CONTROL PANEL INSTALLATION INSTRUCTIONS

WARNING

ELECTRICAL SHOCK HAZARD

Disconnect all power sources before servicing. Failure to do so could result in serious injury or death.

This control panel must be installed by a LICENSED ELECTRICIAN and in accordance with the National Electric Code NFPA-70, and state and local codes.

All conduit running from the sump or tank to the control panel must be sealed with conduit sealant to prevent moisture or gases from entering the control panel. **NEMA 1 enclosures are for indoor use** primarily to provide a degree of protection against contact with enclosed equipment. Cable connectors are not required to be liquid tight on NEMA 1 enclosures. **Do not use NEMA 1 enclosures if subjected to rain, splashing water, or hose-directed water. NEMA 4X enclosures are for indoor or outdoor use** primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, and hose-directed water. **Cable and conduit connectors must be liquid tight on NEMA 4X enclosures.**

Mounting and Wiring the Control Panel

- Determine the mounting location for the control panel. If distance exceeds the length of either the control switch cables or the pump power cables, splicing will be required. For an outdoor or a wet installation we recommend the use of a junction box with liquid tight connectors to make required connections. You must use conduit sealant to prevent moisture or gases from entering the panel.
- 2. Mount the control panel (mounting devices are furnished with control panel).
- 3. Determine the conduit entrance locations on the control panel. Check local codes and schematic for power circuit requirements.

CAUTION: BE SURE THE POWER SUPPLY VOLTAGE AND PHASE ARE THE SAME AS THE PUMP MOTORS BEING INSTALLED. IF IN DOUBT, SEE THE PUMP IDENTIFICATION PLATE FOR VOLTAGE/PHASE REQUIREMENTS.

- 4. Drill proper size holes for connection to the panel.
- CAUTION: IF USING CONDUIT, BE SURE THAT THE CONDUIT BEING USED IS OF ADEQUATE SIZE TO PULL THE PUMP AND SWITCH CABLES THROUGH. RECOMMENDED MINIMUM 1 1/2" FOR DUPLEX APPLICATIONS.
- Attach cable connectors and/or conduit connectors to the control panel.
 CAUTION: AT THIS POINT, TURN OFF ALL

POWER SOURCES.

FOR INSTALLATIONS WITHOUT A SPLICE, GO TO STEP 11. FOR INSTALLATIONS REQUIRING A SPLICE, FOLLOW STEPS 6-10.

- Determine the location for mounting the junction box according to local code requirements. **Do not** mount the junction box inside the sump or basin.
- 7. Run the conduit or connectors to junction box and drill the junction box as required to make the proper connections. Attach the conduit or connectors to the junction box.
- 8. Mount junction box to proper support.
- 9. Identify and label each wire before pulling through conduit into junction box. Make necessary wire splice connections at the junction box.
- 10. Firmly tighten all fittings on the junction box.
- 11. Pull pump cables and control switch cables through connectors/conduit into the control panel.
- 12. Connect pump cables and control switch cables to the appropriate terminals. SEE SCHEMATIC INSIDE CONTROL PANEL.

CAUTION: IF CONTROL SWITCH CABLES ARE NOT WIRED IN THE CORRECT ORDER, THE PUMP SYSTEM WILL NOT FUNCTION PROPERLY.

- 13. Connect "power in" conductors to proper terminals. SEE SCHEMATIC.
- 14. Verify the correct operation of the control panel after installation is complete.