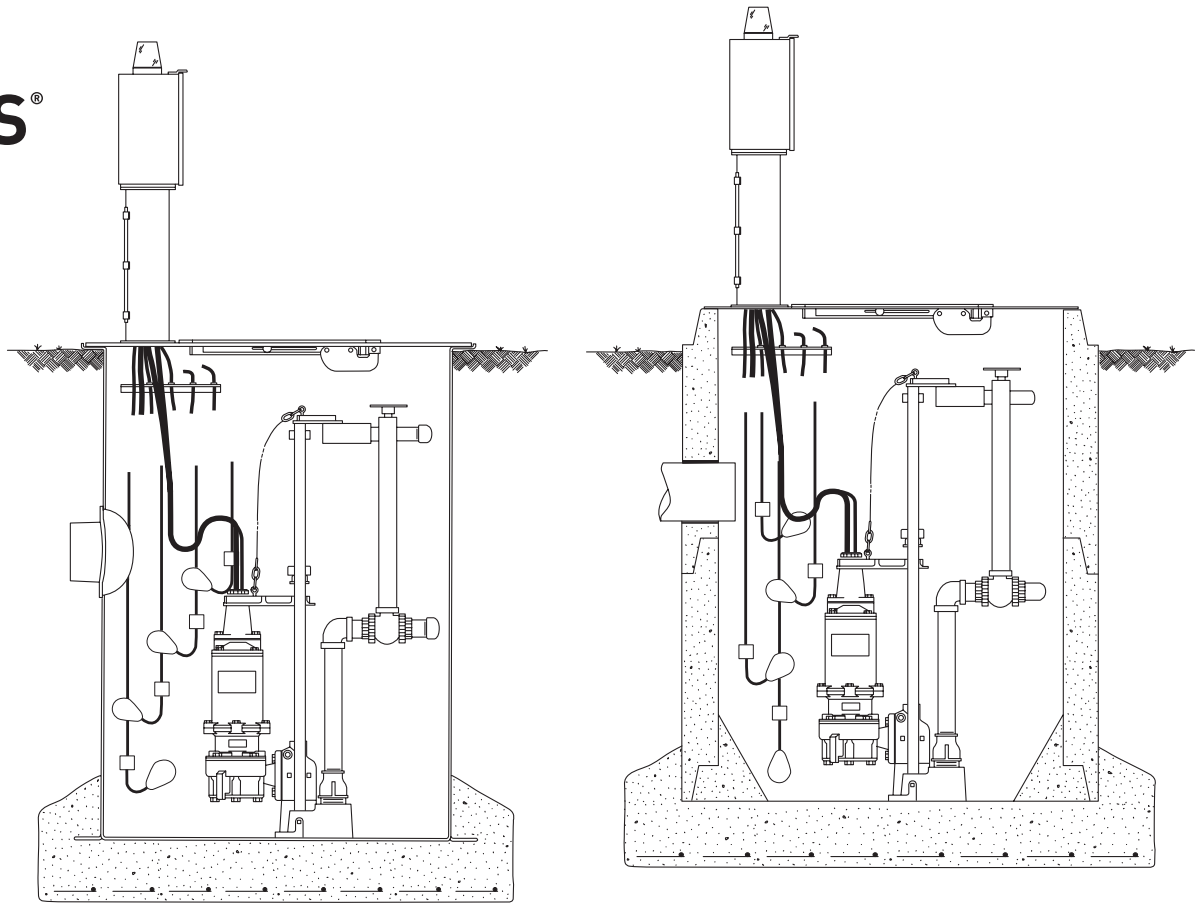




MYERS®



SYSTEM IN FIBERGLASS BASIN

SYSTEM IN CONCRETE BASIN

MODELS WG30, WG50, WG30H, WG50H and WG75H **SIMPLEX AND DUPLEX GRINDER PUMP RAIL INSTALLATIONS**

INSTALLATION AND SERVICE MANUAL

For Myers Simplex and Duplex Lift-Out Rail System Installed in Fiberglass Basin at Factory as Complete Unit or Rail Parts for Installing in Fiberglass or Concrete Basin by Customer.

NOTE! To the installer: Please make sure you provide this manual to the owner of the equipment or to the responsible party who maintains the system.

CALIFORNIA PROPOSITION 65 WARNING:

▲ WARNING This product and related accessories contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

NOTE: When complete packaged system, including fiberglass basin, is supplied from factory all parts are mounted in basin except pump, level controls and connection junction box. Pumps, level controls and electrical control boxes must be ordered separately. Level controls can be ALC or FLCW type and all alarm controls are FLCW type. Type must be specified at time of order so proper support brackets can be mounted in basin.

STEPS TO INSTALL RAIL SYSTEM IN FIBERGLASS OR CONCRETE BASIN

1. Clean basin bottom thoroughly before placing template. For fiberglass basin all parts should be installed before placing basin in ground.
2. Flanges are required for rail support guide and for discharge pipe if system is installed in fiberglass. Use flanges and gaskets supplied and drill through fiberglass wall for bolts. Use gasket seal under bolt heads to seal against ground water leakage. For concrete basins, holes are drilled through wall for support and discharge pipes and are cemented in place after being properly aligned.
3. Bolt discharge cases in place on basin bottom.
4. Install discharge piping from discharge case complete through basin wall. Use slip coupling as shown on drawings to connect piping.
5. Install 1 1/4" guide rails. Galv. pipe is generally used but stainless steel or other corrosion resistant pipe can be used as long as the O.D. is (1.66" dia.).
6. Align 1 1/4" rails plumb by using a level in both directions on pipe. Tighten set screws in discharge base casting to hold rails.
7. Mount level control brackets as shown on drawings. Set control heights as shown on drawings.
8. If factory cover is used where control box is mounted on cover install junction box on elbow before placing cover on basin.
9. If control box is to be offset from basin attach conduit nipple through wall and cement in or use flange if basin is fiberglass. See drawings.

10. If basin is fiberglass, concrete must be poured on anti-flotation ring to prevent basin from floating up. Amount of concrete varies with type of ground in which basin is installed. Where ground water is high as around lakes a 36" dia. basin requires about 5 cu. ft. of concrete per foot of basin depth and a 48" dia. basin requires about 8 cu. ft. of concrete per foot of basin depth. Where ground is dry about 1/4 to 1/3 of this amount is necessary to prevent flotation in case of water drains in around basin before backfilling.
11. Be sure all inlet and discharge piping is properly connected before backfilling.

ASSEMBLING PUMP TO CHECK VALVE AND TO RAIL GUIDES

1. Bolt pump flange to check valve, use cap screws supplied. Be sure to use gasket between flanges.
2. Screw 2" galv. nipple into connection cap at top of motor and install guide and mounting plate.
3. Drop 1 1/4" galv. support pipe and cap through mounting plate and screw into top of check valve. Tighten set screws to pump nipple and to support pipe and attach chain to mounting plate. Pump is now ready to drop in on rails. Use hoist to lower pump to lower discharge casting.
4. Retain power cords so they do not drop into sump.
5. After pump is seated attach 3/4" galv. pipe to lower hold-down bracket and lower down to top of 1 1/4" pipe cap.
6. Place upper hold-down bracket over 3/4" pipe and tighten set screws on all 3 pipes. Do not tighten too tight as casting may crack. This hold-down pipe and brackets prevent the pump from raising up due to the back hydraulic pressure against the check valve housing.
7. Connect power cords and control cords into junction box and connect to wires from control box. See wiring diagram Fig. 8 and Fig. 9 for duplex systems and Fig. 10 and 11 for simplex systems.
8. DO NOT POUR SEALING COMPOUND INTO SEAL FITTING OF JUNCTION BOX UNTIL PUMPS HAVE BEEN RUN TO BE SURE ALL CONNECTIONS ARE CORRECT.

STARTING SYSTEM

1. Open gate valves on discharge piping.
2. Set pump switches at control box at auto position and turn on power. Fill sump with water until controls start pump. Allow pump to operate until level drops, stopping pump.
3. If system is duplex turn both pump switches to off and fill sump above upper control. Turn both pump switches to auto position. Both pumps should run and pump sump down to lower control.
4. Leave both switches in auto-position and pump is ready for automatic operation.
5. A small hole is drilled in the pump case to prevent air lock so some water flows from this hole when pump is operating.

IN CASE OF TROUBLE CHECK THE FOLLOWING

- (A) Pump runs but does not deliver water.
- (1) May be air locked. Lift pump and reseal on lower casting.
 - (2) Discharge shut-off valve may be closed.
 - (3) If pump is 3 phase, may be running in wrong direction. Pump should be checked before installing in sump for proper rotation.
ROTATION: Counterclockwise when looking into pump inlet.

CAUTION: KEEP HANDS AND FINGERS AWAY FROM GRINDER IMPELLER WHEN MAKING THIS CHECK.

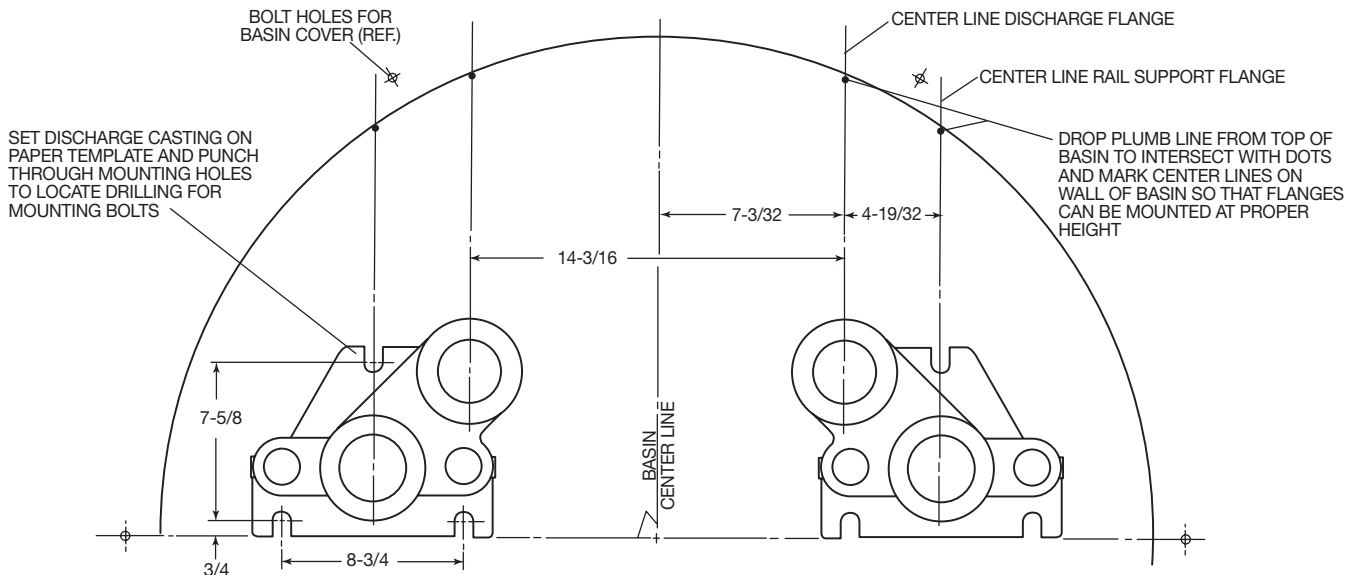
If 3 phase rotation is wrong, interchange any two line leads at the control box to reverse motor.

CAUTION: BE SURE CONNECTED POWER AGREES WITH DATA ON PUMP NAME PLATE.

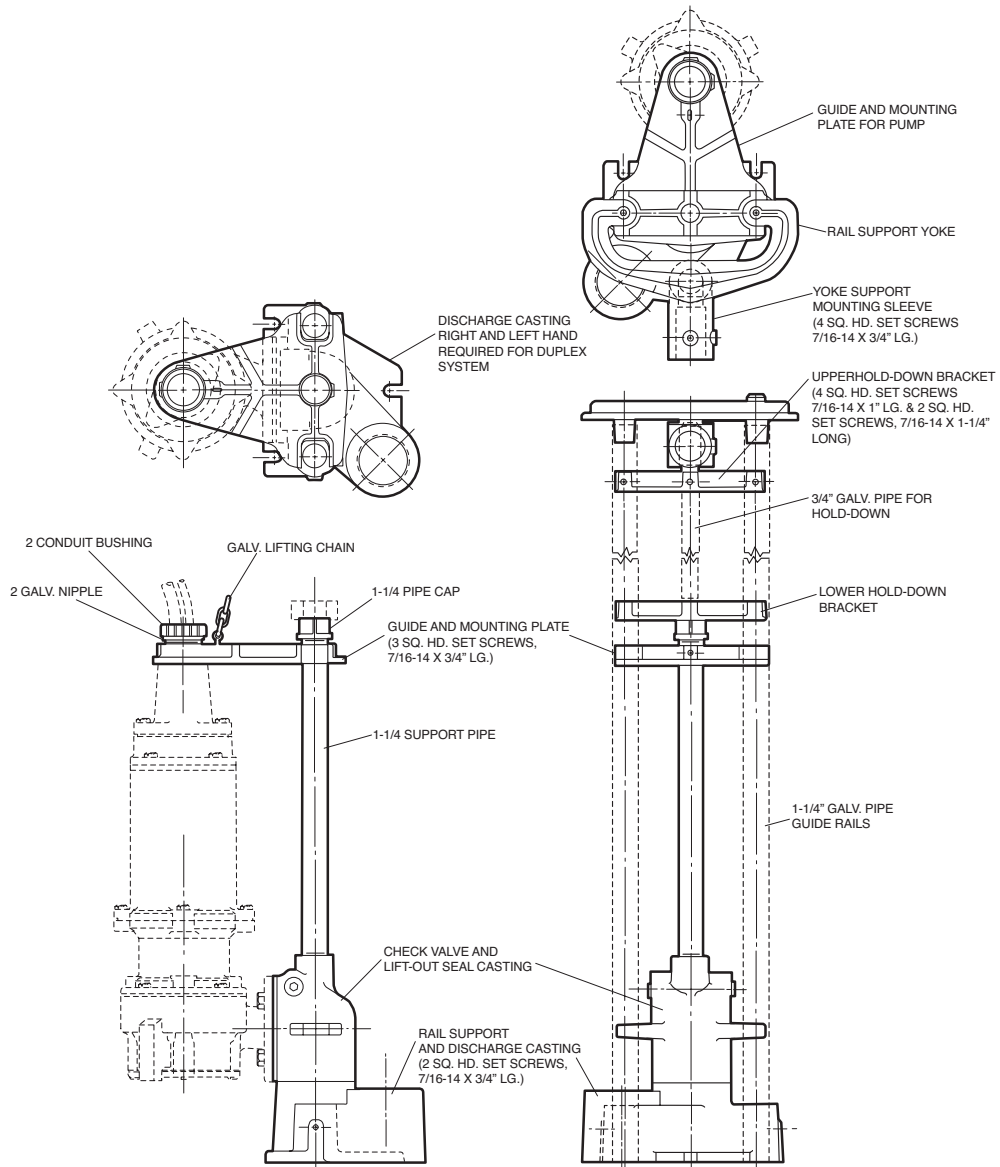
- (B) Check valve seal fitting leaks.
- (1) O-Ring seal may be cut.
 - (2) Trash may be caught under flange. Lift out and reseal. It may be necessary to run pump lifted out of seal casting to flush trash away from seal inlet.
- (C) Proper setting of level controls .
Controls should be set so that pump stops when level is about 3 inches above pump inlet. If controls are set too high, trash and grease will accumulate on the surface and may cause clogging.

CAUTION: NEVER WORK ON PUMPS OR CONTROLS UNLESS POWER IS TURNED OFF IF PUMP IS REMOTE FROM CONTROL BOX, DISCONNECT WIRES TO PUMPS TO BE CERTAIN POWER CAN NOT BE TURNED ON. THIS MEANS ALL WIRES INCLUDING CONTROL WIRES. NEVER PUT HANDS NEAR GRINDER IMPELLER ON ANY RUN CHECKS.

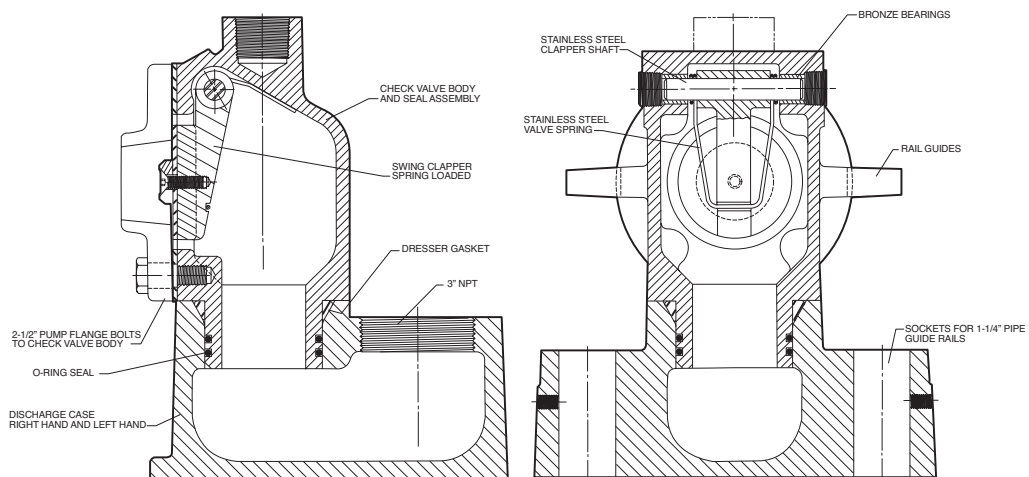
PAPER TEMPLATE TO LOCATE DISCHARGE CASTINGS AND OBTAIN CENTER LINES FOR DISCHARGE AND SUPPORT FLANGES 48"



PARTS INCLUDED IN RAIL PACKAGE

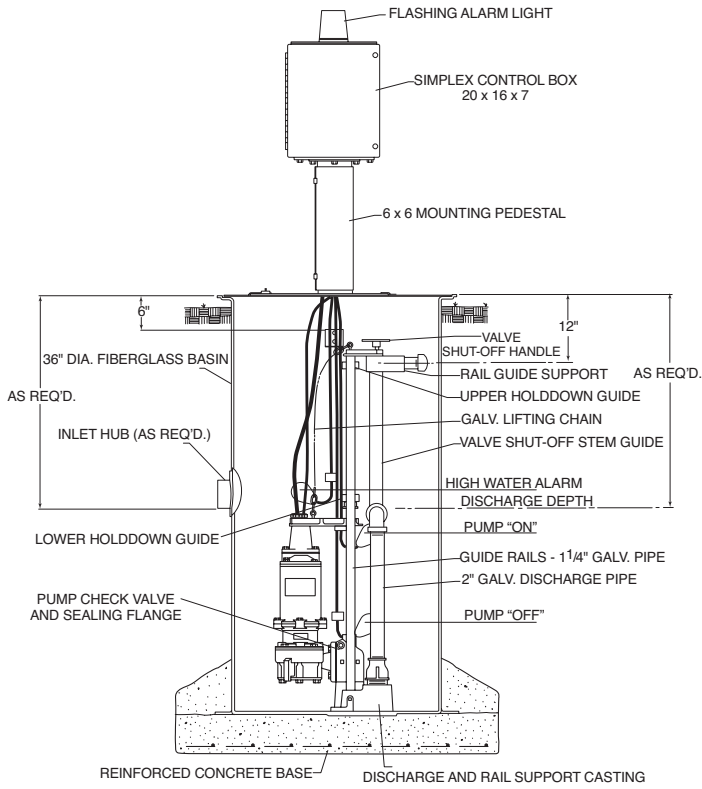


LIFT-OUT CHECK VALVE AND SEALING ASSEMBLY

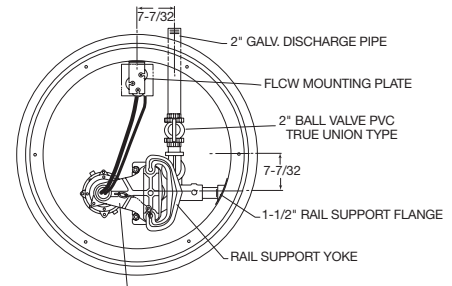
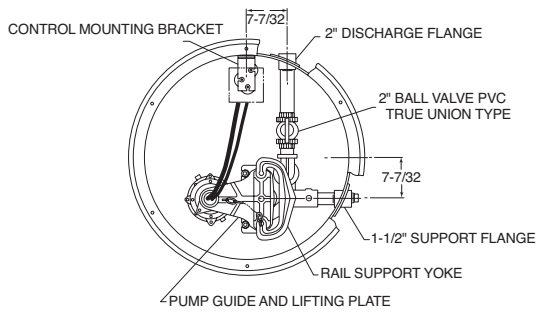
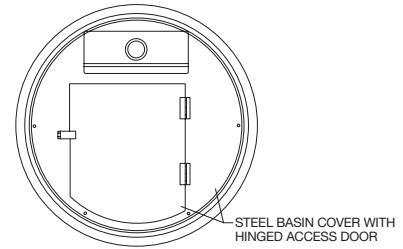
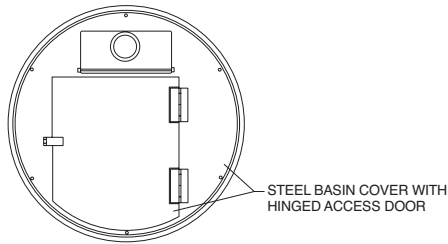
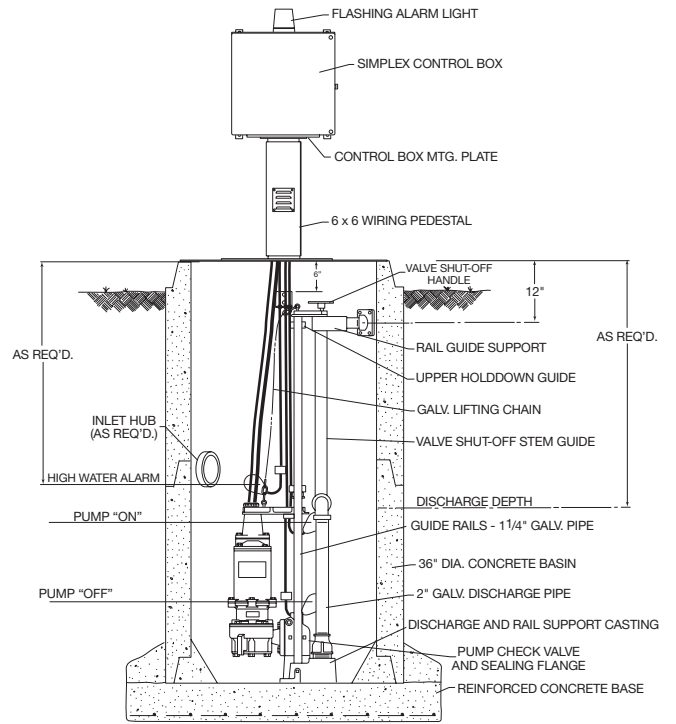


SIMPLEX INSTALLATION

FIBERGLASS BASIN

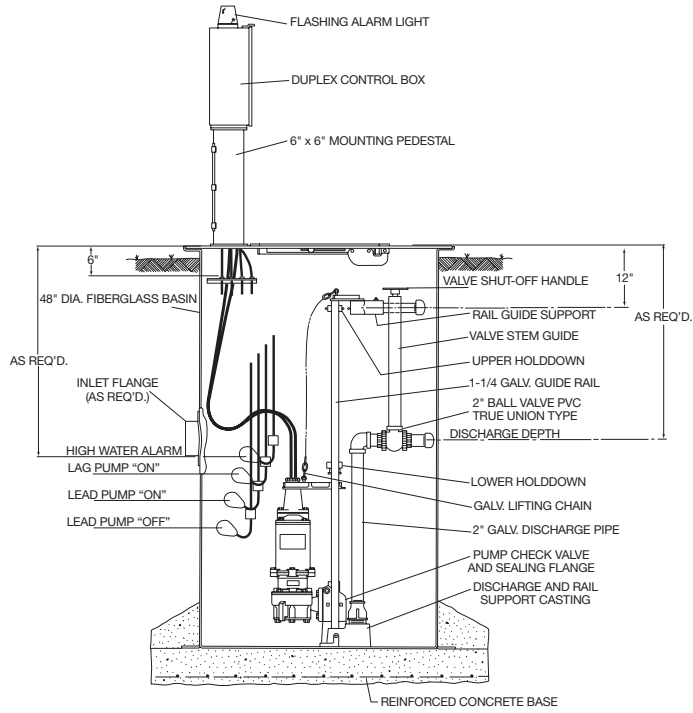


CONCRETE BASIN

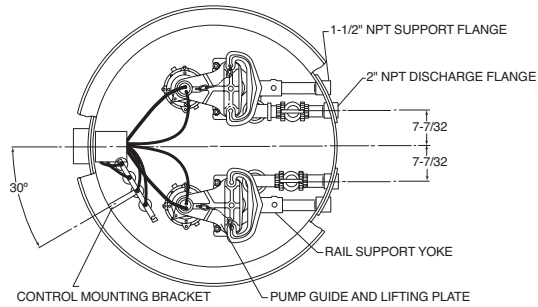
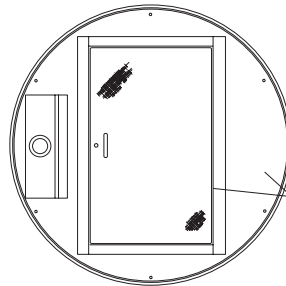
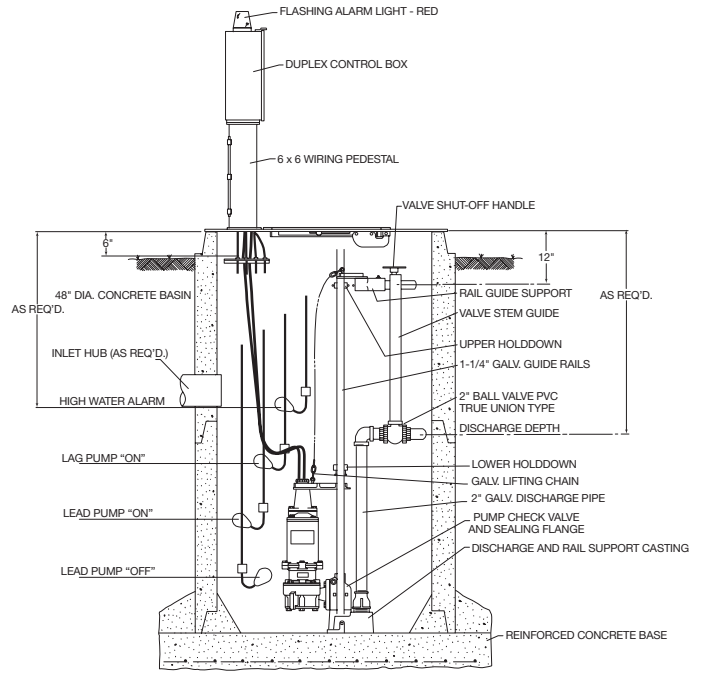


DUPLEX INSTALLATION

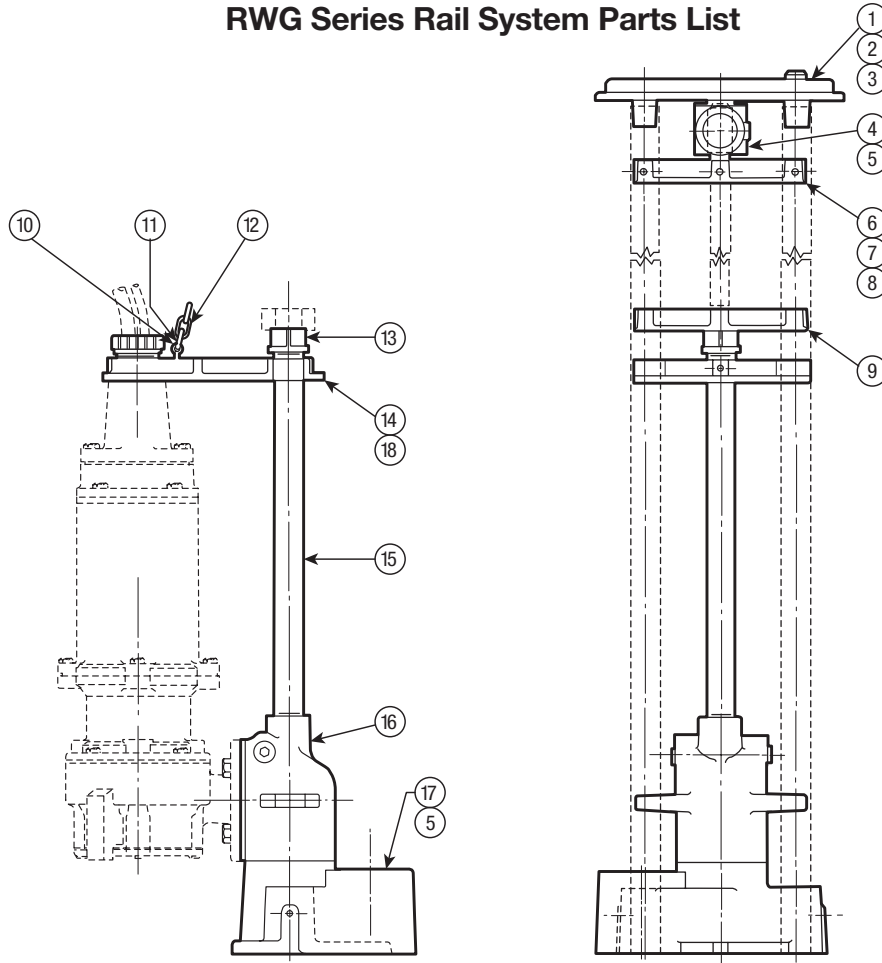
FIBERGLASS BASIN



CONCRETE BASIN



RWG Series Rail System Parts List



Ref. No.	Description	No. Req.	Part Numbers			
			Standard		Hazardous Location	
			RWGRH-300	RWGLH-300	RWGXRH-300	RWGXLH-300
1	Guide – Upper Rail	1	22610C000	22610C000	22610C000	22610C000
2	Eye Bolt – 3/8"-16 UNC x 1" Eye	1	21929A002	21929A002	21929A002	21929A002
3	Clevis, Chain Shackle – 1/4" Screw Type	1	22417A001	22417A001	22417A001	22417A001
4	Support – Rail Guide	1	22611B000	22611B000	22611B000	22611B000
5	Set Screw, Square Hd. – 7/16"-14 UNC x 1"	6	05057A031	05057A031	05057A031	05057A031
6	Plate – Top Hold-down	1	22612B000	22612B000	22612B002	22612B002
7	Cap Screw, Hex Hd. – 7/16"-14 UNC x 1"	4	19102A021	19102A021	19102A021	19102A021
8	Cap Screw, Hex Hd. – 7/16"-14 UNC x 1-1/4"	2	19102A020	19102A020	19102A020	19102A020
9	Plate – Bottom Hold-down	1	22612B001	22612B001	22612B003	22612B003
10	Eye Bolt – 1/2"-13 UNC x 1-3/16" Eye	1	21929A003	21929A003	21929A003	21929A003
11	Clevis, Chain Shackle – 5/16" Screw Type	1	22417A002	22417A002	22417A002	22417A002
12	Chain Assembly – 3/16" x 15'	1	23531A000	23531A000	23531A000	23531A000
13	Cap – 1-1/4" Pipe	1	05737A015	05737A015	05737A015	05737A015
14	Bracket – Top Guide	1	22613C000	22613C000	22613C001	22613C001
15	Pipe – 1-1/4" x 23"	1	05917A129	05917A129	05917A129	05917A129
16	Check Valve Assembly Complete	1	22602D000	22602D000	22602D001	22602D001
	Body – Check Valve	1	22604D000	22604D000	22604D001	22604D001
	Valve – Flapper	1	22605B010	22605B010	22605B011	22605B011
	Shaft	1	22607A000	22607A000	22607A000	22607A000
	Bearing – .627 x .878 x 3/4" Lg.	2	05806A036	05806A036	05806A036	05806A036
	Spring	1	22608B000	22608B000	22608B000	22608B000
	Pipe Plug – 3/4" NPT (Crsk. Hd.)	2	05022A019	05022A019	05022A019	05022A019
	Gasket, Beveled Rubber – 3-1/2" I.D.	1	05085A009	05085A009	05085A009	05085A009
	O-Ring – 3-3/8" x 3" x 3-16"	2	05876A097	05876A097	05876A097	05876A097
	Gasket, Rubber – 7" x 4" x 1/8" Thick	1	05231A077	05231A077	05231A077	05231A077
	Cap Screw, Hex Hd. – 5/8"-11 x 1-1/2"	4	19105A003	19105A003	19105A003	19105A003
17	Case – Discharge	1	22609D000	22609D001	22609D000	22609D001
18	Set Screw, Sk. Hd. – 7/16"-14 UNC x 3/4" Lg.	3	06024A010	06024A010	06024A010	06024A010

STANDARD LIMITED WARRANTY

Pentair Myers® warrants its products against defects in material and workmanship for a period of 12 months from the date of shipment from Pentair Myers or 18 months from the manufacturing date, whichever occurs first – provided that such products are used in compliance with the requirements of the Pentair Myers catalog and technical manuals for use in pumping raw sewage, municipal wastewater or similar, abrasive-free, noncorrosive liquids.

During the warranty period and subject to the conditions set forth, Pentair Myers, at its discretion, will repair or replace to the original user, the parts that prove defective in materials and workmanship. Pentair Myers reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for prior sold and/or shipped units.

Start-up reports and electrical schematics may be required to support warranty claims. Submit at the time of start-up through the Pentair Myers website: <http://forms.pentairliterature.com/startupform/startupform.asp?type=m>. Warranty is effective only if Pentair Myers authorized control panels are used. All seal fail and heat sensing devices must be hooked up, functional and monitored or this warranty will be void. Pentair Myers will cover only the lower seal and labor thereof for all dual seal pumps. Under no circumstance will Pentair Myers be responsible for the cost of field labor, travel expenses, rented equipment, removal/reinstallation costs or freight expenses to and from the factory or an authorized Pentair Myers service facility.

This limited warranty will not apply: (a) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with the printed instructions provided; (b) to failures resulting from abuse, accident or negligence; (c) to normal maintenance services and parts used in connection with such service; (d) to units that are not installed in accordance with applicable local codes, ordinances and good trade practices; (e) if the unit is moved from its original installation location; (f) if unit is used for purposes other than for what it is designed and manufactured; (g) to any unit that has been repaired or altered by anyone other than Pentair Myers or an authorized Pentair Myers service provider; (h) to any unit that has been repaired using non factory specified/OEM parts.

Warranty Exclusions: PENTAIR MYERS MAKES NO EXPRESS OR IMPLIED WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. PENTAIR MYERS SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE.

Liability Limitation: IN NO EVENT SHALL PENTAIR MYERS BE LIABLE OR RESPONSIBLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES RESULTING FROM OR RELATED IN ANY MANNER TO ANY PENTAIR MYERS PRODUCT OR PARTS THEREOF. PERSONAL INJURY AND/OR PROPERTY DAMAGE MAY RESULT FROM IMPROPER INSTALLATION. PENTAIR MYERS DISCLAIMS ALL LIABILITY, INCLUDING LIABILITY UNDER THIS WARRANTY, FOR IMPROPER INSTALLATION. PENTAIR MYERS RECOMMENDS INSTALLATION BY PROFESSIONALS.

Some states do not permit some or all of the above warranty limitations or the exclusion or limitation of incidental or consequential damages and therefore such limitations may not apply to you. No warranties or representations at any time made by any representatives of Pentair Myers shall vary or expand the provision hereof.



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