

START UP CHECKLIST

EPG SurePump™ Pumping System

QUESTIONS FOR CONTRACTOR OR INSTALLER

- A: Did they use the Installation Guide – Bulletin 0610b?
- B: Are sensor and power cables tied or strapped to discharge line? On what kind of spacing?
- C: What is the as built length of riser and sump? Are cables long enough? There should be three or more feet of slack in the cables.
- D: What size cable was run for supply power?
- E: What is the distance from power supply transformer to pump control panel?
- F: How has it been verified that pump is down into sump?
- G: Was the level sensor tested prior to installing?
- H: Was the pump tested prior to installing or prior to your arrival?
- I: Was a pressure gauge installed in the pump discharge line?
- J: Are there any questions or concerns?
- K: Complete Form 200?

PHYSICAL INSPECTION OF CONTROL PANEL

- A: Is the control panel located a minimum of 15' from sump or riser and a minimum of 36" above grade to bottom of panel?
- B: Are power and sensor cables run in separate conduit? If not, stop work and have this corrected.
- C: Are seal-offs installed in both sensor and power runs? If not, suggest breakout junction boxes with seal-offs or have seal-offs installed.
- D: Are seal-offs potted? If not, stop work and have them potted.

Special Instructions: Because electrical fittings are not designed to be liquid or vapor tight, you must use a thread sealant such as Teflon tape on all threaded joints. All field installed openings must be sealed with gasket threaded fittings such as Myers hubs. When using thread tape on joints, the conduit can no longer be considered a ground path. You must pull separate ground wires to bond all the parts to the ground.

- ❑ E: Will inner and outer door of enclosure open and close freely? If not, loosen enclosure mounting bolts and shim until it is level and square. Then retighten mounting bolts.
- ❑ F: Water and vapor tight seals are required at all openings.

PRIOR TO ENERGIZING CONTROL PANEL

- ❑ A: Measure resistance to ground. It must be less than 25 Ohms. If greater stop work and report to owner. It should be 1 Ohm or less to protect electronic equipment.
- ❑ B: Measure voltage prior to control panel or at entrances to control panel. Measure and record voltage line.
- ❑ C: Compare this reading to voltage listed on drawing and label in control panel.
- ❑ D: Megger motor leads resistance must be 1 Megohm or greater.
- ❑ E: Take Ohm readings of each motor lead wire to wire and compare these to values in Table 13 of the 2011 Franklin Electric AIM Manual for 1Ø and Table 22 or 24 for 3Ø. Be sure to add wire resistance value to value from Tables 13 and 21. See page 47 for wire resistance.
- ❑ F: Inspect inside of control panel. Look for items that may have come loose during shipping.
- ❑ G: Has sealing edge made contact with the gasket all the way around?
- ❑ H: Inspect wire connections. Are they the correct colors? Are they tight?
- ❑ I: If color-coded wires were not continued from sump or riser, Ohm out each circuit to confirm.
- ❑ J: Review equipment list and drawings from any accessory circuits. If present, run volt and Ohm test.
- ❑ K: Check and make sure all hand switches are in off position. If you have a water level indicator verify leachate level in sump or riser.

POWER UP

- ❑ A: Turn on power at panel main disconnect.
- ❑ B: Level meters display should light up. Record displayed reading. How does this reading compare to the measured level reading?
- ❑ C: If level and flow meter do not light up check GFCI, reset if necessary.
- ❑ D: Are any indicator lights on? Should they be on?

- ❑ E: Make sure pump is turned off. Using built in or hand held simulator, verify level meter settings are correct for this site.
- ❑ F: Bump pump by turning hand switch two or three times to make sure pump has reached its resting point. You should have minimum of three feet of slack in the cables.
- ❑ G: To verify correct rotation place hand around discharge line. It will torque right if the rotation is correct. From the top view of the pump, the correct rotation is counter clockwise.
- ❑ H: If there is liquid in sump with level above pump start set point and below 150", turn pump selector switch to AUTO. Run pump through one complete cycle.
- ❑ I: While pump is running measure and record amperage and voltage. Check 3Ø systems for current balance within 5% of average. See Franklin Electric motor manual for guidance.
- ❑ J: Verify that starting, running and stopping causes no significant vibration or hydraulic shocks.
- ❑ K: How does your Form 200 compare to the installers?