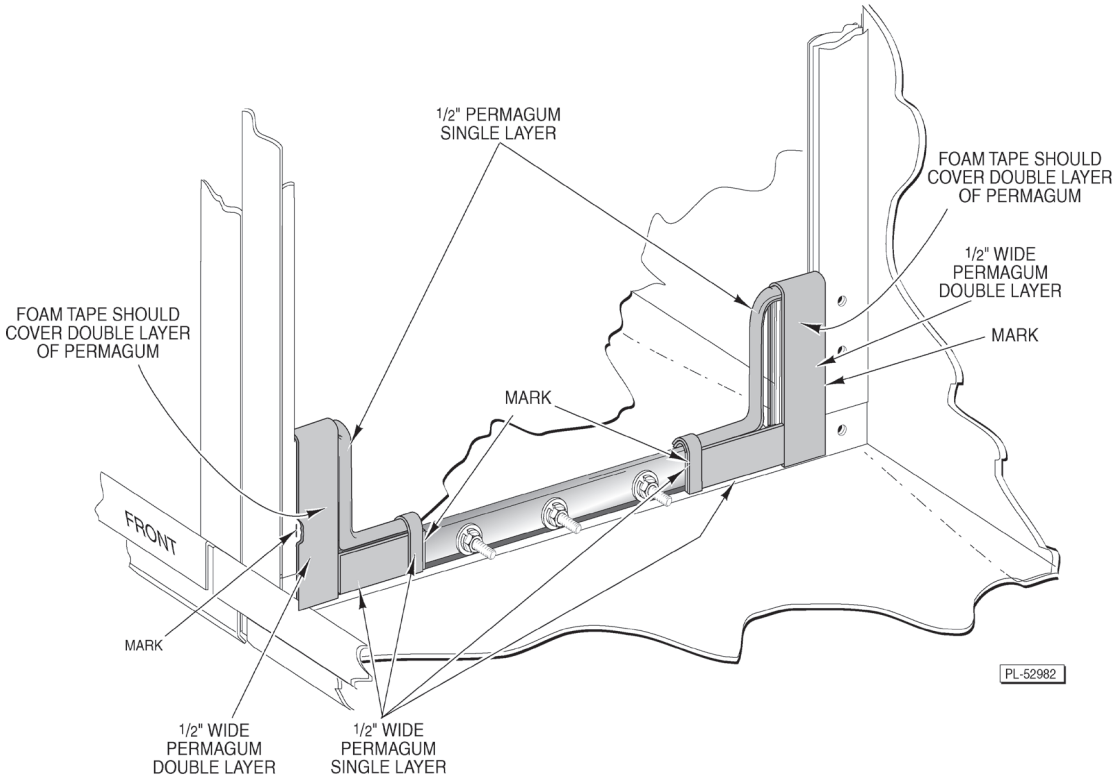


Fig. 14

7. Position the end caps over the ends of the saddle joint at the bottom corners of the chamber flanges.

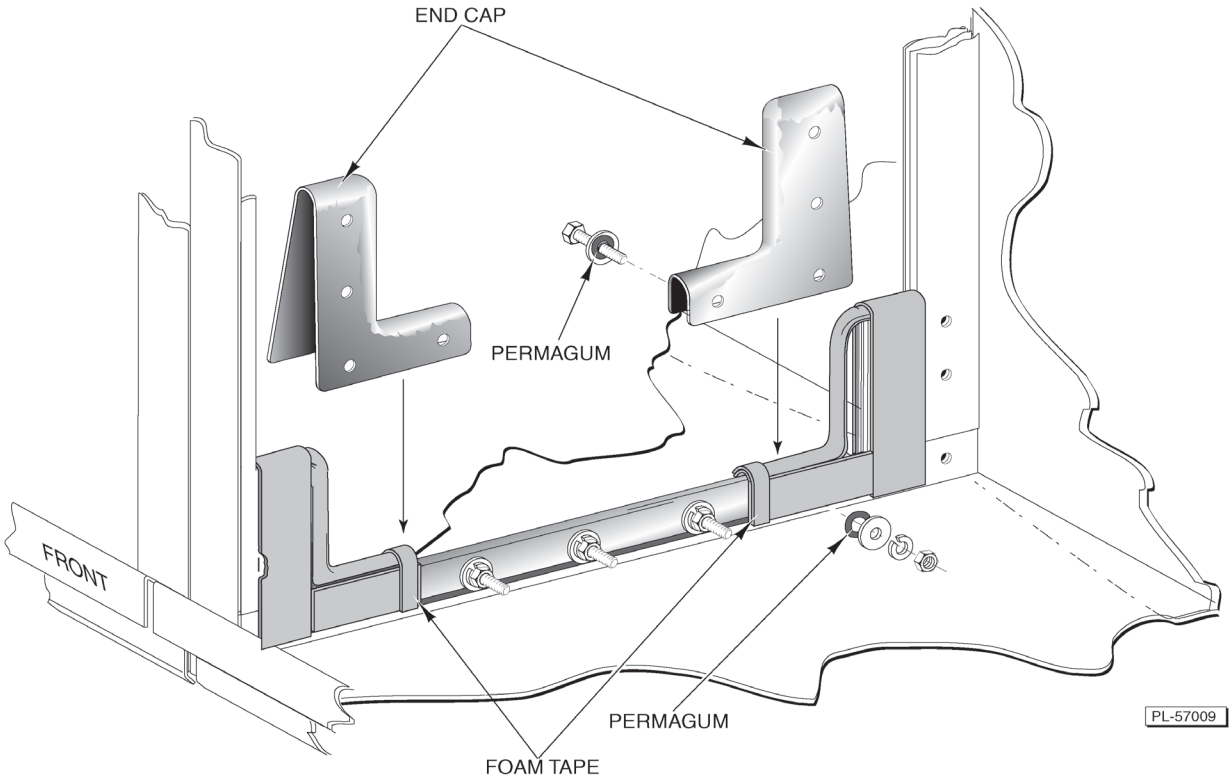


Fig. 15

8. Align bolt holes using drift pins (Fig. 16). Flare open ends of saddle end caps for ease of assembly (Fig. 17).

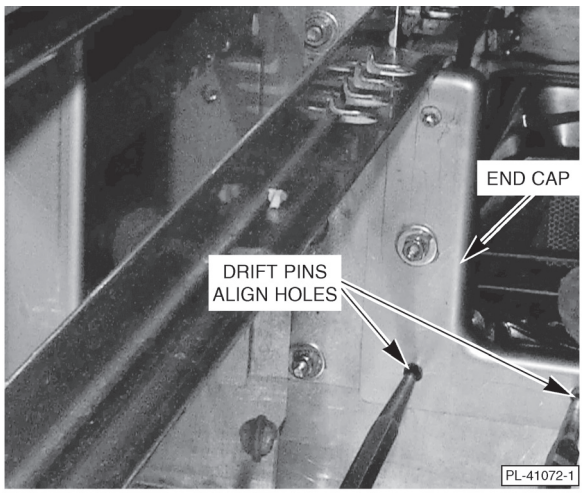


Fig. 16



Fig. 17

9. Bolt end caps through saddle joint slots and chamber flange holes (long bolts, nuts, washers and lockwashers are provided) (Fig. 18). Use Permagum on inside of washers on both sides to make an adequate seal.

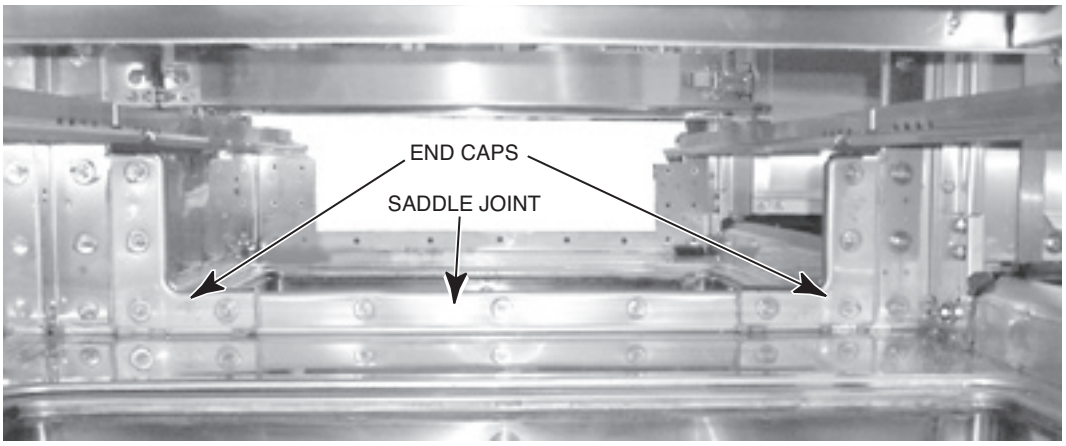


Fig. 18

10. Join all dishwasher sections, as required. Tighten all remaining bolts that connect the chamber flanges. Use Permagum on inside of washers on both sides to make an adequate seal.

ASSEMBLING SPREADER BAR TO BASE FRAME BEHIND CONTROL BOX

Assemble the spreader bar, joining the front base frame of the center and unload sections (Fig. 19). Use $^{5}/_{16}$-18 bolts, lockwashers, washers and nuts, provided.

ATTACHING CONTROL BOX TO UNLOAD SECTION

1. The spreader bar (Fig. 19) provides a support for the bottom of the control box. Use wood blocks to lift and support the control box temporarily (Fig. 19).
2. Remove shipping hinges and position the control box on the unload section in the proper location (align uniformly $^{1}/_{4}$" along the edge of the preceding adjacent door, wash FT900S and power-rinse FT900 and FT950).
3. Secure the control box with the four weld studs on the back of the control box through the holes provided in the front of the unload section using four $^{5}/_{16}$-18 washers, lockwashers and nuts.

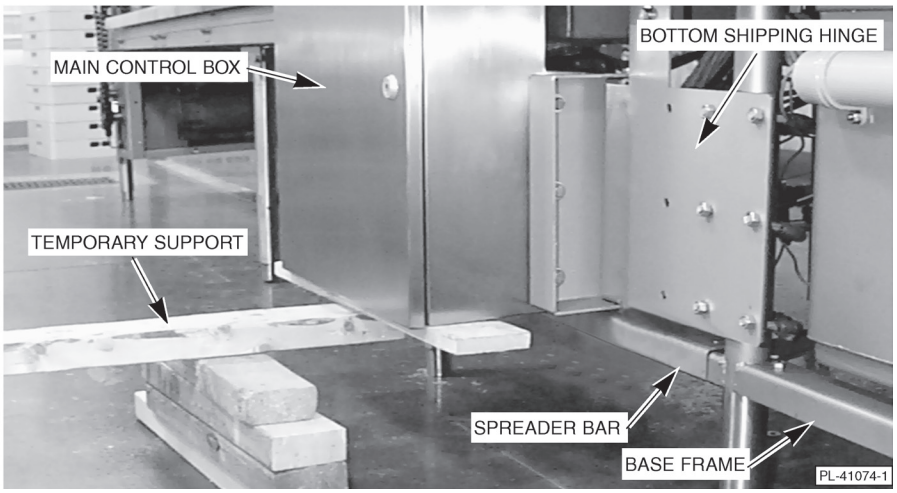


Fig. 19

CONTROL BOX CONNECTIONS

Refer to the electrical diagram stored inside of the main control box door in a protective plastic bag. After use, make sure that the electrical diagram is returned to the plastic bag.

Although each section is prewired, components in the load and unload sections must be electrically connected to the main control box that is attached to the unload section. All wires that need to be connected are furnished with stripped leads and have crimped barrel terminals for terminal block connections. Also provided are locking plug connectors for control boards.

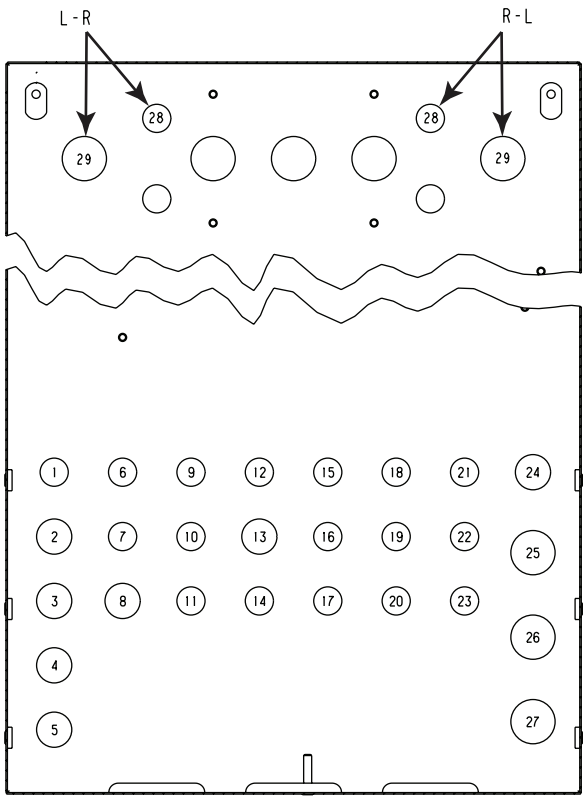
Run wires in proper routing clips, channels and so forth to openings in the lower rear of the main control box. Specific connection locations are shown viewed from the front (Fig. 20). Run wires (in conduit) through conduit fittings; run cordage through strain reliefs. Make proper connections for wires and cordage. Properly tighten strain reliefs and conduit fittings.

After all wires are routed and connected at terminal block, check to make sure any unused holes are plugged (Figs. 20 and 33).

DO NOT permit electric cables or conduit to touch steam pipes.

When making connections to the terminal block (5TB), torque screws to 12 inch-pounds minimum to secure wires and to avoid damage to terminals.

HOLE	CONDUIT SIZE	USAGE
1	1/2"	SINGLE & DOUBLE STEAM BOOSTER THERMOSTATS
2	3/4"	J8 / LOAD SWITCH BOX
3	3/4"	J11 / TANK 3 FLOAT BOX
4	3/4"	J13 / TANK 2 FLOAT BOX
5	3/4"	J10 / TANK “D” (EXTRA TANK) FLOAT BOX (SEF)
6	1/2"	4MTR / CONVEYOR MOTOR
7	1/2"	J9 / UNLOAD SWITCH BOX
8	3/4"	J12 / TANK 1 FLOAT BOX
9	1/2"	3MTR / PREWASH PUMP MOTOR
10	1/2"	J2 / DOOR INTERLOCKS
11	1/2"	J15 / FINAL RINSE THERMISTER
12	1/2"	7MTR / FLUSH PUMP MOTOR
13	3/4"	DUAL RINSE HEAT BOX - TANK “D”
14	1/2"	J16, ELEC BSTR TEMP PROBE / HIGH LIMIT T-STATS
15	1/2"	TANK 1 STEAM HEAT VALVE
16	1/2"	TANK 2 STEAM HEAT VALVE
17	1/2"	
18	1/2"	J3 / WATER VALVES
19	1/2"	8MTR / DUAL RINSE PUMP MOTOR
20	1/2"	ENERGY RECOVERY CONTROL CABLE
21	1/2"	1MTR / TANK 1 PUMP MOTOR
22	1/2"	2MTR / TANK 3 PUMP MOTOR
23	1/2"	J6 / BOOSTER / ELECTRIC OR STEAM
24	3/4"	
25	1"	TANK 1 HEAT BOX
26	1"	TANK 2 HEAT BOX
27	1"	TANK “D” (EXTRA TANK) HEAT BOX (SEF)
28	1/2"	BLOWER DRYER STEAM VALVE
29	1"	BLOWER DRYER ELECTRIC HEAT



NOTE: IF A HOLE IS NOT USED, COVER IT WITH A HOLE PLUG:
FOR .875” DIA. HOLES (1/2” CONDUIT SIZE) USE PLUG NO. PB-004-08
FOR 1.094” DIA. HOLES (3/4” CONDUIT SIZE) USE PLUG NO. PB-005-17
FOR 1.375” DIA. HOLES (1” CONDUIT SIZE) USE PLUG NO. PB-005-16

Fig. 20

Using the supplied NSF-approved sealer, apply a bead of caulk where each side of the control box meets the tank support rails to allow any moisture condensation to drain back into the tank.

INSTALLING THE FLOWBACK PIPE (Wash to Prewash Tanks)

Install the flowback pipe between the wash tank and the prewash tank (Fig. 21).

Make sure the flowback pipe is adequately lubricated with Parker “Super-O-Lube” (not supplied) or a household liquid dishwashing detergent. Make sure O-rings are in their proper places on the coupling: Two inside and one on the flange end.

Models FT900, FT900D, FT950 — use straight pipe.

- With the connecting fitting already mounted on the prewash tank, slide the unnotched end of the flowback pipe into the coupling so it extends about 6" into the prewash tank.
- Slide the notched end of the flowback pipe into the fitting on the wash tank so the cutout in the end of the flowback pipe mates with the tab in the fitting.

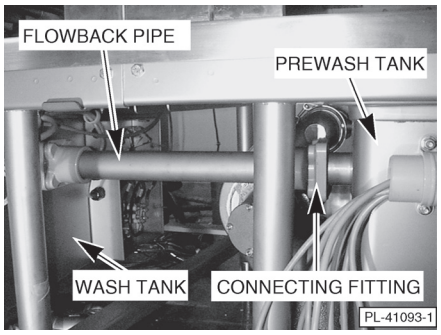


Fig. 21

Models FT900S, FT900SD — use swept-end pipe.

- Loosen the nut on the fill piping support clamp and slide the flowback pipe toward the prewash tank. As the straight end of the flowback pipe penetrates the coupling, make sure the notch on the pipe mates with the rib on the coupling mounted on the prewash tank. The swept end of the pipe will be open upwards in the wash tank.
- Re-tighten the nut on the fill piping support clamp.

INSTALLING THE DUAL RINSE FLOWBACK PIPE

Install the flowback pipe for models FT900D and FT900SD (Fig. 22).

Models FT900D, FT900SD only.

1. Loosely assemble the hose and clamps on the pipe coming out of the fitting on the dual rinse tank.
2. Insert the long end of the flowback pipe into the fitting on the adjoining center tank. The offset end will probably hang down temporarily.
3. Rotate the offset end of the pipe to align with the hose.
4. Insert the offset end of the pipe so it is halfway in the hose.
5. Tighten the clamps so one clamp tightens to the hose and the pipe from the dual rinse tank; the other clamp tightens to the hose and the offset end of the flowback pipe.

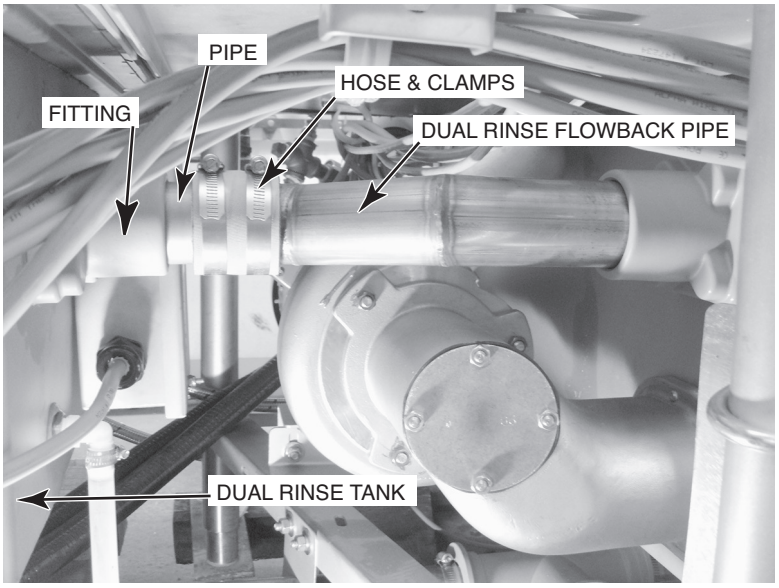


Fig. 22

INSTALLING THE DRAIN PIPE

Install the drain pipe between the adjoining tank sections as follows:

1. Mark the drain pipe 3" from each end with a legible mark. (Use marking pen, lead pencil, etc.)
2. The arrow molded in the drain T-connector indicates the direction of flow.
3. Lubricate the molded drain T-connectors at each end of the drain pipe using Parker “Super-O-Lube” (not supplied) or a household liquid dishwashing detergent. Do not use animal-, vegetable- or petroleum-based lubricants.
4. With a twisting motion, slide the pipe into one of the molded drain T-connectors.
5. Lift the other end, align it with the molded drain T-connectors and, with a twisting motion, slide the pipe until the legible marks are approximately equal distance from each face of the T-connector (Fig. 23). Position hose clamps snug against molded drain T-connector at both ends and tighten (Fig. 23).

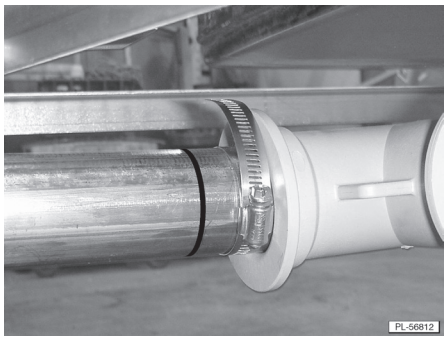


Fig. 23

CHECKING OPERATION OF DISH LIMIT SWITCH

Before installing the conveyor, check the operation of the dish limit actuator to make sure the magnet on the bottom of the bracket does not rub the tank. If it rubs or if the dish limit switch does not actuate, adjust the magnet up or down by loosening the bottom nut. (The factory setting is 0.104" above the tank bottom.)

CHECKING THE POSITIONS OF THE DRAINBACK PANS

Check the positions of the drainback pans to make sure water flows through the machine as intended.

The drainback pans between joining sections generally drain in reverse direction from the conveyor’s principle motion. For example, the drainback pans for a R to L machine flow to the right at section joints. For a L to R machine (Fig. 24), the drainback pans flow to the left at section joints. Refer to the illustrations for Curtains and Drainback Pans for various FT900 models on pages 31 – 34.

For makeup water flow to be correct, the final rinse drainback pan (FT900 and FT950 only) must be properly positioned — the pan must rest over the rod in the track support with the outlet positioned directly above the makeup pipe collector. After butting the pan against the rod, tighten the screw to secure the pan in position. Check to be sure that the makeup pipe collector is vertical.

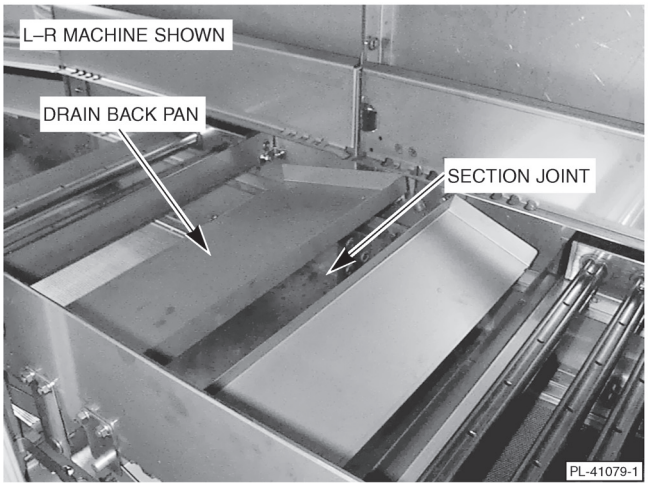


Fig. 24

DUAL RINSE DRAINBACK PAN INSTALLATION — MODELS FT900D & FT900SD

1. Make sure dual rinse pan support brackets are mounted in their original shipped position when joining the center and unload sections.
2. Remove lower dual rinse arm (Fig. 25); release arm by pulling on the spring-loaded handle. Slide pan towards rear of unit by leaning pan on edge opposite of the strainer (Fig. 26).



Fig. 25

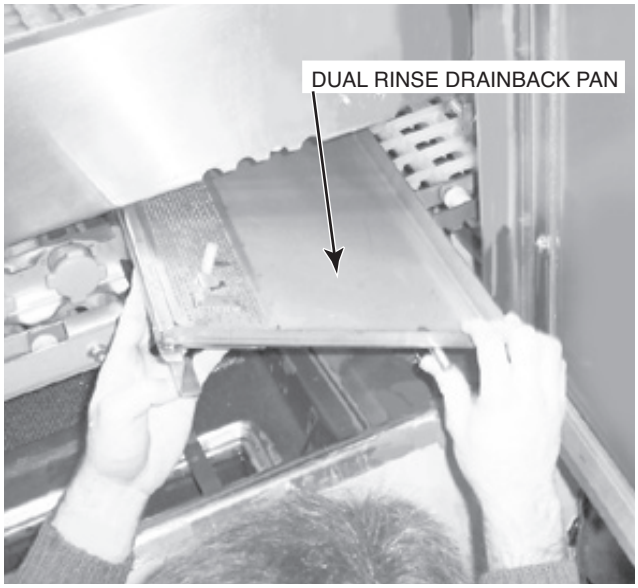


Fig. 26

3. With the dual rinse pan in position front to rear, lift up on the strainer side and guide pan towards the support bracket until pins engage support brackets (Fig. 27). Then allow pan to lower into position (Fig. 28).

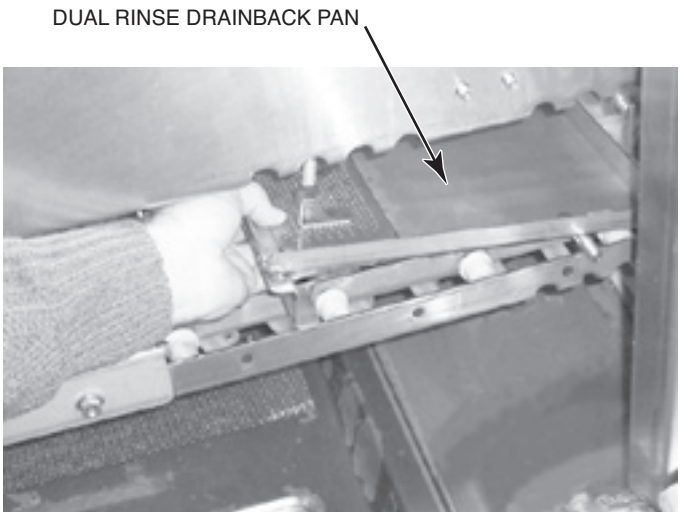


Fig. 27



Fig. 28

4. Also check to make sure that the rear of the pan is properly seated in the flowback catch bucket (Fig. 29) (mounted to the bottom portion of the rear track).
5. Reinstall the lower dual rinse arm by pulling on the spring-loaded handle, inserting the arm into the hub and then releasing the handle (Fig. 29).

NOTE: To remove dual rinse arms, pull on spring-loaded handle. To remove final rinse arms, pull on final rinse arms themselves.

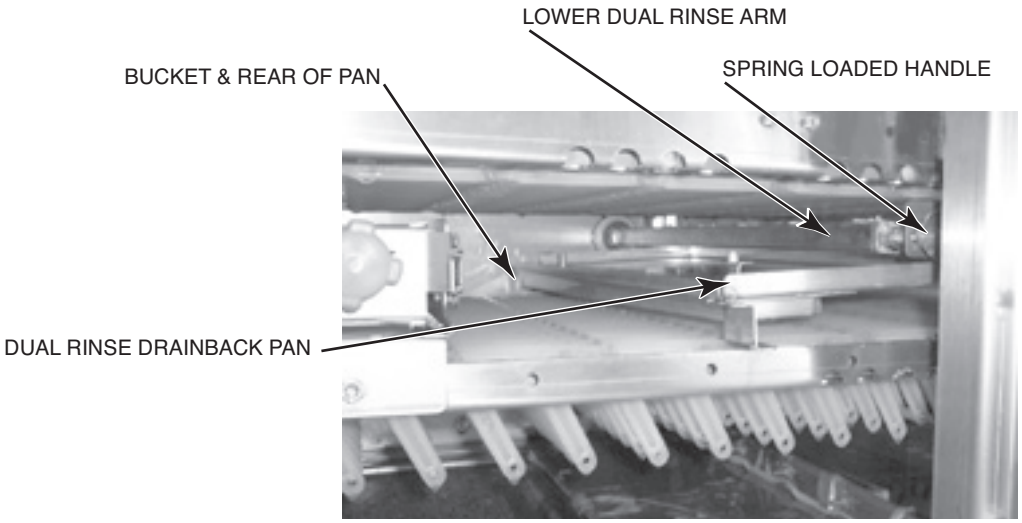


Fig. 29

BLOWER-DRYER ASSEMBLY

This applies to blower-dryers equipped with either electric or steam heat.

NOTICE When installing the blower-dryer, do not stand, sit or lean on top of dishwasher or air deflector covers as blower-dryer performance could be compromised.

Remove the louvered blower-dryer cover panels, both front and rear (Fig.30).



Fig. 30

NOTE: Do not overtighten or put the rubber portion of the vibration isolator in a twist. Secure the blower output to the rivet nuts on the diffuser plenum using the four #10-24 screws and lockwashers, provided.

The blower output should be fitted inside the diffuser plenum as the blower and motor assembly is lowered over the six rubber vibration isolator studs (Fig. 31). Install washers, lockwashers and nuts ($^{5}/_{16}$-18) on the rubber vibration isolator studs.

Install the black rubber blower fan seal over the blower intake ring (Fig. 32). Position the dryer intake panel assembly inside the blower fan seal. Make sure the black rubber fan seal is outside both the blower intake ring and the dryer intake panel assembly. Secure the dryer intake panel assembly to the weldnuts on the blower-dryer frame by assembling the five $^{1}/_{4}$-20 bolts, lockwashers and washers from the inside of the dryer chamber.

Steam-operated blower-dryers have an air filter that mounts over the intake on the blower intake panel.

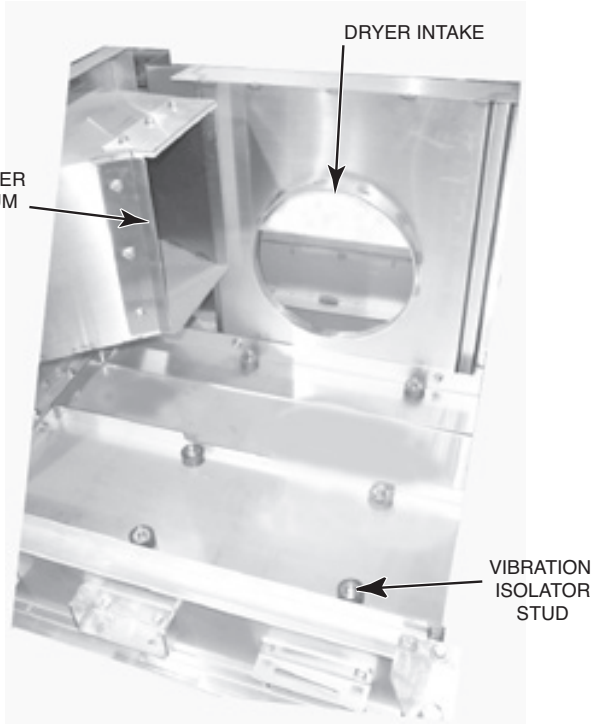


Fig. 31

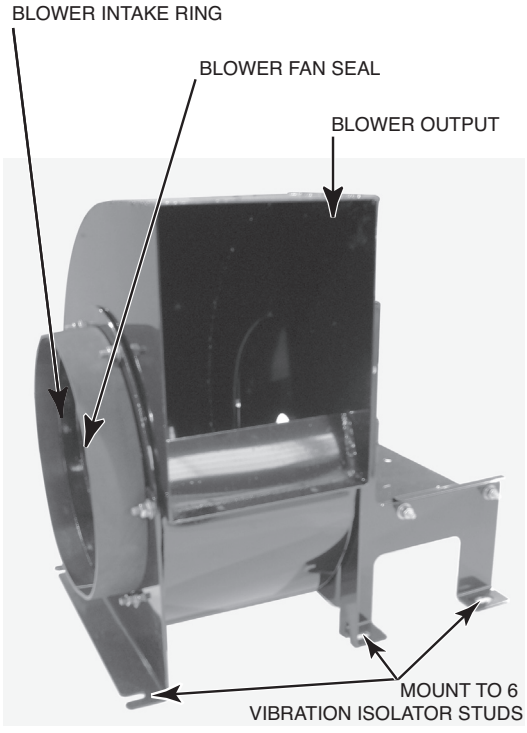


Fig. 32

Blower-dryer conduit(s) and cable enter the control box from the rear; specific locations for these connections are shown from the front, inside the main control box (Fig. 33). Refer to the wiring diagram in the main control box.

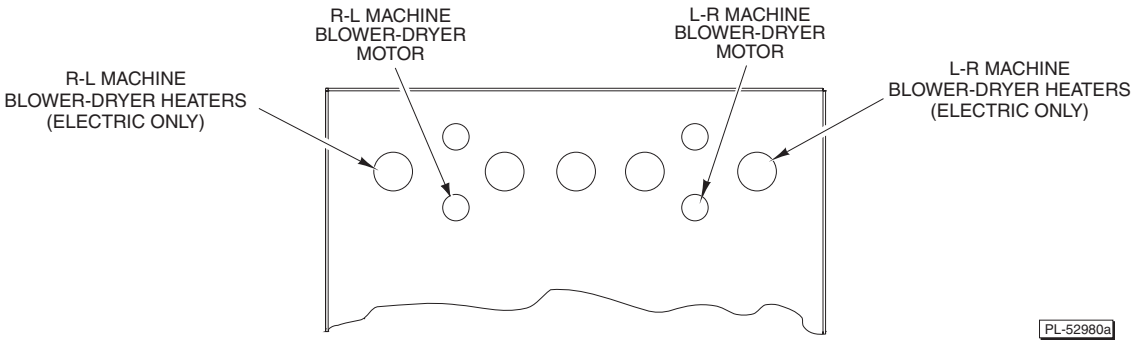


Fig. 33

Extend the blower motor electrical cable from the blower motor junction box to the top rear of the main control box using the strain relief, provided.

Steam blower dryers have an air filter that mounts over the blower intake panel and is removable from the discharge end of the blower-dryer.

For the electric blower-dryer, all electric heat wires are routed through 1" conduit from the top inlet cover (Fig. 34). The blower motor cable is routed through the inlet cover with a strain relief fitting. Both conduit and cable should be connected to the top rear of the main control box using appropriate fittings (supplied) (Fig. 33). Refer to the electrical diagram in the main control box.

The steam blower-dryer has the same blower motor cable that is routed through the inlet cover.

Connect blower motor wires labeled **8CON-T1**, **-T2** and **-T3** to contactor 8CON. This applies to blower-dryers with either steam or electric heat.

NOTE: If the blower-dryer is equipped with electric heaters, connect electric heater wires marked **9CON-T1**, **-T2** and **-T3** to contactor 9CON and wires marked **10CON-T1**, **-T2** and **-T3** to contactor 10CON. Also, connect control wires marked **8CON-NO** to 8CON Side Switch, **9CON-C1** to contactor 9CON, and **10CON-C3** to contactor 10CON.

Install front and rear covers on the blower dryer (Fig. 35). Fasteners (1/4-20 bolts, lockwashers and washers) are provided.

Make sure all hardware is tightened.

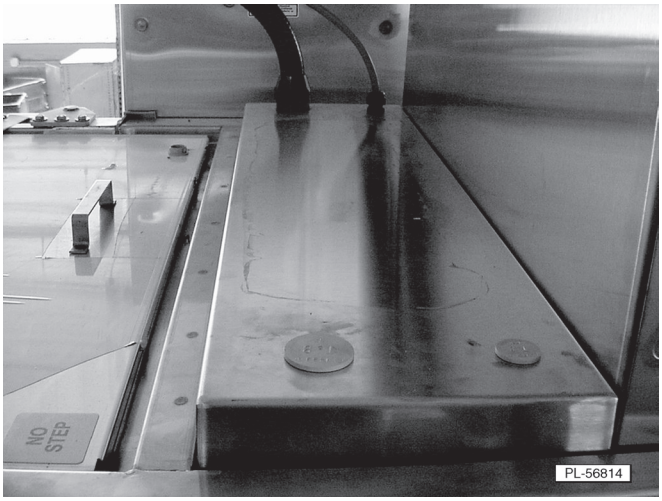


Fig. 34



Fig. 35

ELECTRICAL CONNECTION(S)

⚠ WARNING Electrical and grounding connections must comply with applicable portions of the National Electrical Code (NFPA No.70, latest edition) and / or other local electrical codes.

⚠ WARNING Disconnect the electrical power to the machine and follow lockout / tagout procedures. There may be multiple circuits. be sure all circuits are disconnected.

With power to all service connections locked out / tagged out, verify that the line and load service connections have been properly tightened.

Refer to the electrical diagram attached to the inside of the control box door. Some machines may require more than one electrical power supply connection. All electrical supply lines to the machine must be disconnected when servicing machine.

CHECKING MOTOR ROTATION (THREE-PHASE MOTORS)

Pumps, conveyor motor and blower-dryer fan motor (when equipped) are all three-phase motors. Before placing the machine into service, check to verify correct rotation by observing motor direction.

If any pump motor does not rotate in the correct direction, check the rotation of the other motors. If they all are rotating backward, *disconnect the electrical power supply* and interchange any two of the incoming power supply leads. If all motors are not running in the same direction, only change the two incoming wires of the motor(s) that is running backward. Reconnect electrical power, push the START switch and verify that the motors rotate in the proper direction.

NOTE: If the conveyor motor does not rotate in the correct direction, *disconnect the electrical power supply* and interchange any two of the conveyor motor wires from the Frequency Inverter at terminal 5TB-1, -2 or -3.

SEPARATE ELECTRICAL CONNECTIONS

Separate electrical connections in the main control box may be required for an optional electric blower-dryer heater (when equipped) and for optional electric tank heaters (when equipped) unless equipped with optional circuit breakers. When equipped with an optional electric booster heater, a separate electrical connection at the booster is always required. **NOTE:** To remove electric booster cover panel, the circuit breaker actuator on the outside of the cover panel must be in the “OFF” position (Fig. 35a). The electric booster water heater may be rated 15 KW or 30 KW. A separate connection is required for a dual-rinse machine unless it is supplied with an electric blower-dryer or with circuit breaker options.

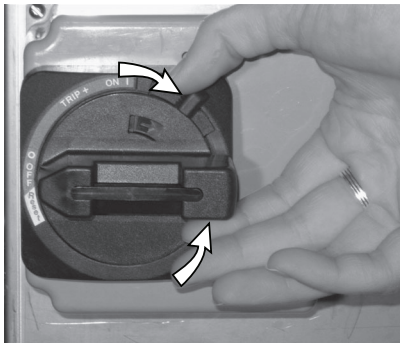


Fig. 35a

VOLTAGE ADJUSTMENT

This adjustment procedure applies to all FT900 dishwashers equipped with steam heat and rated at 200 to 240 volts, 50 to 60 Hz, 3 phase. All other FT900 dishwasher voltages are preset at the factory and do not require this adjustment procedure.

THIS PROCEDURE MUST BE DONE ONLY BY A QUALIFIED HOBART-TRAINED SERVICE TECHNICIAN.

If the supply voltage to the machine is 224 to 264 volts, no change is necessary. The control circuit transformer [1T] should already be set to operate at 240 volts.

If the supply voltage to the machine is 177 to 224 volts, the control circuit transformer [1T] must be changed to operate at 208 volts.

PREWASH DOOR INTERLOCK(S) — SLIDING AND HINGED DOORS

The prewash door interlock(s) is/are prewired from the junction box at the rear of the center section and is/are shipped with the center section. The door interlock(s) is/are to be installed on the prewash section. Uncoil the prewash door interlock wire(s) and attach the switch body to the clamp(s) provided at the front of the plenum of the prewash section. Check operation of the door interlock and adjust if required. If the center section is shipped in separate sections, connect the wires to the wash motor, water level control and door interlock as required.

ELECTRICAL CONNECTION — RINSE AID & DETERGENT DISPENSERS

NOTE: This machine must be operated with an automatic detergent feeder, including a visual means to verify that detergents are delivered or a visual or audible alarm to signal if detergents are not available for delivery to the washing system. Please see instructions for electrical and plumbing connections located in this manual and in the feeder equipment manual. Chemical feeders are supplied by others.

The machine electrical supply voltage can be used to supply electrical power source for a rinse aid dispenser and/or a detergent dispenser-up to 1.5 amperes each.

Terminal connections, RPS1 and RPS2, are provided for a rinse aid dispenser (ON when the final rinse is on). Terminal connections, DPS1 and DPS2, are provided for a detergent dispenser (ON when the pumps are running). A location for 1/2" conduit is provided at the rear of the control panel for connection of these devices.

A hole plug is provided in the wash tank for a detergent sensor probe. A plugged hole is provided at the rear of the wash chamber for a liquid detergent dispenser inlet. The access panel can be removed. Two 1/4" NPT plugs are provided in the copper rinse piping behind the rear access panel for a rinse aid inlet and rinse line pressure or temperature sensor. Do not use a saddle valve. The preferred location for a detergent dispenser and/or a rinse aid dispenser is at the rear of the machine. Route all plumbing and wiring between the rear access panels and chamber where possible.

The alternate location for a detergent dispenser is on the cover panel at the front of the machine between the prewash and wash section doors. When mounting a detergent dispenser in the front location, remove the cover panel at the front of the machine. Mount brackets for the dispenser and controller on the cover panel so the gravity feed dispenser discharge tube aligns with the chamber hole located behind the cover panel. Make sure the brackets mount the dispenser and controller out from the cover panel to allow clearance for the doors to raise freely. Route the detergent tube to the edge of the strainer in the wash tank. Bring the fresh water line, control and sensor wires up the back of the machine, through the inner top (plenum) and through the back of the cover panel. Make necessary wiring connections through the back of the cover panel to the dispenser and controller.

VENT FAN CONTROL

Machine electrical circuits can be used to switch a vent fan, supplied by others. On all models, the vent fan is ON when the main power switch is on. The two terminal connections for the vent fan control are both labeled VFC and are provided as a switching circuit to control the vent fan. A location for 1/2" conduit is provided at the rear of the control panel for conduit connection for this application.

Power for the vent fan motor is supplied independently.

The maximum rated load for VFC switch connection is 16 amps at 120 to 240 volts, single-phase.

PLUMBING CONNECTIONS

⚠ WARNING Plumbing connections must comply with applicable sanitary, safety and plumbing codes.

Check all water lines, particularly unions. Tighten if necessary.

WATER SUPPLY

The water supply must be within the recommended hardness range of 3 grains or less per gallon. Higher hardness may cause excessive formation of lime scale. Chlorides must not exceed 50 ppm. Recommended water pressure should be 20 to 25 psig (flowing) at the dishwasher. If the water pressure is higher than 25 psig, a pressure-regulating valve with internal thermal expansion bypass must be supplied (by others) in the water supply line to the dishwasher.

NOTICE The water pressure regulator must have a relief bypass. Failure to use the proper type of pressure regulator may result in damage to the unit.

Fill

All machines have a single 1" NPT female connection point for the fill and/or booster heater. The minimum water temperature for the fill connection is 140°F. Machines equipped with the prewash temperature control option require a seperate connection to cold water at a 1" NPT female pipe fitting at the load end.

Final Rinse

A water hammer arrestor meeting ASSE-1010 standard or equivalent should be supplied (by others) in the final rinse water supply line at the service connection. The required minimum water temperature for the final rinse is 140°F when an electric or steam booster heater is supplied, the booster heater is plumbed to the final rinse at the factory on FT900D/FT900SD machines. For FT900/FT900S/FT950 machines, the hose attached to the final rinse piping must be connected to the booster. Machines without booster heater require 180°F water to be connected to the 3/4" NPT female fitting at the final rinse connection point.

NOTICE Remove the final rinse arms and purge the final rinse system prior to operation. This will reduce the possibility of clogging the final rinse nozzles. To properly purge the unit, activate the final rinse for 3 to 5 minutes and then reinstall the final rinse arms.

DRAIN

Connect the drain at the 2" NPT threaded fitting located at either the unload end or the load end of the machine, as specified on the order.

NOTE: The plug fitting and the threaded drain fitting can be interchanged to reverse the drain end of the machine by loosening the stainless steel clamp fitting. The molded arrows must all point in the same direction on all molded drain T-connectors.

If a grease trap is required by code, the drain should have a flow rate of 40 gallons per minute. Do not overtighten the fittings.

Line Strainers

Line strainers on the machine should be cleaned after installation and within the first week of operation. The line strainers will collect cutting oils and other contaminants. Clogged line strainers will cause restrictions to the flow of steam or water and will reduce overall performance of the machine.

STEAM SUPPLY (WHEN EQUIPPED)

Check all steam lines for leaks, particularly unions. Tighten if necessary.

The steam supply must be 15 to 50 psig flowing pressure at the dishwasher. Machines with a steam booster (and steam tank heaters) have a single 1 1/2" NPT female fitting for connection at the steam booster at the unload end, underneath. Machines equipped with steam tank heaters, but without a steam booster, have a single 1" NPT female fitting for connection, located underneath the unload end. **NOTE:** If available steam pressure is less than 15 psi flowing, operational characteristics may be limited because of insufficient delivery of steam. If this occurs, contact Hobart Warewash Technical Support.

STEAM USAGE / REQUIREMENTS — (POUNDS PER HOUR)

Model	Tank Heat	Booster 120°F Incoming Water, 70°F Rise	Dryer	TOTAL Tank Heat & Booster	TOTAL Tank Heat, Booster & Dryer
FT900, Std Ht	175	125	75	300	375
FT900, 6" HTS	175	157	75	332	407
FT900S, Std Ht	175	85	75	260	335
FT900S, 6" HTS	175	90	75	265	340
FT900D, Std Ht & 6" HTS	175	67	75	242	317
FT900SD, Std Ht	175	54	75	229	304
FT900SD, 6" HTS	175	63	75	238	313
FT950, Std Ht & 6" HTS	153	57	15	210	225

Steam Tank Heaters — Condensate Return Lines

The wash tank and power rinse tank may be equipped with steam injector or steam coil types of heaters. If steam coil types of heaters are used, a condensate return, gravity type, must be connected for each coil. Bucket-type traps are furnished. The connection points for the condensate return lines for both coils are 3/4" NPT female pipe fittings. Condensate lines must not be plumbed uphill.

Steam Booster Heater — Condensate Return Line and Relief Valves

The connection point for the condensate return line for the steam booster heater is a 3/4" NPT female pipe fitting. The steam booster heater is equipped with a steam relief valve that has a 1" NPT female pipe fitting that must be piped to an open drain receiver in the floor. The steam booster heater is equipped with a hot-water relief valve that has a 3/4" NPT female pipe fitting that must be piped to an open drain receiver in the floor.

The steam booster thermostat (bulb and capillary tube style) is mounted and wired in the main control box. The bulb and capillary tube is shipped with the control box on the center section. During installation, the bulb and capillary tube must be carefully uncoiled and routed to the steam booster and inserted in the booster outlet hot water line through the supplied fitting. Insert the bulb two-thirds of the way into the booster body (refer to tag attached to thermostat, F-44107).

Steam Blower-Dryer (When Equipped)

Steam blower-dryers require a 1 1/2" connection at the steam coil with 15 to 25 psig maximum flowing pressure on top of the machine. The steam line to the blower-dryer should be fitted with a manual shutoff valve near the connection point suitable for operator convenience. The steam blower-dryer has a condensate return, gravity type, that must be connected from the coil at the bottom of the blower-dryer. Bucket-type traps are furnished. The connection point for the condensate return line for the coil is a 3/4" NPT female pipe fitting. Condensate lines must not be plumbed uphill.

NOTE: For cleaning convenience, a water tap equipped with 30' of heavy-duty hose and a spray squeeze valve installed near the machine is recommended.

NOTE: When the blower-dryer is equipped with an optional steam on/off valve, the steam supply is ON when the machine is ON and OFF when the machine is OFF.

CONVEYOR ASSEMBLY

Prior to installing the conveyor, a quick check should be made to verify that the sprockets are set correctly at both the load and unload ends of the machine. The take-up units on both the front and rear of the load section must be completely retracted towards the load platform so that the conveyor shaft is as square as possible with the machine before attempting this procedure. Then, place a level or combination square across the inside face of the rear sprocket and the inside edge of the rear track (Fig. 36). Both parts should be aligned or set with the sprocket just slightly to the inside of the track. The inside face of the sprocket should never be set outbound of the inside edge of the track. Once this has been confirmed or properly adjusted, check the inside dimension between the front and rear sprockets; it should be $28\,{}^{3}/_{16}$ ($+{}^{1}/_{8}$ / -0). If it is not, loosen the set screw on the front sprocket and slide it forward or backward until the proper dimension is achieved, then retighten the set screw on the sprocket. When you have completed this procedure at both ends of the machine, you will be ready to load the conveyor.

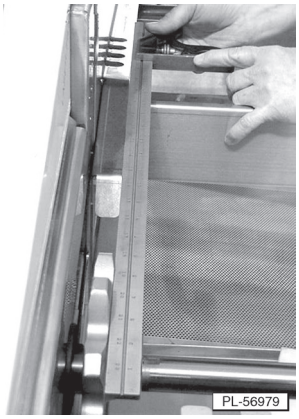


Fig. 36

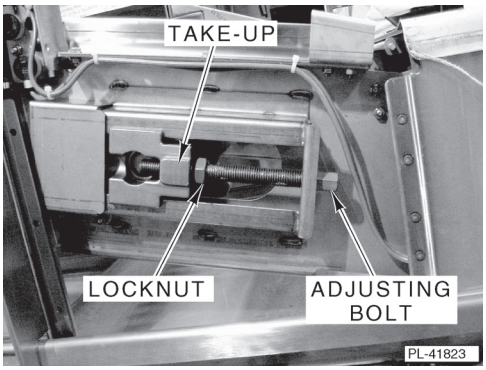


Fig. 37

LOADING AND JOINING THE CONVEYOR SECTIONS

Each dishwasher is supplied with the correct amount of conveyor. The conveyor sections must be connected together.

- All conveyor sections are numbered: Roll 1, Roll 2, Roll 3, Roll 4, etc.; install them in numerical sequence.
- Raise the loading platform and place a piece of cardboard under, around and above the platform to protect it from being scratched during conveyor installation.
- Loosen the take-up units (Fig. 37) at the front and rear sides of the load end by loosening the locknuts and threading the adjusting bolts as far out as possible.
- Remove the chain cover on the unload end and then remove the drive chain from the conveyor gearmotor so that the conveyor sprockets are free to rotate.
- Position the first section of the conveyor in line with the machine at the load end. The flight links must point toward the load end of the machine.
- Tie a rope to the first conveyor rod. Feed the rope through the machine following the desired path of the conveyor with the flight links pointing up. The conveyor rollers must not be fed under the tracks.

- Remove the last conveyor rod from the first section. Thread the rod back through the flight links, alternating the links from the first and second sections; thread rod through the side bar on both sides; and assemble a conveyor roller and retaining ring at each end of the rod (Figs. 38 & 39). Spin the roller to ensure that the retaining ring has been secured to the conveyor rod. **Always use a new retaining ring to secure a tight grip on the conveyor rod.** Make sure the flight links are angled or pointed toward the load end. Repeat this step for joining each succeeding conveyor section.



Fig. 38

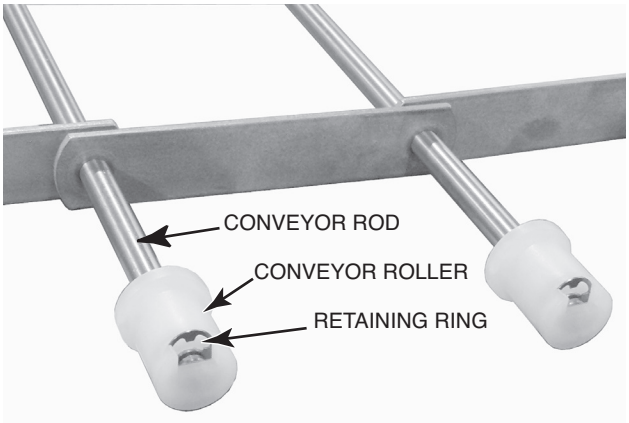


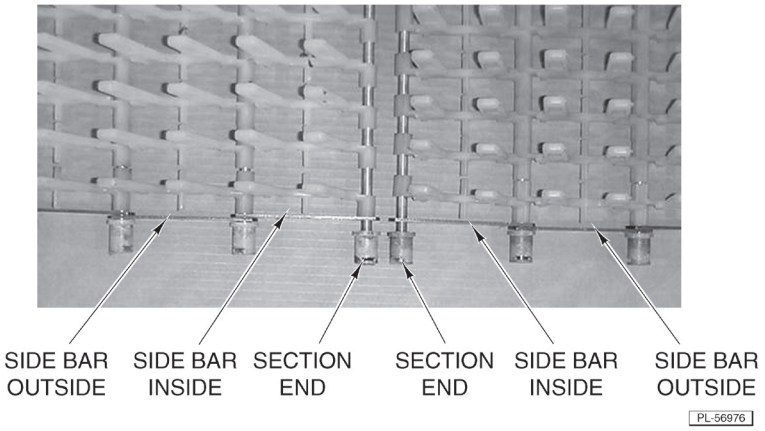
Fig. 39

Pull the conveyor through the machine starting at the load end, around the freed conveyor sprockets at the unload end, down to the top of the lower track and back through the machine. Make sure conveyor rollers do not feed under tracks.

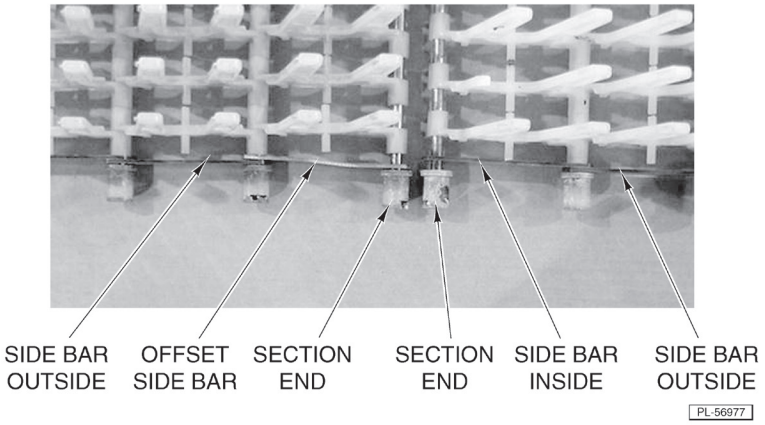
Join the ends of the conveyor by threading the final conveyor rod through both rows of flight links and the side bars on both sides. Conveyor links alternate with both ends of the link on the inside followed by both ends of the next link on the outside, except for the conveyor offset link (only used on AA or BB type of conveyor).

CONVEYOR OFFSET LINK

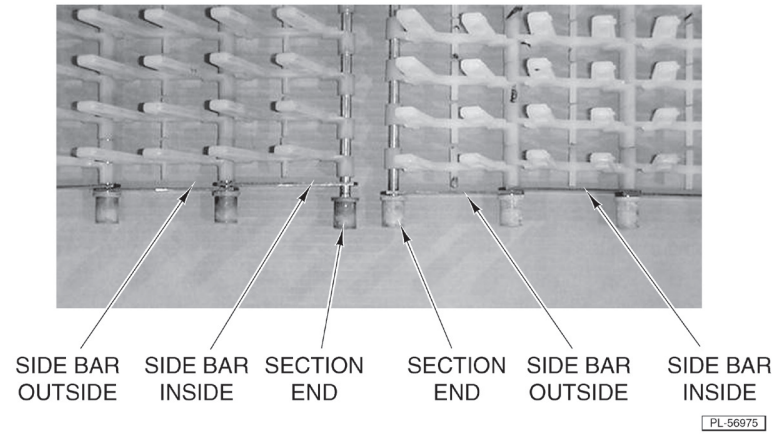
Conveyor offset links are supplied for use with both the AA and BB style conveyors and are to be used, if necessary, when making the final connection to join the two conveyor ends. The total length of all conveyor sections shipped may slightly exceed the optimal length required for the machine's length and the conveyor's travel. This can possibly require one or two rows of flight links to be removed together with all associated rods, side bars and end rollers. When the proper length of conveyor has been determined pull the ends of the last two sections together to examine the side bar patterns. If both sections end with the side bars on the inside position or both sections end with the side bars on the outside position (Fig. 40), you must replace the last links on one of the sections with the offset links to maintain the pattern (Fig. 41). However, if the sections end such that the inside to outside pattern of the side bars will be maintained, they can be joined without the use of the offset links (Fig. 42). Complete the joining of the conveyor sections as necessary to maintain the chain link pattern.



Incorrect (Both Side Bars Inside)
Fig. 40



Correct with Offset Link (Inside to Outside Maintained)
Fig. 41



Correct without Offset LInk (Inside to Outside Pattern Maintained)
Fig. 42

Once the conveyor is installed, reinstall the conveyor drive chain to the conveyor gearmotor.

NOTE: The proper length of conveyor, when adjusted, will have the flight links close to or engaging the load fingers at the load platform. It may be necessary to remove one or two conveyor rods (with rows of flight links) to obtain the desired length.

NOTE: Each time a conveyor roller is installed or replaced, a NEW retaining ring (Fig. 39) must be used.

ADJUSTING THE CONVEYOR TAKE-UP UNIT (PREWASH SECTION)

Align the conveyor sprockets or tighten the tension on the conveyor by turning the adjusting bolt on the take-up units (Fig. 43). Alignment can be gauged by centering the large diameter hub of the conveyor rollers on the conveyor tracks.

If the conveyor is tracking straight but travels closer to the front (door side) or toward the rear of the machine, then do the following:

- If tracking closer to the front, tighten the adjusting bolt on the front take-up unit.
- If tracking closer to the rear, tighten the adjusting bolt on the rear take-up unit.

If the conveyor is tracking diagonally from one end of the machine to the other, then do the following:

- If tracking diagonally from the front (door side) of the load end toward the rear at the unload end, tighten the adjusting bolt on the front take-up unit.
- If tracking diagonally from the rear on the load end toward the front (door side) on the unload end, tighten the adjusting bolt on the rear take-up unit.

Run the conveyor for 20 minutes. During this time, it may be convenient to perform the booster thermostat calibration described under “Calibrating the Booster Thermostat” in the Miscellaneous section of this manual. After running the conveyor for 20 minutes, stop the conveyor and check the tension. Proper tension is achieved when the conveyor rollers run freely on the bottom track and, by grasping a conveyor rod near the middle, the conveyor can be lifted 1" to 1¾" vertically from the top track on the unload end.

- If additional tension is needed on the conveyor (after it has been centered), tighten both of the take-up units the same amount. After the proper conveyor tension is achieved, tighten the locknuts on the take-up units on both sides (Fig. 43).

With the take-up units properly adjusted, there is a possibility that the sprocket shaft may not be square with the conveyor track. This will not diminish operation provided the conveyor rollers are centered on the track.

Check the set screws in the bearing collars (two each) to make sure that they did not loosen during shipment.

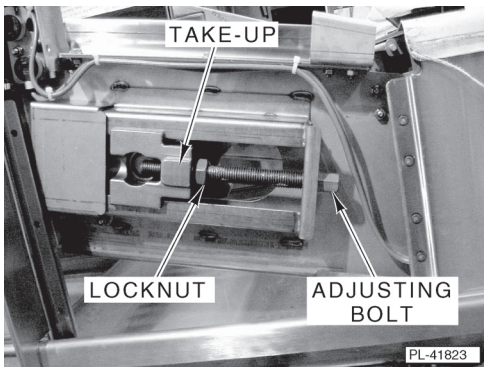


Fig. 43

MISCELLANEOUS

NOTE: Check all bolts and connectors to make sure they are tight.

VENT DUCT

NOTICE Do not step on top of chambers when installing vent duct.

Fit overhead vent duct (not supplied) inside machine vent opening at the midpoint of the dishwasher and bolt together. The vent fan should provide 1000 cubic feet per minute (cfm) (at standard air conditions) when the machine is installed with blower-dryer. When the machine is installed without blower-dryer, the vent fan should provide 750 cubic feet per minute (cfm) (at standard conditions). Adjust dampers in plenum at the end of both load and unload sections so that little vapor escapes from the ends of the machine (Fig. 44). Additional final adjustment can be made in vent damper adjustment on top of the machine. When the vent damper is adjusted properly, tighten the nut.

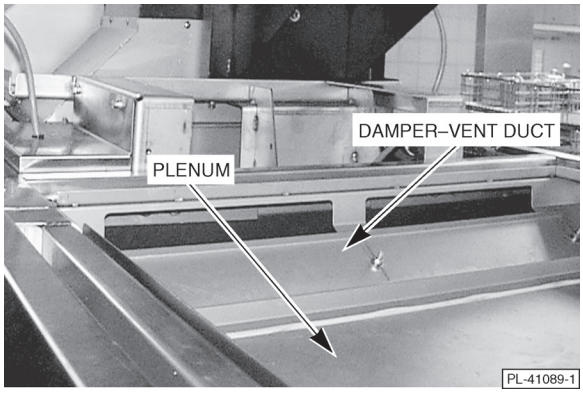


Fig. 44

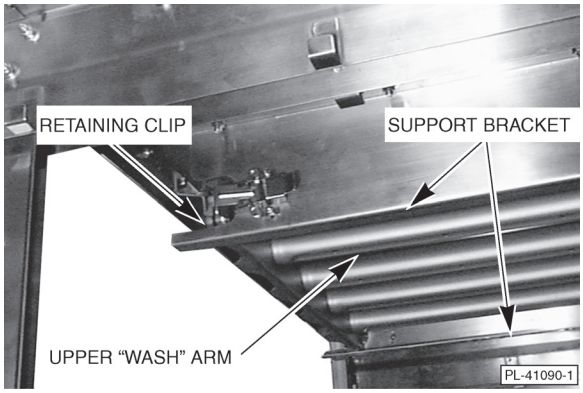


Fig. 45

PREWASH, WASH AND POWER RINSE ARMS

The upper and lower prewash, wash and power rinse arms must be installed in their correct locations. To install each of the upper or lower arms, rest the manifold on the support brackets, slide into position and latch the arm in place (Fig. 45).

FINAL RINSE ARMS

Final rinse arms must be in their proper locations — all models. Final rinse arms have non-metallic nozzles.

DUAL RINSE ARMS — MODELS FT900D & FT900SD

Dual rinse arms must be in their proper locations. Dual rinse arms have metallic nozzles.

CURTAINS AND DRAINBACK PANS, MODEL FT900 and FT950

Curtains and drainback pans must be in their proper places, Fig. 46 . . .

- Hang a short curtain on the unload side of each upper prewash, wash and power rinse arm.
- Hang a long curtain on both sides of every section joint.
- Hang two long curtains at the load end.
- Hang one long curtain at the unload end.
- Place drainback pans as indicated.

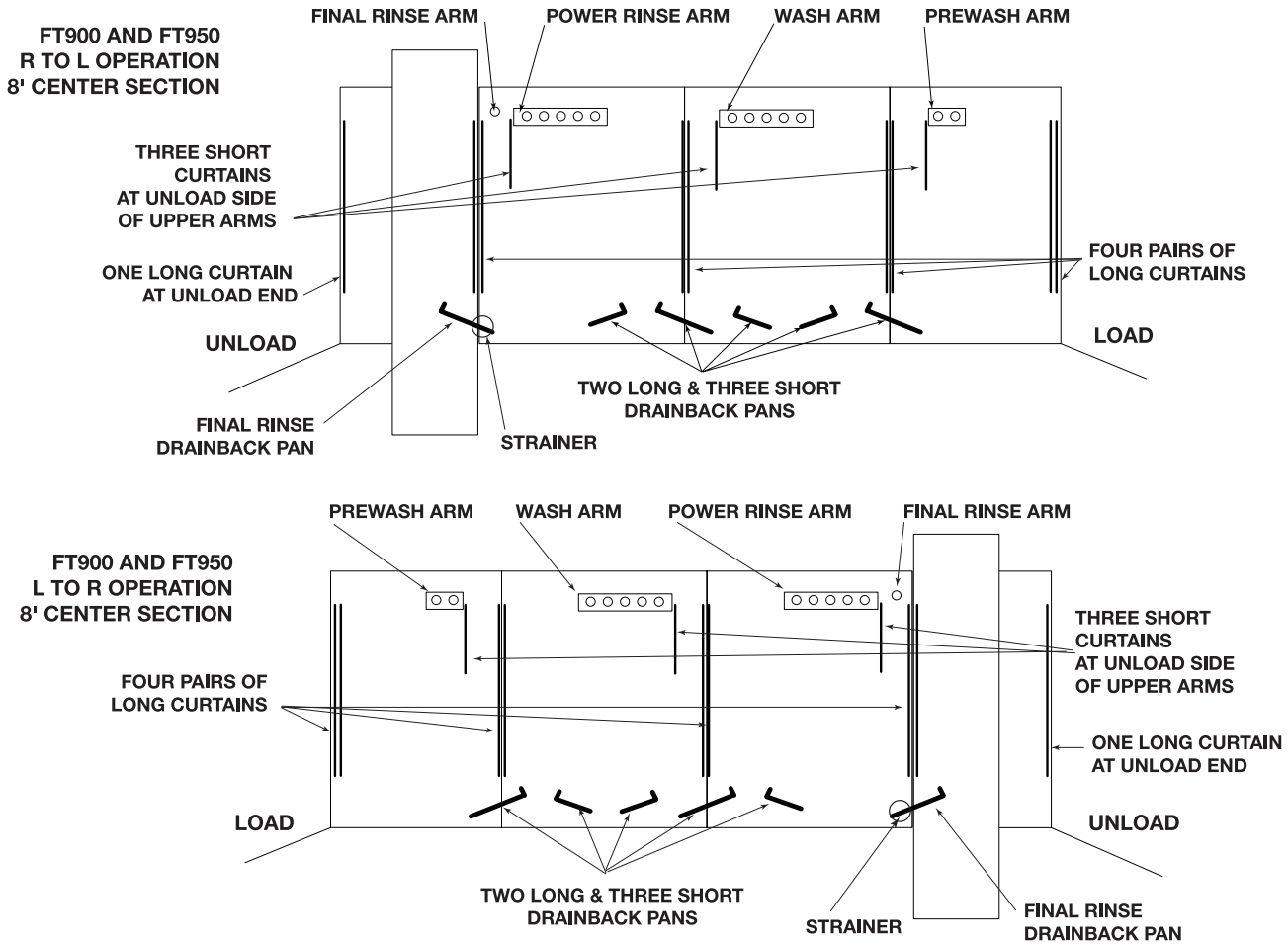


Fig. 46

CURTAINS AND DRAINBACK PANS, MODEL FT900D

Curtains and drainback pans must be in their proper places, Fig. 47 . . .

- Hang a short curtain at the unload side of every upper prewash, wash, power rinse and dual rinse arm.
- If equipped with a blower-dryer, hang another short curtain after the final rinse arm.
- Hang a long curtain on both sides of the prewash / wash section joint and the wash / power rinse section joint.
- Hang two long curtains at the load end.
- Hang one long curtain at the unload end.
- Place drainback pans as indicated.

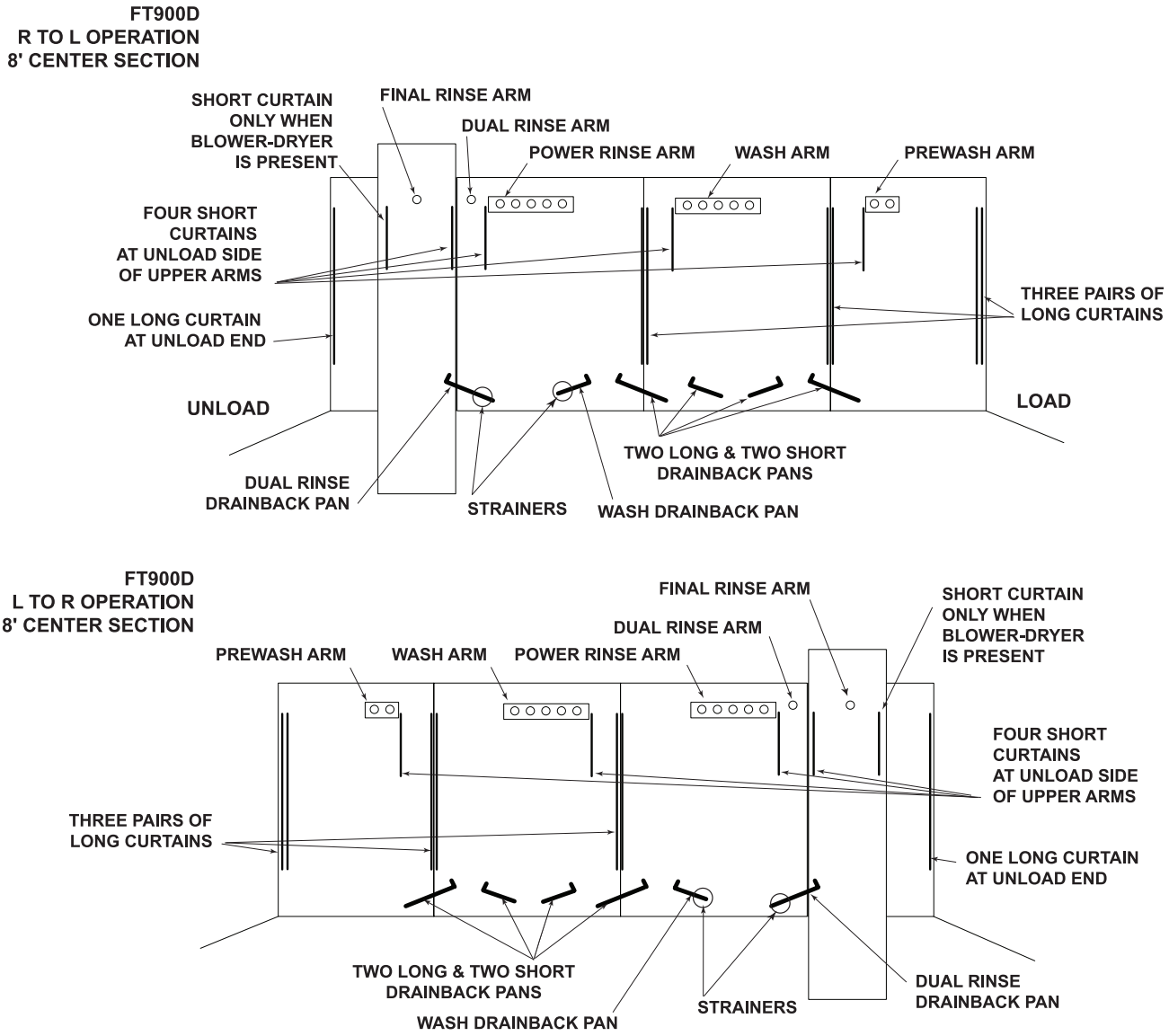


Fig. 47

CURTAINS AND DRAINBACK PANS, MODEL FT900S

Curtains and drainback pans must be in their proper places, Fig. 48 . . .

- Hang a short curtain on the unload side of each upper prewash and wash arm.
- Hang a long curtain on both sides of every section joint.
- Hang two long curtains at the load end.
- Hang one long curtain at the unload end.
- Place drainback pans as indicated.

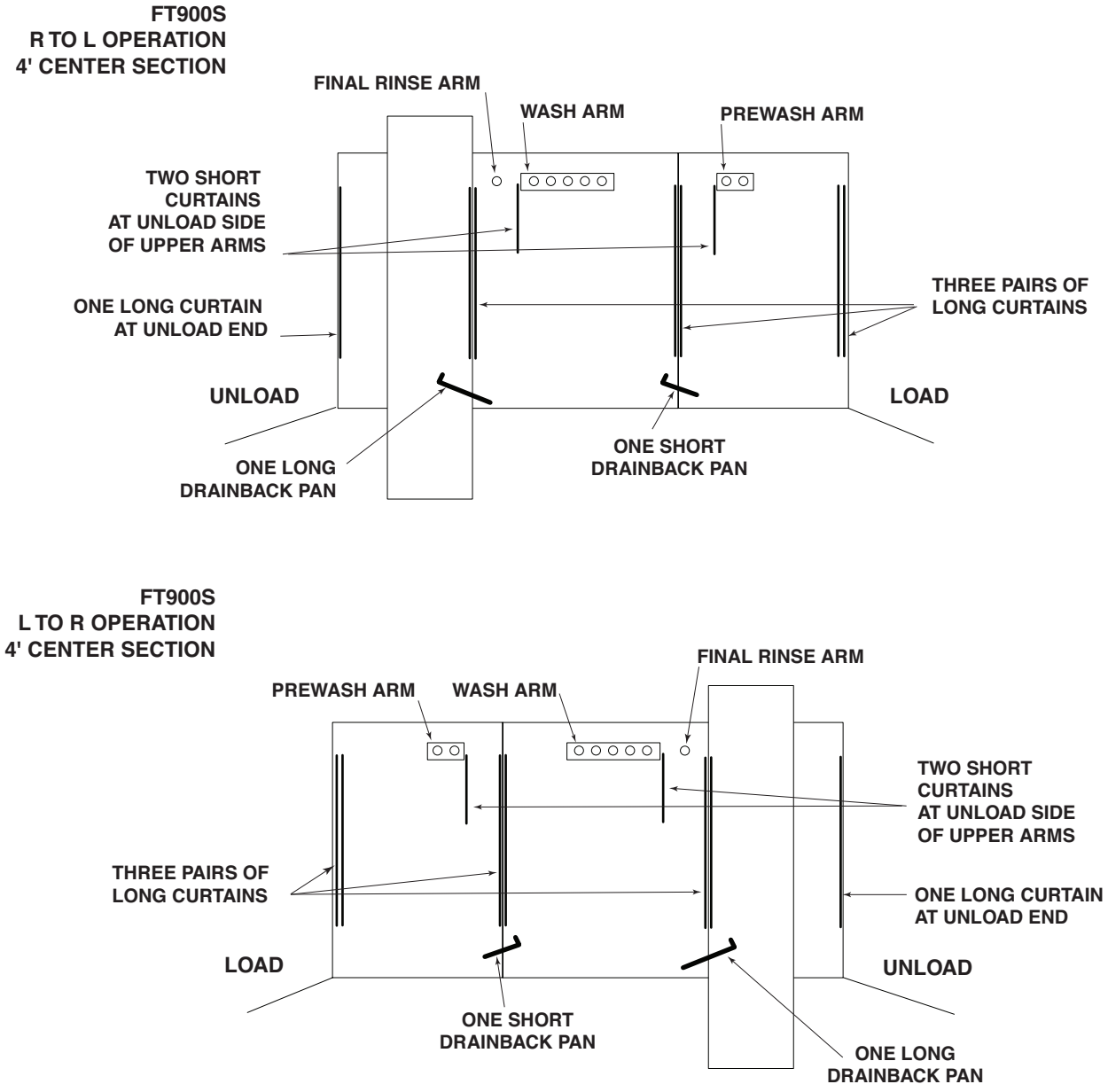


Fig. 48

CURTAINS AND DRAINBACK PANS, MODEL FT900SD

Curtains and drainback pans must be in their proper places, Fig. 49 . . .

- Hang a short curtain at the unload side of every upper prewash, wash and dual rinse arm.
- If equipped with a blower-dryer, hang another short curtain after the final rinse arm.
- Hang a long curtain on both sides of the prewash / wash section joint.
- Hang two long curtains at the load end.
- Hang one long curtain at the unload end.
- Place drainback pans as indicated.

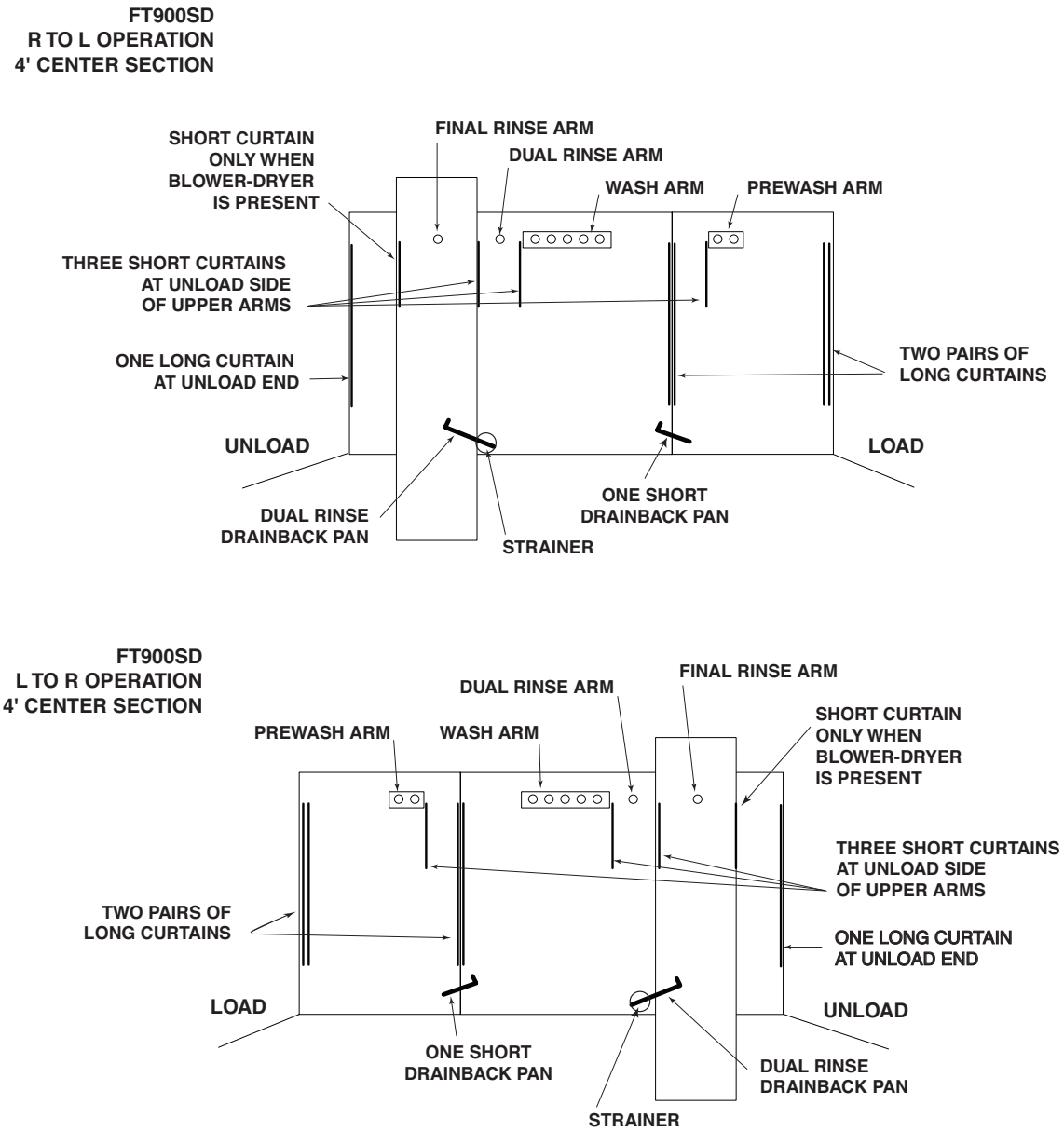


Fig. 49

CONVEYOR GEARMOTOR

The conveyor gearmotor is shipped with oil at the proper level in the speed reducer.

Lubricants are available from your local Hobart Service Office.

LOWER TRIM PANELS (FRONT)

Hang lower front trim panels from two (or more) hanger brackets under the front tank support rail. Slots in bottom of panels should be inserted into panel bracket retainers. Lower panel bracket retainers may project from the lower rails of the machine or may be attached to an adjacent panel. Each panel must be located in its proper position.

When installing lower trim panels, butt each panel end to end and then adjust the end wrap panel so there is approximately $^{1}/_{16}$" clearance between it and the adjacent panel. This clearance, spread over the entire length of the machine, will provide optimum appearance (Fig. 50).

REAR PANELS

Hang rear panels from two upper hanger brackets at the top (Fig. 51) and insert slots in bottom of panels into panel bracket retainers. Lower panel bracket retainers may project from the lower rails of the machine or may be attached to an adjacent panel. Each panel must be located in its proper position. Each rear panel and chamber is numbered to identify position.



Fig. 50

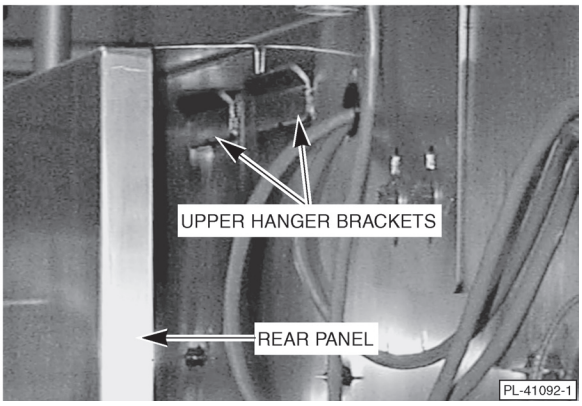


Fig. 51

CALIBRATING THE ELECTRIC BOOSTER THERMOSTAT

NOTE: This procedure only needs to be followed once during initial setup.

NOTE: This procedure may be followed during the 20 minute period in the “Adjusting the Conveyor Take-up Unit (Prewash Section)” procedure.

NOTE: This procedure should only be followed if both the booster can be powered on and the booster has hot water of at least 105F flowing into it.

For the internal Hobart booster (15kW or 30kW), the controlling thermostat needs to be calibrated to the conditions at the customer’s site. The calibration is automatic while the machine is running.

To begin calibration, ensure the booster’s circuit breaker is set to the “ON” position and power is present at ##CON. Start the conveyor running. Block the upper photo detector for at least 20 minutes.

NOTE: Do not put ware or any other item on the conveyor during the procedure. This may cause the dish limit arm to trip and stop the conveyor movement. If the conveyor stops for any reason during the 20 minute calibration period, the procedure should be rerun from the beginning to ensure proper calibration.

After 20 minutes, unblock the photo detector. When the final rinse output turns off and the display shows “---” for the final rinse temperature, stop the conveyor. Power off the machine by pressing the POWER button on the keypad. This saves the calibration data and completes the automatic calibration.

SETUP PROCEDURE FOR ENERGY RECOVERY (WHEN EQUIPPED)

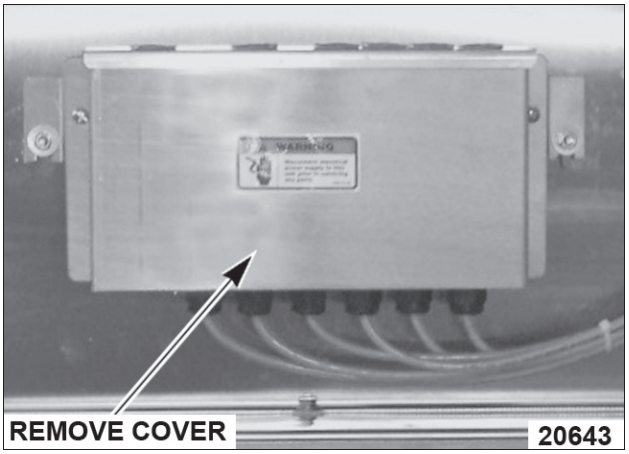
Set Up Procedure



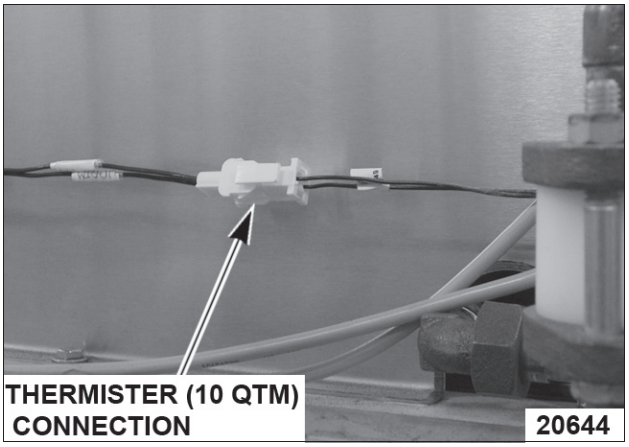
⚠ WARNING Certain procedures in this section require electrical test or measurements while power is applied to the machine. Exercise extreme caution at all times. If test points are not easily accessible, disconnect power and follow lockout / tagout procedures, attach test equipment and reapply power to test.

NOTICE Setup up procedures must be preformed after hot and cold water connections have been completed and machine is cold.

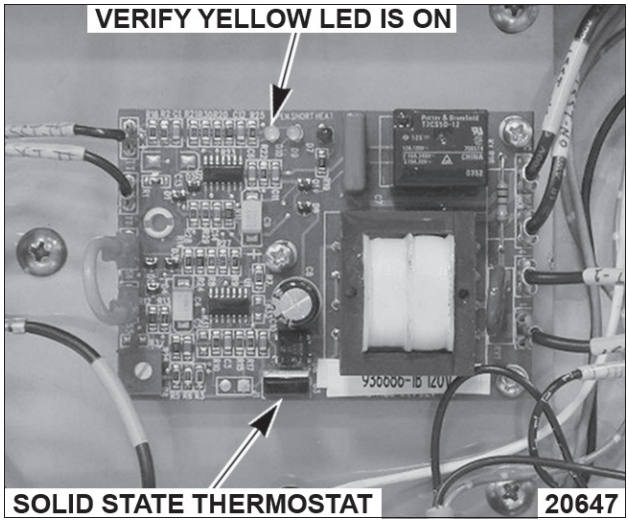
1. Determine that both the hot and cold water supply manual valves are on.
2. Turn main power to the machine OFF.
3. Remove the cover from the ER control box located on the right side of the coil enclosure assembly (located top of machine @ vent connection).



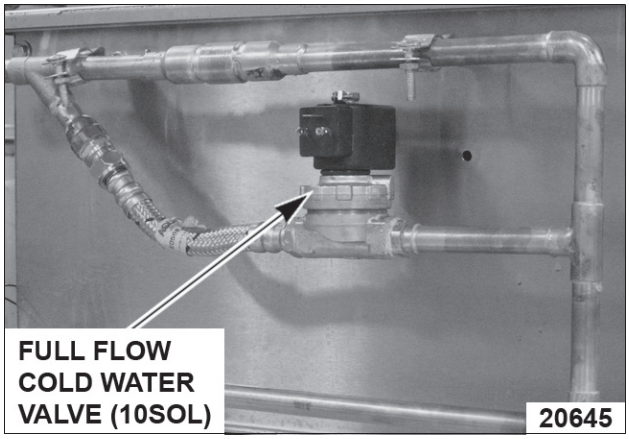
4. Disconnect thermister (10 QTM) connection located at the rear of the coil enclosure assembly.



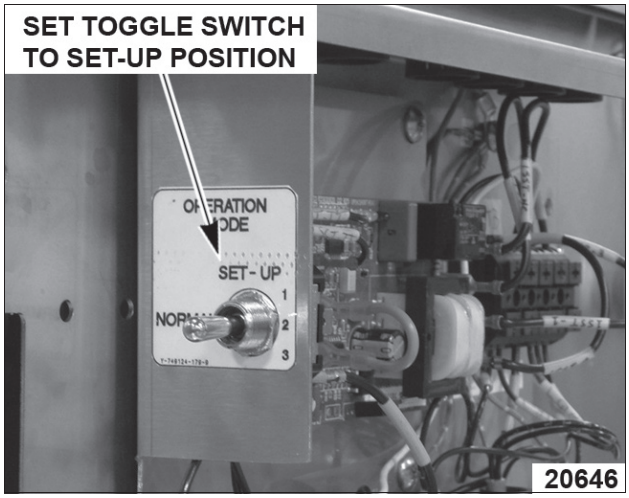
5. Turn main power to the machine ON.
   A. Turn Power ON/OFF switch (located on front of main control box) ON.
   B. Verify yellow led on solid state thermostat is ON.



   C. Full flow cold water valve (10 SOL, valve in plumbing assembly on the left side of the coil enclosure) turns ON.

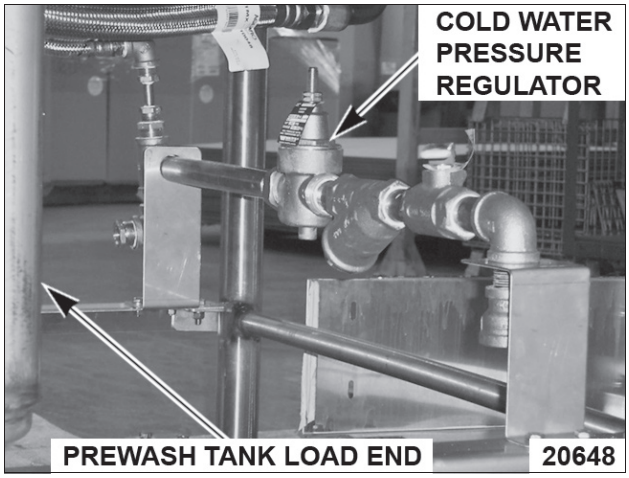


6. Toggle Operation Mode switch (3S, located in ER control box) to the "SET-UP" position.



A. Final Rinse valve (3 SOL) turns ON.

B. Adjust pressure regulator on the cold water plumbing assembly (under load/pre-wash section) until final rinse pressure gauge reads 22 ± 2 PSI.



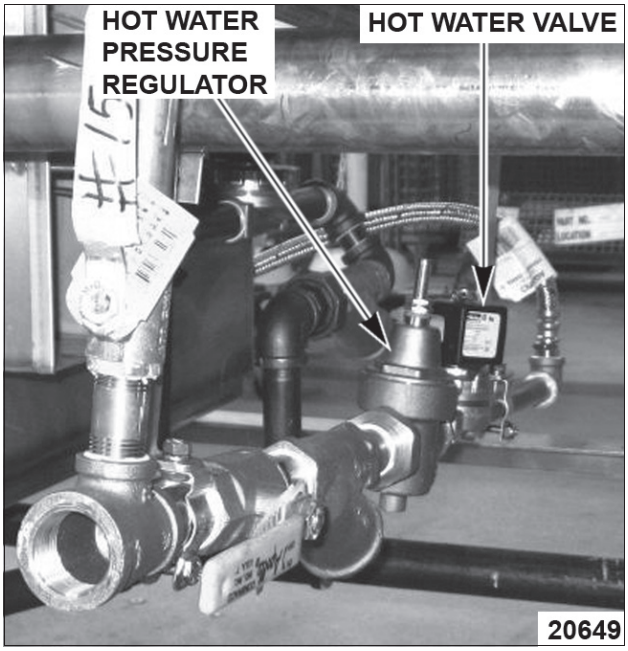
7. After the cold water pressure is established, reconnect the thermister (10 QTM) connection.

   A. Verify red light on solid state thermostat is ON.

   B. Verify full flow cold water valve (10 SOL) turns OFF.

   C. Hot water valve (12 SOL located under center/wash section) turns ON.

8. Adjust the pressure regulator in the hot water plumbing assembly (located between Wash & Power Rinse sections for FT900/FT900D/FT950 or between the Wash & Unload sections for FT900S/FT900SD) until final rinse pressure gauge reading matches the value set for the cold water supply 22 ± 2 PSI.



9. Toggle Operation Mode switch (3S) to the "NORMAL" position, Figure 4.

   A. Final Rinse Valve (3SOL) turns OFF.

10. Turn power ON/OFF switch located on front of main control box OFF.

11. Turn main power to machine OFF.

12. Replace control box cover, Figure 1.

13. Turn main power to the machine ON; machine is now ready for normal operation.

SERVICE

If service is needed on this machine, contact your local Hobart Service Office.

NOTES