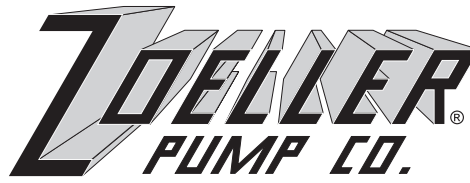


"QUALITY PUMPS SINCE 1939"



FM0478
4006
Supersedes
1104

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

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ZOELLER DOUBLE PIGGYBACK VARIABLE LEVEL FLOAT SWITCH

10-0229, 10-1209 10-1964, 10-1966 - 115V/1HP - 15 FT. cord 10-0230, 10-1210, 10-1965 and 10-1967 - 230V/2 HP - 15 FT. cord
Designed for EFFLUENT, SEWAGE AND DEWATERING applications.

READ ALL INSTRUCTIONS BEFORE INSTALLING - ALL APPLICATIONS



WARNING Make sure the pump electrical supply circuit is equipped with fuses or circuit breakers of proper capacity. A separate branch circuit is recommended, sized according to the National Electrical Code for the current shown on the pump name plate.



WARNING FOR YOUR PROTECTION ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING. Single phase pumps are supplied with a 3-prong grounded plug to help protect you against the possibility of electrical shock.



WARNING DO NOT UNDER ANY CIRCUMSTANCES REMOVE THE GROUND PIN. The 3-prong plug must be inserted into a mating 3-prong grounded receptacle. If the installation does not have such a receptacle, it must be changed to the proper type, wired and grounded in accordance with the National Electrical Code and all applicable local codes and ordinances.

CAUTION Zoeller 10-0229, 10-0230, 10-1209, 10-1210, 10-1964, 10-1965, 10-1966 and 10-1967 Double Piggyback Variable Level Float Switches are designed for use with the appropriate voltage and horsepower, nonautomatic, single phase, Zoeller pumps.

CAUTION Use 10-0229, 10-1209, 10-1964 and 10-1966 for 115V and 10-0230, 10-1210, 10-1965 and 10-1967 for 230V. All can be used as a control switch for a magnetic or combination starter. Maximum temperature must not exceed 140°F. **NOTE:** UL Recognized and CSA approved. **NOTE:** Consult factory for controlling units over 1½ HP with variable level float switch.

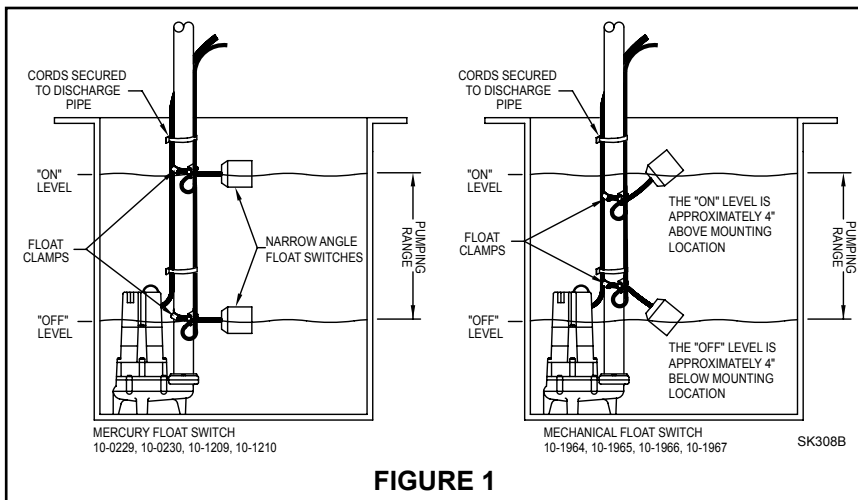


FIGURE 1

INSTALLATION INSTRUCTIONS

- Decide the desired pumping range for your installation. (See Fig. 1.) Secure the float cable clamps to the discharge pipe at the distance you desire. (See clamp detail in Fig. 6 on next page). The float labeled "TOP" must be on top. (The cable clamps are releasable, which permits readjustment and removal.) **NOTICE: Do not adjust "Off" Level below discharge on pump.**
- Insert the piggyback plug from the switches into a standard grounded outlet of proper voltage. For automatic operation plug the pump directly into the piggyback plug. (Pump can be manually operated by bypassing piggyback plug.) See Fig. 2. **NOTICE: For installation utilizing a watertight junction box or similar connections, see Figure 3.** **NOTICE: For installation as a control switch for magnetic or combination starter, see Figure 4.**
- Securely tape or clamp both piggyback switch cord and pump cord to the discharge pipe, clear of float operation. (See Fig. 1.) Excess cord should be coiled and fastened to the discharge pipe.
- Clean basin free of debris after installation.

5. Check and test your installation. Fill basin with water and allow pump to cycle to insure proper range and operation. **NOTICE:** For installation utilizing a Piggyback Float Switch connection use Zoeller Qwik-Box. See FM1420

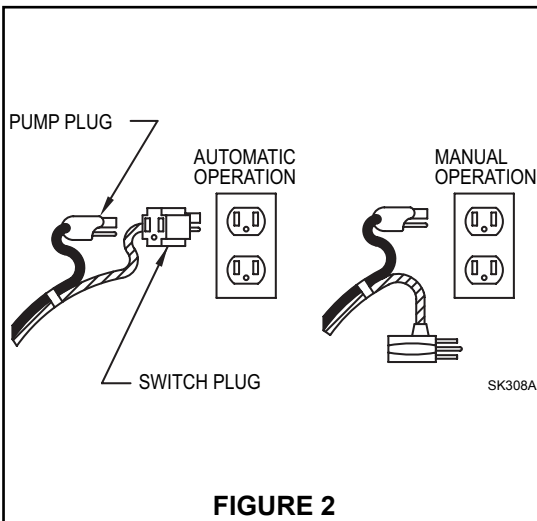


FIGURE 2

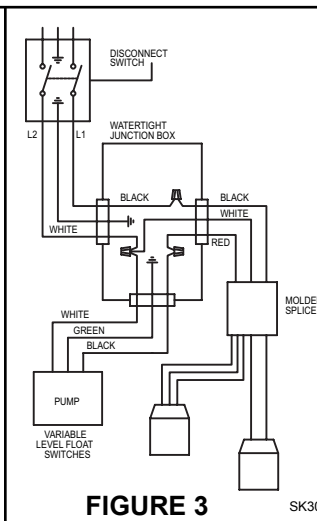


FIGURE 3

- Remove (cut) Piggyback Plug from Variable Level Float Switch. Remove approx. 3½" of Cord Jacket and 1" insulation from Wires.
- Wire Switch into Circuit as shows.
- Return to Instructions.
- Installation must be in agreement with the National Electric Code and all local codes.

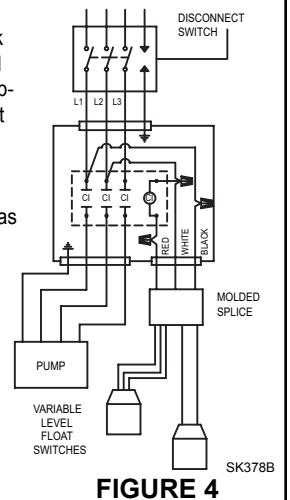


FIGURE 4

ZOELLER SWITCH-MATE SINGLE PIGGYBACK VARIABLE LEVEL FLOAT SWITCH

REFER TO OTHER SIDE FOR INSTRUCTIONS FOR ALL APPLICATIONS.



- 10-0055 - 115V/Max. 1/2 HP 13A 10' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0032 - 115V/Max. 1 HP 15A 15' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0033 - 230V/Max. 2 HP 15A 15' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0034 - 115V/Max. 1/2 HP 13A 15' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0035 - 230V/Max. 1 HP 13A 15' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0063 - 115V/Max. 1/2 HP 13A 20' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0559 - 230V/Max. 2 HP 15A 20' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0705 - 115V/Max. 3/4 HP 15A 20' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0706 - 230V/Max. 1 HP 13A 20' cord for EFFLUENT, SEWAGE and DEWATERING
- 10-0748 - 230V/Max. 3 HP 20A 25' cord (No Plug) for EFFLUENT, SEWAGE and DEWATERING (120°F Maximum Liquid Temperature)

Zoeller Switch-Mate Variable Level Float Switches are designed for use with the appropriate voltage and horsepower, nonautomatic, single phase, Zoeller pumps. Maximum liquid temperature must not exceed 120°F for 10-0748.

Zoeller Switch-Mate Variable Level Float Switches can be used as a control switch for a magnetic or combination starter. Maximum temperature must not exceed 140° F. See figure 9.

Single Piggyback Variable Level Float Switches are recommended for use in 18" minimum diameter pits or basins.

NOTE: Consult factory for controlling units over 1 1/2 HP with variable level float switch.

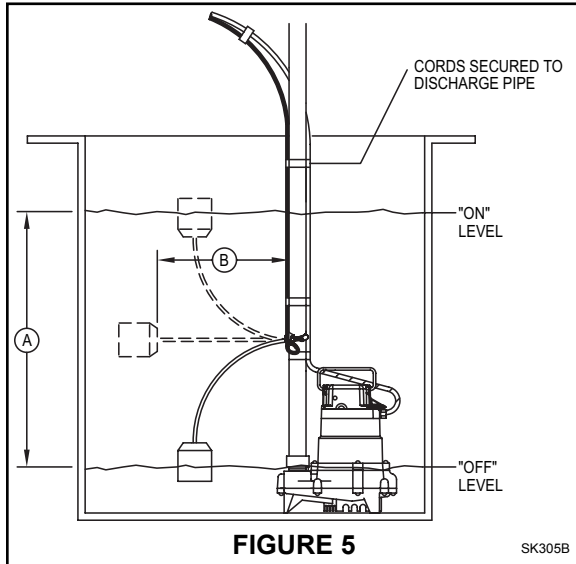


FIGURE 5

SK305B

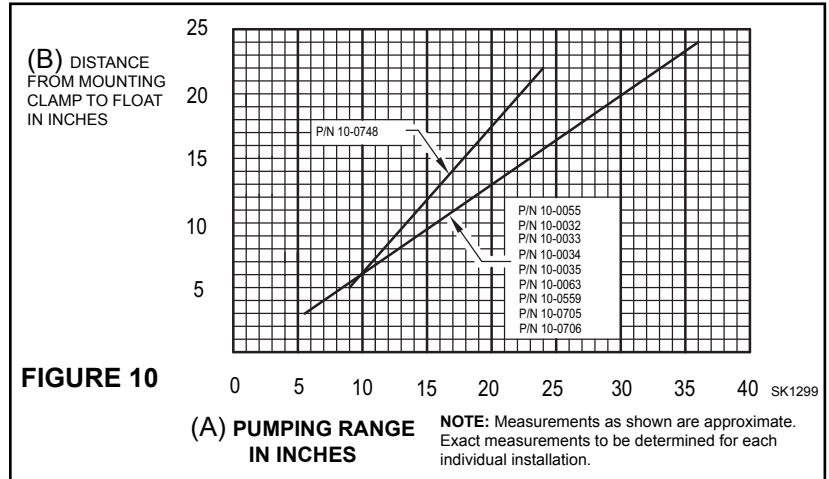


FIGURE 10

SK1299

(A) PUMPING RANGE IN INCHES

NOTE: Measurements as shown are approximate. Exact measurements to be determined for each individual installation.

INSTALLATION INSTRUCTIONS

1. Decide the desired pumping range for your installation instruction. (See Fig.5 and Figure 10.) (B) is the distance between the mounting point of attachment and the float. The distance (B), determines (A), the desired pumping range.
2. At Distance (B), determined from Figure 10) place the cord into the clamp as shown in Fig. 6.
3. Position the float to the desired "OFF" level and secure the clamp to the discharge pipe as shown in Fig.6. See Fig. 5 noting water line. **NOTE:** Do not install cord under hose clamp.
4. Tighten hose clamp using a screw driver. **NOTE:** Do not over tighten. Over tightening may result in damage to the plastic clamp. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.
NOTICE: Do not adjust "Off" Level below discharge on pump.
5. Insert the piggyback plug from the switch into a standard grounded outlet of proper voltage. For automatic operation, plug the pump directly into the piggyback plug. (See Fig. 7.) Pump can be manually operated by bypassing the piggyback plug.
NOTICE: For installation utilizing watertight junction box or similar connections, see Figure 8.
NOTICE: For installation as a control switch for magnetic starter, see Figure 9.
6. Tape or clamp both piggyback switch and pump cords to the discharge pipe, clear of float operation. (See Fig. 5.) Excess cord should be coiled and fastened outside the basin.
7. Clean basin free of debris after installation.
8. Check your installation. Fill basin with water and allow pump to cycle to insure proper range and operation.

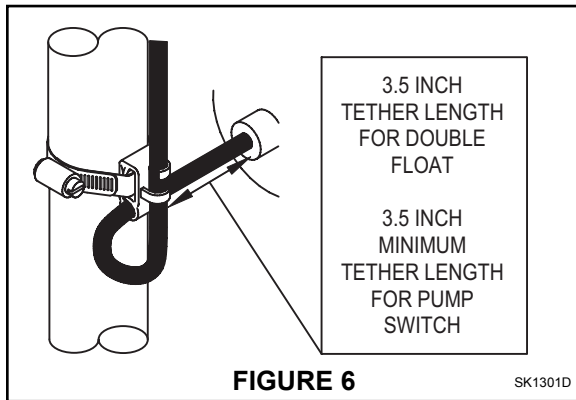


FIGURE 6

SK1301D

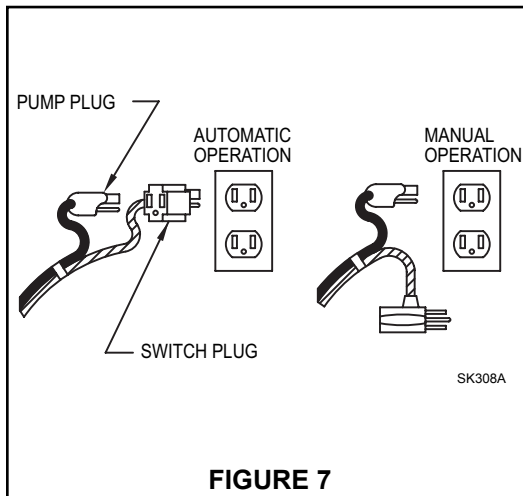


FIGURE 7

SK308A

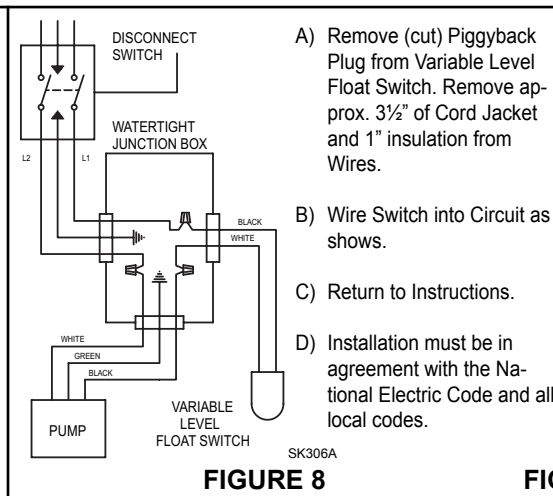


FIGURE 8

SK306A

- A) Remove (cut) Piggyback Plug from Variable Level Float Switch. Remove approx. 3 1/2" of Cord Jacket and 1" insulation from Wires.
- B) Wire Switch into Circuit as shows.
- C) Return to Instructions.
- D) Installation must be in agreement with the National Electric Code and all local codes.

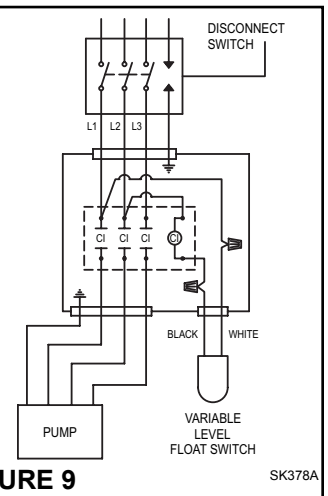


FIGURE 9

SK378A