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## GUIDE RAIL SYSTEM INSTALLATION PROCEDURES

4" P/N 39-0154 and 39-0155  
6" P/N 39-0185 and 39-0190



### GENERAL INFORMATION

These models are complete systems used in sewage or dewatering installations with side outlet flanged pumps. They can be used in basins at any depth. The guide rail systems are particularly useful when the liquid level is above the discharge pump. The systems feature easy automatic engagement and disengagement for removing the pump for service or repair without draining the basin.

**General Construction:** A flanged discharge elbow is supplied with the rail system which also supports the lower rail guides. The discharge elbow, as well as the mounting plate are made of durable ductile iron that is epoxy coated. Upper guide rail brackets (supplied) and intermediate guide brackets (optional) are stainless steel. The mounting plate is available in non-sparking brass. All models require the use of 2" schedule 40 (galvanized steel or stainless steel) pipe for guide rails. Pipe is furnished by the user.

**Lifting Cable:** The pump is equipped with lifting lugs that are an integral part of the motor housing or cover for lifting. A permanently attached chain, cable or choker (purchased separately), should be used to aid in pump installation and removal. It is not necessary to use a separate pull chain on the mounting plate which is bolted to the pump discharge flange.

**Rail Support Bracket:** As mentioned above, all the rail systems utilize 2" standard pipe for the guide rails. The supplied top rail support is to be mounted to the hatch frame. Intermediate brackets are available for deep installations. It is recommended that an intermediate stabilizer support bracket be ordered separately and used for each 15 feet of basin depth.

### INSTALLING RAIL SYSTEM PARTS

#### Discharge Base and Rails:

1. Lower the base elbow into the basin.
2. Position the base elbow by dropping a plumb line from the center of the 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. Mark the position of the base, hold down bolts through the holes/slots in the base.
3. Move the base aside to allow for installation of 3/4" mounting bolts (not included). Secure base with mounting bolts.
4. Cut the 2" pipe guide rails (supplied by others) to the proper length and install them between the upper guide rail bracket and the pins on the base elbow. It is recommended that the guide rails are to be schedule 40, galvanized or stainless steel.

**▲ IMPORTANT :** Discharge pipe and guide rails must be parallel if intermediate guide bracket is used.

#### INSTALLING INTERMEDIATE GUIDE BRACKET (Required for each 15 feet of basin depth)

1. Remove the guide rails and cut a piece from each one. The amount to cut from each one must be determined to permit installing the intermediate guide bracket in the desired location. After cutting, the pipes must be exactly the same length. The intermediate guide rail bracket attaches to the discharge piping.
2. Place the cut pieces of pipe over the guide rail pins located on the base elbow.
3. Set the intermediate guide bracket in position with the guides into the pipe. Put a U-bolt around the discharge pipe and tighten lightly.
4. Measure from pipe seat on intermediate guide bracket to pipe seat on top rail support and cut two (2) guide rails to length. Put rails in place and tighten screws in top support.
5. Recheck guide rails, they must be straight and plumb. Move intermediate guide bracket if necessary to perfectly align. After aligning rails, finish tightening the nuts on the U-bolt.
6. If a second intermediate guide bracket is used, the above procedure must be followed again.

**ATTACHING MOUNTING PLATE TO PUMP**

1. Install the Buna-N O-rings onto the mounting plate. Lightly grease O-rings with a general purpose grease to aid in assembly. Position mounting plate against pump discharge flange. Plate is oriented correctly when the angled machined surfaces face the pump and the guide portion of the bracket faces up.
2. Secure mounting plate to pump with screws and washers provided. Tighten securely.
3. The 64 HD, X64 HD, 72HD and X72HD Series solids-handling pumps have 3 pipe legs. Remove these legs from the pump.

**INSTALLING PUMP AND DISCONNECT**

Position pump so the guide rails are captured by the mounting plate. Slowly lower the pump down the guide rails. The angled surface of the mounting plate should come to seat in the inclined surface on the arms.

After lowering the pump down the guide rail, secure the upper end of the lifting cable to the top rail support to keep it from falling into the pit.

Order intermediate stabilizer for basin depths greater than 15 feet.

**Zoeller Engineered Products 4" Guide Rail System**

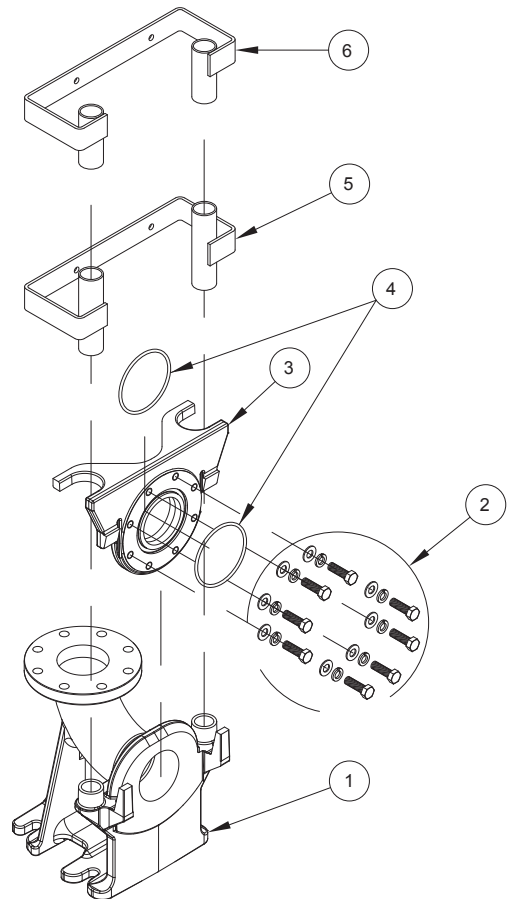
**4" Systems - P/N 39-0154 and 39-0155**

<b>Parts List For 39-0154 - 4" Standard Z-Rail® Guide Rail System</b>			
<b>Item No.</b>	<b>Description</b>	<b>Qty.</b>	<b>5/17 to Current Revision A</b>
1	Powder Coated Ductile Iron Discharge Elbow	1	154400
2	Stainless Steel Hardware	-	Consult Factory
3	Powder Coated Ductile Iron Mounting plate	1	154402
4	Buna-N O-ring	2	154795
**5	Stainless Steel Intermediate Stabilizer Bracket	1	006050
6	Stainless Steel Upper Guide Rail Bracket	1	006045

*\*\* Optional Order P/N for pit depths greater than 15 ft.*

<b>Parts List For 39-0155 - 4" Non-sparking Z-Rail® Guide Rail System</b>			
<b>Item No.</b>	<b>Description</b>	<b>Qty.</b>	<b>5/17 to Current Revision A</b>
1	Powder Coated Ductile Iron Discharge Elbow	1	154400
2	Stainless Steel Hardware	-	Consult Factory
3	Bronze Mounting plate	1	154404
4	Buna-N O-ring	2	154795
**5	Stainless Steel Intermediate Stabilizer Bracket	1	006050
6	Stainless Steel Upper Guide Rail Bracket	1	006045

*\*\* Optional Order P/N for pit depths greater than 15 ft.*



SK3145

# Zoeller Engineered Products 6" Guide Rail System

## 6" Systems - P/N 39-0185 and 39-0190

### Parts List For 39-0185 - 6" Standard Z-Rail® Guide Rail System

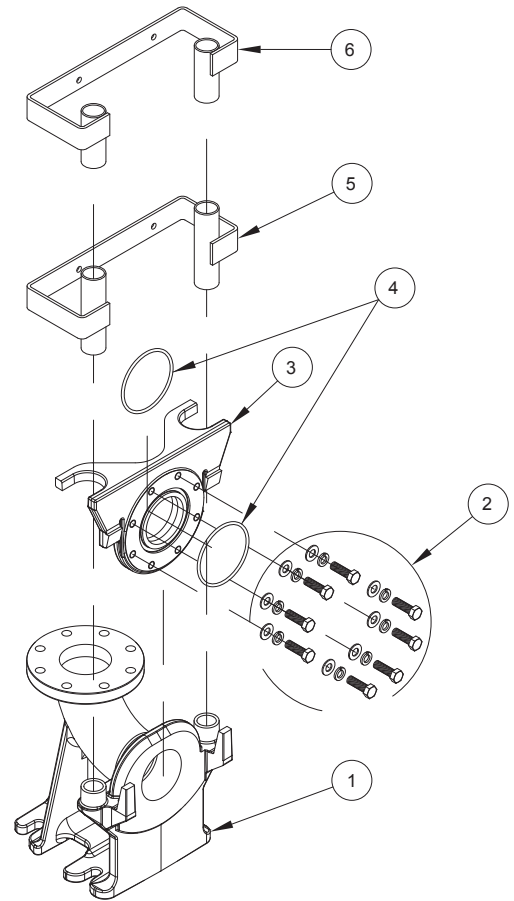
Item No.	Description	Qty.	03/23 to Current Revision A
1	Powder Coated Ductile Iron Discharge Elbow	1	158013
2	Stainless Steel Hardware	-	Consult Factory
3	Powder Coated Ductile Iron Mounting plate	1	158016
4	Buna-N O-ring	2	158127
**5	Stainless Steel Intermediate Stabilizer Bracket	1	007513
6	Stainless Steel Upper Guide Rail Bracket	1	006665

\*\* Optional Order P/N for pit depths greater than 15 ft.

### Parts List For 39-0190 - 6" Non-sparking Z-Rail® Guide Rail System

Item No.	Description	Qty.	03/23 to Current Revision A
1	Powder Coated Ductile Iron Discharge Elbow	1	158013
2	Stainless Steel Hardware	-	Consult Factory
3	Bronze Mounting plate	1	158017
4	Buna-N O-ring	2	158127
**5	Stainless Steel Intermediate Stabilizer Bracket	1	007513
6	Stainless Steel Upper Guide Rail Bracket	1	006665

\*\* Optional Order P/N for pit depths greater than 15 ft.



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