

SRA-125/SRAX-125 Double-Rail Lift-Out Rail System

Installation & Service Manual
with Parts List

Myers[®]

Pentair Pump Group

For MG, WG, WGL, and Grinder Pumps for Effluent & Sewage



CAUTION! Read these safety warnings first before installing, servicing, or operating any pump.

GENERAL

1. Most accidents can be avoided by using **COMMON SENSE.**
2. Read the operation and maintenance instruction manual supplied with the pump.
3. Do not wear loose clothing that can become entangled in the impeller or other moving parts.
4. This pump is designed to handle materials which could cause illness or disease through direct exposure.

Wear adequate protective clothing when working on the pump or piping.

ELECTRICAL

5. To reduce the risk of electrical shock, pump must be properly grounded in accordance with the National Electric Code and all applicable state and local codes and ordinances.
6. To reduce risk of electrical shock, disconnect the pump from the power source before handling or servicing.
7. Any wiring to be done on pumps should be done by a qualified electrician.
8. Never operate a pump with a power cord that has frayed or brittle insulation.
9. Never let cords or plugs lay in water.
10. Never handle connected power cords with wet hands.

PUMPS

11. Pump builds up heat and pressure during operation, allow time for pump to cool before handling or servicing.
12. Only qualified personnel should install, operate or repair pump.
13. Keep clear of suction and discharge openings. **DO NOT** insert fingers in pump with power connected.
14. Do not pump hazardous material not recommended for pump (flammable, caustic, etc.)
15. Make sure lifting handles are securely fastened each time before lifting.
16. Do not lift pump by the power cord.
17. Do not exceed manufacturer's recommendation for maximum performance, as this could cause the motor to overheat.
18. Secure the pump in its operating position so it cannot tip over, fall or slide.
19. Keep hands and feet away from impeller when power is connected.
20. Submersible effluent, sewage and grinder pumps are not approved for use in swimming

pools, recreational water installations, decorative fountains or any installation where human contact with the pumped fluid is common.

21. Do not operate pump without safety devices in place.
22. For hazardous locations, use pumps that are listed and classified for such locations.

IMPORTANT! F. E. Myers is not responsible for losses, injury or death resulting from a failure to observe these safety precautions, misuse or abuse of pumps or equipment.

GENERAL INFORMATION

Lift-Out Models: These instructions cover the SRA-125 with and without check valve. All lift-outs are designed for pumps with 1 1/4" vertical discharge.

General Construction: The base as well as the movable disconnect are made of cast iron. The guide plate, top rail support and intermediate rail support are made of stainless steel.

Lift-Out Chain: The two chain packages available are galvanized or stainless steel. Each package is designed to attach to the top of the pump and also to the guide plate which is part of the movable disconnect. Each package is designed to allow the pump to be safely hoisted up the guide rail.

Rail Support Brackets: All the lift-outs are designed to use 1" standard pipe for guide rails. A top rail support is available to be mounted to the hatch frame. Intermediate brackets are available for deep basins. It is recommended that if the rail length is over 20 feet that an intermediate bracket be installed.

Basin Covers: Myers has several types of basin covers available for use with either fiberglass or concrete basins. Basin hatch type covers are available in either steel or aluminum construction. The basin cover frame is designed to allow for mounting of rail support brackets.

Basin Bottom: All cement pipe basins must have a smooth level troweled bottom for level mounting of discharge casting.

GENERAL INFORMATION (Cont'd)

Level Sensing Controls: The float level controls maintain the basin sewage water level by controlling pump turn-on and turn-off levels.

1. The lower turn-off control should be set so that the pump stops at approximately the top of the pump. Consult the factory for any settings below this point.
2. The upper turn-on control should be set above the lower turn-off control. The exact height between the two controls is determined by the number of pump starts desired and depth of the basin. A maximum of 10 starts per hour should not be exceeded.
3. The override control is set at a specified height above the upper turn-on control.
4. The alarm control is set about 6" to 12" above the override control.
5. No control should be set above the inlet invert.

CAUTION: After the pump is installed and sewage has entered the basin there is "Danger". Sewage water gives off methane and hydrogen sulfide gases, which are poisonous. Never enter a wet well unless the cover is open for a sufficient period of time to allow fresh air into the basin. It is recommended that a man in the basin have a harness on with a rope to the surface, so that he can be pulled out in case of asphyxiation. It is for this reason that Myers recommends using the rail lift-out system so that no service is required inside the basin.

INSTALLING RAIL SYSTEM PARTS

Mounting Cover, Discharge Base and Rails

1. Set concrete cover with hatch opening in position.
2. Bolt top rail support plates to hatch frame. Two 1/4" bolts are required to attach each support.
3. Lower the base elbow into the basin.
4. Position the base elbow by dropping a plumb line from center of pipe supports, located on top rail support, to center of rail pins protruding from the base elbow. Level the elbow flange in two directions 90° to each other. Shims may be required under the base in order to obtain this level condition. Mark the position of the base hold down bolts through the holes in the base.
5. Move the base aside to allow drilling of the concrete for 3/8" expansion bolts, 2" long. Move the base over the bolt holes and recheck with level and plumb line. Install expansion bolts.
6. Cut the pipe guide rails to the proper length and install them between the pipe supports at the top of the basin and the pins on the base. Guide rails are to be Schedule 10 or Schedule 40, galvanized or stainless steel.

7. Install discharge pipe as required by the particular job specifications.

IMPORTANT: DISCHARGE PIPE AND GUIDE RAILS MUST BE PARALLEL IF INTERMEDIATE GUIDE BRACKET IS USED.

INSTALLING INTERMEDIATE GUIDE BRACKET (Required for each 20 feet of basin depth)

1. Remove guide rails and cut a piece from each one. These pipes must be exactly the same length and of a length that will permit installing the intermediate guide bracket in the desired location.
2. Place the cut pieces of pipe over the guide rail pins located in the base.
3. Set the intermediate guide bracket in position with guides into pipe. Put U-bolt around discharge pipe and tighten lightly.
4. Measure from joint on plug on intermediate guide bracket to joint on plug on top rail support and cut two rails to this length. Put rails in place and tighten screws in top rail support.
5. Recheck rails; they must be straight and plumb. Move intermediate guide bracket if necessary to perfectly align rails. After alignment is secured, tighten nuts on U-bolt.
6. If a second intermediate guide bracket is used, the above procedure is followed for installation.

ATTACHING DISCONNECT TO PUMP (See Fig. 1)

1. Bolt elbow onto pump volute at flange vice with two 5/16"-18UNC socket head cap screws.
2. Set lifting chain bail with one end on guide plate eye bolt and other end on pump lifting eye.

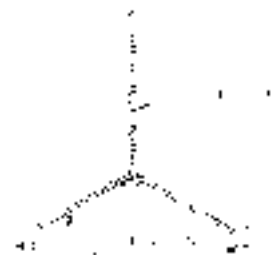


Fig. 1

INSTALLING PUMP AND DISCONNECT

1. Attach the lifting chain to the bail with clevis, sliding the clevis along bail until the center of gravity is found.
2. A hook is located on the top rail support to hold the upper end of the chain when not in use.
3. 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 pins on sealing plate) should come to seat in the inclined surface on the arms.

CAUTION: No persons should be in the sump basin when pump is lowered into position!

Air Venting: Air tends to trap in the pump volute when water raises in the sump or when the pump is lowered into water after service. To vent off this air, a small hole is drilled into the pump volute. Be sure this vent hole is clean after any service work on pump.

INSTALLATION FOR RAIL SYSTEM

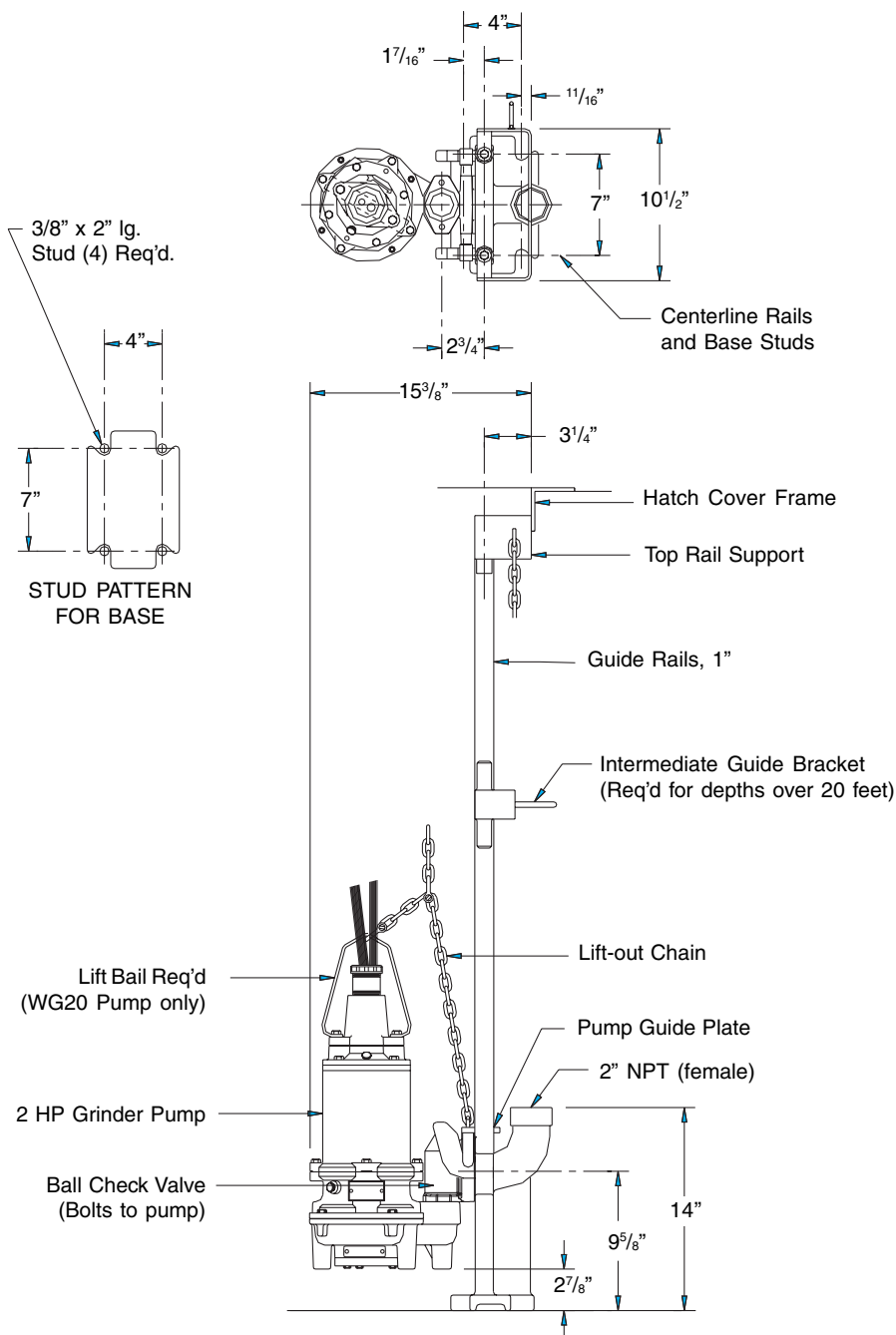


Fig. 2

PARTS LIST

Description	Part Number
Discharge Seal	27170A001
O-ring, Elbows	05876A258
Base	27156D000
Elbow, SRA-125	27157C000
Guide Pin	25073A004
Guide Plate	27171B000
Screws, Guide Plate	19100A004
Eyebolt, SST	21929A011
Screws, Volute	06106A059
Insert, SRA-125CV	27277A000
Ball, SRA-125CV	050780001
Elbow, Brass, SRAX-125	27157C010
Guide Plate, Brass, SRAX-125	27171B001

TYPICAL INSTALLATION SIMPLEX

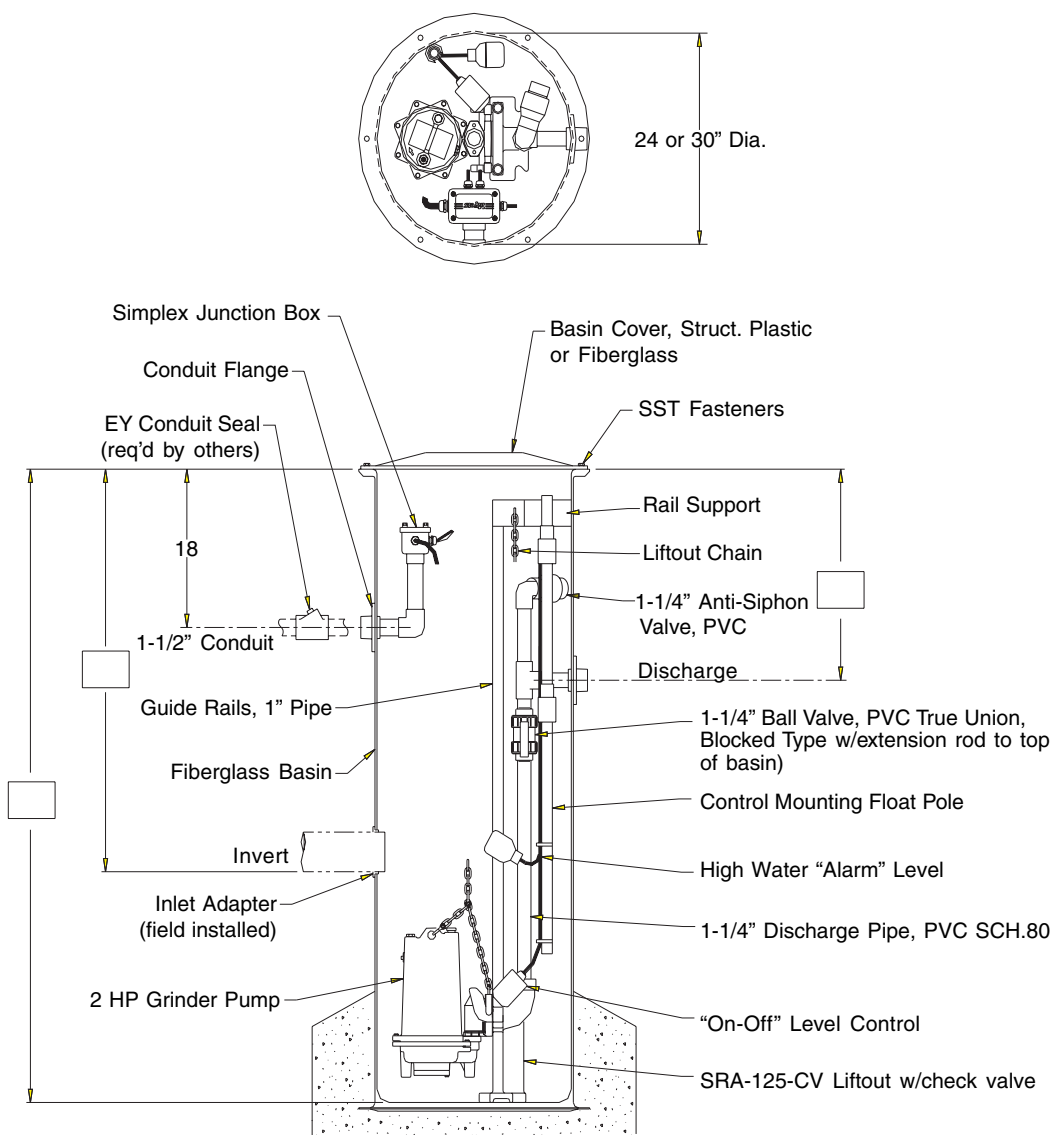


Fig. 3

TYPICAL INSTALLATION DUPLEX

