"Quality Pumps Since 1939"

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

ZOELLER® PUMP CO.

MAIL TO: *P.O. BOX 16347 • Louisville, KY 40256-0347*
SHIP TO: *3649 Cane Run Road • Louisville, KY 40211-1961*
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

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QUALITY MADE America's Pump Co. BY U.S. CRAFTSMEN

MODEL:_____
DATE CODE: _____
DATE INSTALLED: _____

ASSEMBLY & INSTALLATION INSTRUCTIONS
ZOELLER HAZARDOUS ENVIRONMENT AUTOMATIC SYSTEMS
(For Class 1, Division 1, Groups C & D Applications)
Explosion Proof Requirements

Notice to Installer: Instructions must remain with installation.

PREINSTALLATION CHECKLIST

Zoeller 913 and 914 systems are designed to provide automatic control of a Zoeller Hazardous Environment Series pump without the need for a control panel. The 913 and 914 kits contain all the parts and hardware needed for installation, less the field wiring.

Carefully unpack your system and check the contents against the parts list in Fig. 1. Installations should only take place where there is sufficient headroom to allow for pump removal. Installer supplied discharge piping should include a union and a ball/gate valve.

1. ⚠ CAUTION Check that power source is adequate for the motor as indicated on the pump or basin plate.

2. ⚠ CAUTION Make sure the pump electrical supply circuit is equipped with fuses or circuit breakers of proper capacity. A separate branch circuit, sized according the National Electrical Code for the current shown on the pump nameplate, is recommended.

3. ⚠ WARNING Test for Ground. As a safety measure, each electrical outlet should be checked for ground using an Underwriters Laboratory listed circuit analyzer. Be sure that the power, neutral and ground wires are properly connected to the outlet; if they are not, call a qualified electrician.

4. ⚠ CAUTION All plumbing (discharge and vent lines) must be installed to meet local codes. This unit must be vented. **DO NOT USE AN AUTOMATIC VENT DEVICE SIMILAR TO A "PRO-VENT".** Some states require that this product be installed by a licensed plumber.

5. ⚠ WARNING Installation and checking of electrical circuits and hardware should only be performed by a qualified licensed electrician.

6. ⚠ CAUTION Repair and service should only be performed by a Zoeller Pump Company Authorized Service Station.

7. ⚠ CAUTION Dewatering pumps are not designed or intended to handle raw sewage.

⚠ WARNING All installations must be in accordance with National, State and Local codes including, but not limited to, National Electrical Code articles 500-505. **Compliance with all codes is the responsibility of the installing party or parties.**

FIGURE 1: PARTS LIST

NO.	DESCRIPTION	QTY. 913	QTY. 914
1	Pump and pump plate assembly	1	1
2	Float ball	1	1
3	Seal, bellows	1	1
4	Collar, float and switch adjustment	4	4
5	Assembly, conduit	1	1
6	Assembly, switch pedestal	1	1
7	Rod, float	2	2
8	Guide, float rod	1	1
9	Rod, all thread brass	1	1
10	Switch, explosion proof	1	1
11	Seal, pipe	1	1
12	Shim, U-slotted	2	2
13	Clamp, hose	2	2
14	Bushing, vinyl	1	1
15	Screw, 3/8-16 X 1 1/2 S.S.	2	2
16	Washer, flat 3/8 S.S.	8	2
17	Washer, lock 3/8 S.S.	2	2
18	Nut, 3/8-16 S.S.	2	2
19	Screw, .25-20 X 1 S.S.	2	2
20	Washer, lock .25 S.S.	2	2
21	Screw, 3/8-16 X 1 S.S.	6	N/A

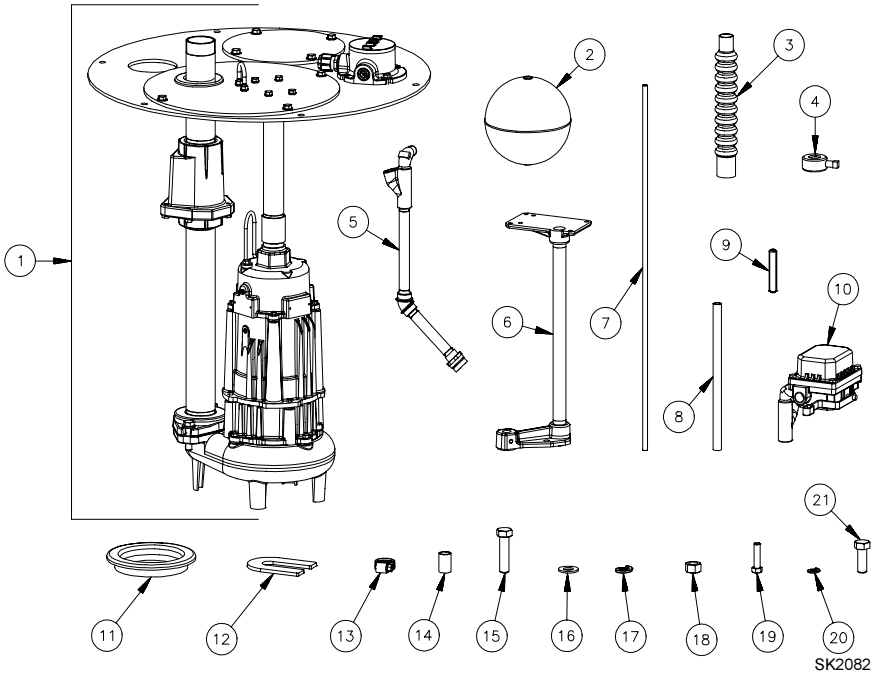

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FIGURE 2: CONDUIT/SWITCH ASSEMBLY

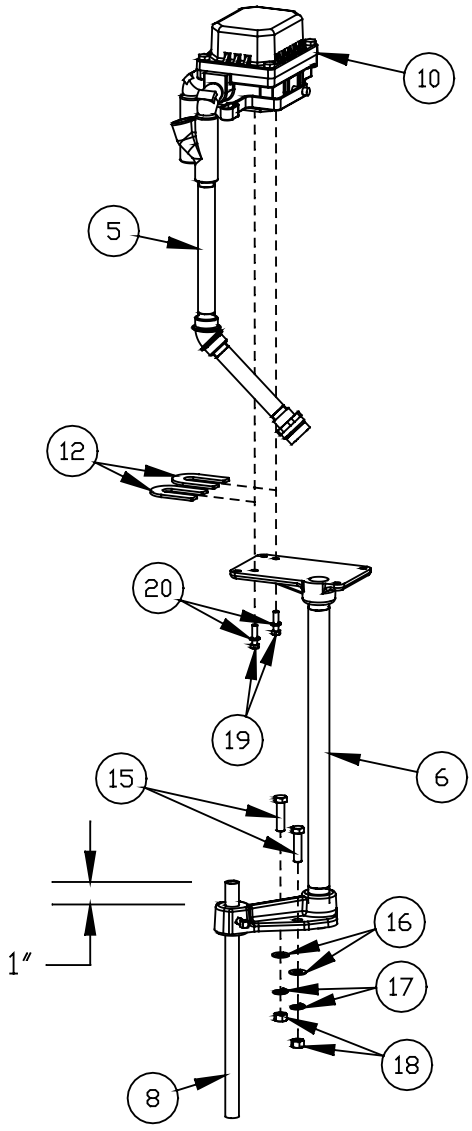

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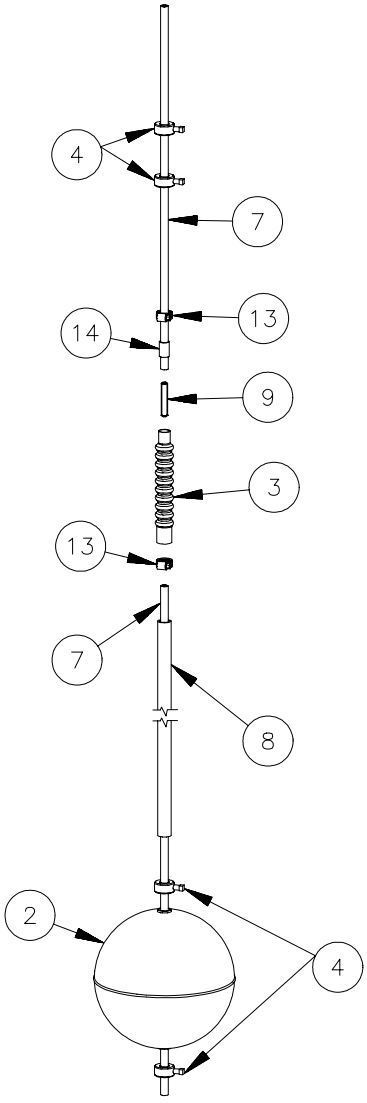
FIGURE 3: FLOAT ASSEMBLY



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ASSEMBLY INSTRUCTIONS

1. Remove the inspection plate from the steel cover by removing four 3/8-16 bolts and flat washers and place them aside for now.

2. Position the switch pedestal assembly (6) onto the steel cover matching up the corresponding holes in the foot of the switch pedestal assembly with those in the steel cover.

3. Apply silicone sealer around these holes and secure the foot to the steel cover with two each screws (15), flat washers (16), lock washers (17) and nuts (18). Nuts and all washers will be on the bottom (pump side) of the steel cover. Hand tighten these screws at this time.

4. Loosen the set screw in the foot of the switch pedestal assembly. Apply a bead of silicone sealer to the outside of the float rod guide (8) at 1-1/2" from one end. Insert the other end of the float rod guide into the foot of the switch pedestal assembly until only 1" of the float rod guide extends above the foot. Tighten the set screw and the mounting screws from step 3. It will be necessary to reach through the inspection opening in the steel cover to tighten the mounting screws.

5. Attach the conduit assembly (5) to the explosion proof switch (10) as shown in Fig. 2.

6. Position the explosion proof switch and conduit onto the pad of the switch pedestal assembly and align the switch arm with the float rod guide.. Attach these components by using two each screws (19) and lock washers (20). Thread the screws through the pad and up into the base of the explosion proof switch. Do not tighten at this time.

7. Slide the U-slotted plastic shims (12) under the explosion proof switch so that the legs of the shims are around the screws in step 6. Now tighten these screws to secure the explosion proof switch to the pad.

8. Place a collar (4) onto the float rod (7) at 1" from one end and tighten the set screw. Slide the float ball (2) onto the rod followed by another collar (4) but do not tighten the set screw at this time. Lay this assembly aside for now.

9. Place the hose clamp (13) over the larger end of the bellows seal (3) and slide them over the 1" protrusion of the float rod guide (step 4). Tighten the clamp.

10. Screw half of the threaded brass rod (9) into the remaining float rod (7). Position a collar (4) near the middle of this float rod and tighten the set screw.

11. Slide the vinyl bushing (14) and hose clamp (13) onto the end of the float rod with the threaded brass rod. Position the float rod so it passes through the switch arm and the vinyl bushing is inside the open end of the bellows seal. Reference Fig. 3.

12. Reach through the inspection opening and position the float rod assembly from step 8 so that it is inside the float rod guide. Screw the two float rods together until they seat. Slip the remaining hose clamp (13) over the end of the bellows seal with the vinyl bushing and tighten.

13. Slide the remaining collar (4) onto the end of the float rod above the switch arm. Lift the float rod assembly to the desired “OFF” level and tighten the set screw. Set and tighten the collar from step 10; it should be positioned so there is 1" to 1-1/2" from the top of the collar to the lower side of the switch arm.

14. Determine the “ON” level by setting the collar above the float ball from step 8 and tighten the set screw.

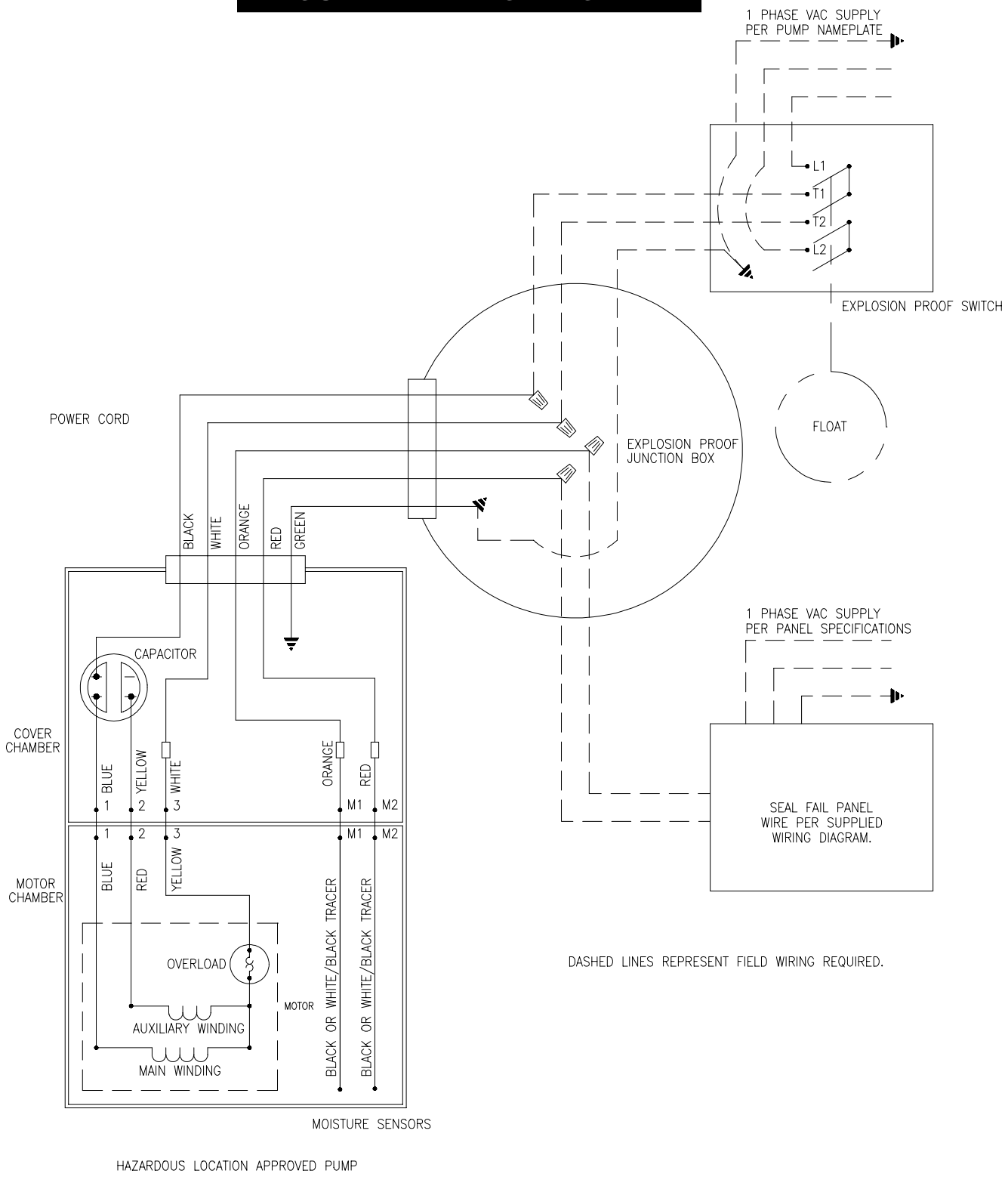
15. Insert the vent pipe seal (11), flanged side up, into the 4" hole in the steel cover. Vent the tank assembly to the outside atmosphere as required by local codes.

16. Connect discharge piping as required. Be sure to incorporate a union and a ball/gate valve to allow for pump removal. Reinstall inspection plate from step 1.

17. The installer will be required to pull and seal all wiring as local codes dictate for wiring in classified hazardous locations. The wiring and checking of electrical circuits should only be done by a qualified licensed electrician. Reference Fig. 4.

18. Fill basin with water and allow pump to cycle to ensure proper range of operation. Make adjustments as needed.

FIGURE 4: WIRING DIAGRAM



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