

 CAUTION

hub is used, refer to the directions included with the hub.

Determine point at which influent line will enter basin and, using a properly maintained piloted hole saw sized per chart below, drill a hole through the basin wall. Clean cut hole and apply a sealant coating to the cut section to prevent deterioration. Insert the inlet grommet into the drilled hole.

⚠ WARNING

⚠ WARNING

⚠ CAUTION

Lubricate inside lip of inlet grommet with pipe soap. Clean

⚠ DANGER

Obtain proper backfill material. The backfill material provides as much as 90% of the basin's support under certain stress conditions. The installer must

be positive that correct bed and backfill materials are used per instructions as follows:

- a. Gravel – clean and free flowing with particle size not less than 1/8" nor more than 3/4" in diameter. Use this description when ordering or specifying as material varies upon geographical location. This material is commonly known as “pea gravel”.
- b. Stone or gravel crushings with angular particle size of not less than 1/8" nor more than 1/2" diameter, washed and free flowing, is acceptable as an alternative material.

At least a 4–6 inch wide band of compacted aggregate must be placed in successive layers (6" lifts) around the entire periphery of the basin. Carefully compact aggregate under all piping and electrical lines. Cover grade should slope down 3" to the normal surrounding grade. Care must be taken to prevent damage to any influent, discharge, or electrical connections made to the basin.

Factory built basin systems are available in 24" and 30" diameter basins with 60" through 156" depths in one foot increments. In a TL-Pro system, the pump is raised and lowered in the basin using rope or chain attached to the pump. This system includes an integrated ball check valve assembly that slides up and

down the dual rails, allowing the pump to be removed without disconnecting the piping.

These pump systems are designed for pumping effluent or sewage water with a pH ranging from 5 to 9, specific gravities from 0.9 to 1.1, viscosities ranging from 28 to 35 S.S.U. and temperatures up to 140°F.

Check to be sure that all items for your particular system are included, and that the phase and voltage on the pump nameplate are correct as ordered. Codes: All local codes must be observed. Consult the local inspector(s) before installation to avoid costly delays or rework.

Attach the ball check valve and rail guide assembly to the grinder pump discharge with bolts and washers provided.

▲ DANGER

Attach rope or chain as provided to the guide plate lifting eye. A hook is located on the top rail support to hold the upper end of the chain or rope when not in use.

Position pump so the guide rails are located in the slots of the guide plate. Slowly lower the pump down the guide rails to the base. The locating pins (horizontal pin on seal plate) should come to seat in the inclined surface on the arms.

If the system is supplied with a float bracket, attach float switches to the float bracket by clamping strain relief bushings around the float cords, then inserting and twisting the bushings into the float bracket slots.

After grinder pump attachments have been made, lower the pump unit down the rails and ensure ball check valve aligns and connects properly with base elbow in basin bottom.

Ensure power source is off or disconnected.

Push pump power, seal failure/heat sensor, and float cords through cord grips in the junction box and

Remove junction box cover and make all connections inside junction box to all incoming control panel wires.

It is required that the customer furnish and install a conduit seal outside the basin to prevent surface water from entering the junction box.

Ensure power source is off or disconnected.

Connect pump power, seal failure heat sensor, and float cords to panel terminals per the schematic

Ensure power source is off or disconnected.

Remove pump from basin.

With power off, turn radial cutter with a screwdriver to be sure it rotates freely.

Stand clear from pump and with power on, check for proper rotation of pump by turning the H-O-A switch to Hand momentarily and then Off. The impeller should turn counterclockwise when viewed from the suction end.

Run clear water into the basin until motor housing is covered.

Open the shut-off valve to the discharge line.

Turn H-O-A switch to the Off position and turn on main breaker.

Start the pump by turning the H-O-A switch to the Hand position.

Check the pump amperage with clamp on ammeter on black pump lead. Readings higher

shuts off when the water level is 2 inches above the pump volute discharge.

Adjust floats so that a pump will start when the water level is just above the pump motor housing, and pump on override water level is 5 inches above the pump motor housing. Adjust pump shut-off so that water level is within 2 inches above pump volute discharge. Pumps should alternate starting, between each other, upon successive pump-down cycles. To check override level, set both H-O-A switches to Off position and allow water to surpass the override level, then set both H-O-A switches to Auto position and both pumps should start. Turn off one pump and be sure second pump starts when override level is reached on second trial. If pumps fail to cycle in this manner, retrace control float wiring panel.

Ensure H-O-A switch is set to Auto before placing system into service.

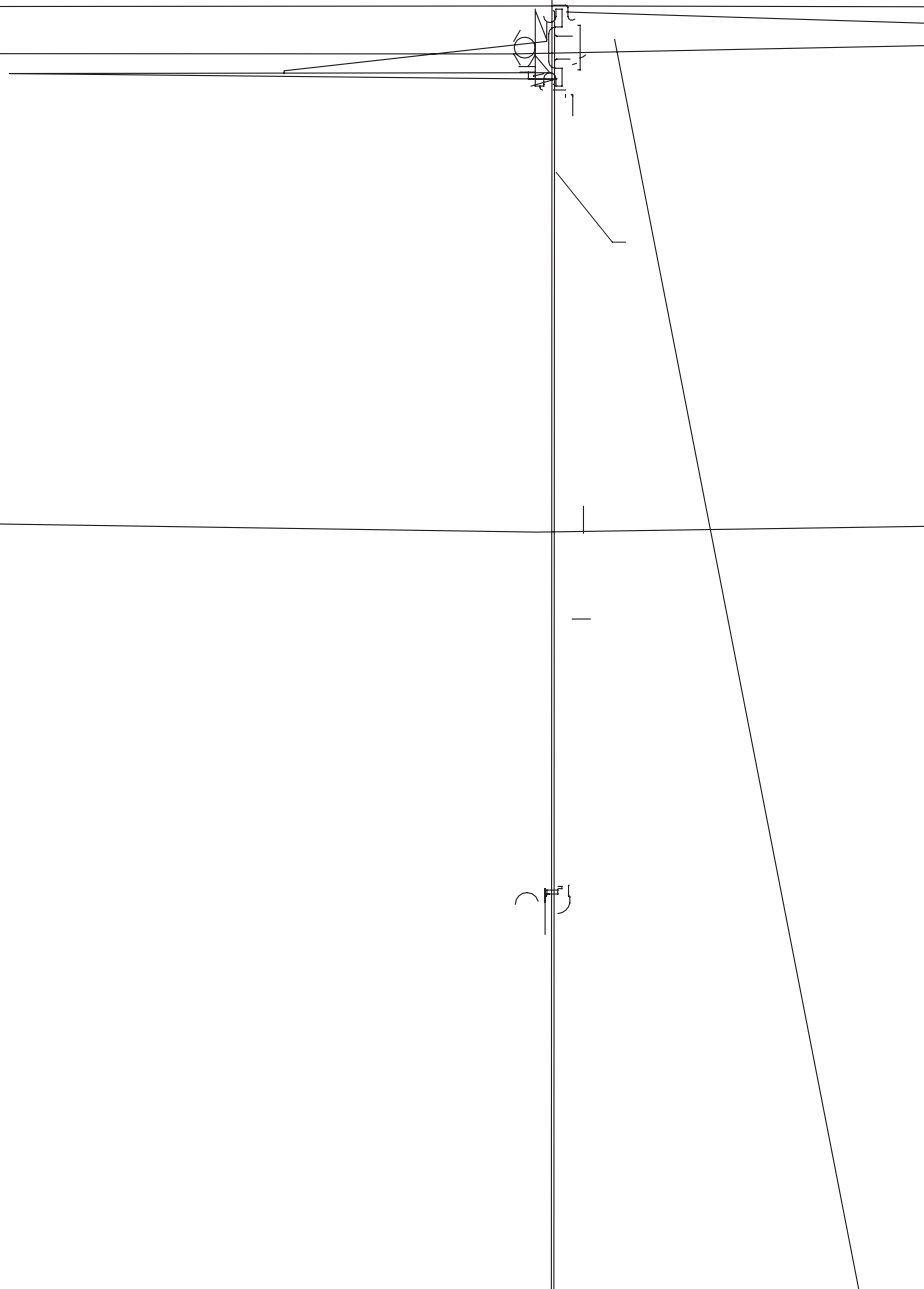
Following is a list of common problems and possible solutions. Refer to the pump and panel installation and service manuals for details regarding any necessary adjusting, dismantling or repair work.

1. Cutters may be clogged.
Amperage higher than nameplate may indicate this problem.
2. Pump rotation may be reversed (on three-phase pumps only).
Switching any two power leads on three phase pumps will correct the rotation.
3. Discharge gate valve may be closed.
4. Pump may be air locked.
Fill basin approximately 10 inches or more above the ball check valve assembly. Raise pump assembly so that the ball check valve disengages the discharge elbow (approximately 6 inches). Stand clear from the sump opening to avoid spray and turn pump on for a brief second to clear trapped air in the volute.

1. Cutters may be clogged.

Fiberglass Simplex Parts List

ORDERING REPLACEMENT PARTS: Product improvements are made from time to time. The latest part design will be furnished as long as it is interchangeable with the old part. When ordering replacement parts, always furnish the following information: (1) pump serial number, (2) pump model and size, (3) part description, (4) part number, (5) impeller diameter (if ordering impeller).





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