



TOWN of FALMOUTH

DEPARTMENT OF PUBLIC WORKS, WASTEWATER DIVISION

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WASTEWATER SUPERINTENDENT

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Memo to LPSSA Electricians

RE: Instructions, Schematic, Shroud

- 1) Please read the Instructions for Grinder Pump Installation before beginning installation. The instructions specific to the outdoor grinder pumps supplied for this project are **attached**, and are on the *town's website under Little Pond Sewer Service Area Project/Grinder Pump Information*. There are instructions in a bag inside each pump unit, but these are more general – those attached are specific to the pumps supplied for this project.
- 2) Schematic to be used for Grinder Pump Sentry Alarm Panel Installation. When you open the E/One grinder pump alarm panel, there is an *Sentry Protect Alarm Panel Information Booklet* inside the door. Peel open the instructions (top right corner) until you see the page that says *Optional Wiring Diagram*. This is the wiring diagram you should be using for the installation of the Sentry Protect alarm panel. (Please see pictures next pages). The wire color chart for this installation is the one shown under the Extreme column on the Main Wiring Diagram page.
- 3) Shroud. The protective cable shroud that is the supply cable goes through (and to be installed on the outside of the grinder pump) is located in a bag that is hanging inside the grinder pump unit.

SENTRY PROTECT ALARM PANEL INFORMATION BOOKLET

PEEL OPEN
FOR USE AND
WIRING

See installation manual for complete instructions.
It can be found shipped with your Grinder Pump Station

Panel Installation Notes:

- Panel is recommended to be installed within sight of the station.
- Panel must be located in an area the user will easily see and hear if an alarm occurs.
- Panel is to be mounted to a wall or pole through mounting flanges at top and bottom of panel.
- Panel must be mounted with the Alarm Lamp up.
- No non-factory penetrations are allowed through the panel wall or door except for conduit entries through bottom.
- All conduit fittings into panel must be 4X rated and sealed.
- Seal all conduit per NEC SECTION 300.5 & 300.7.
- A 30 Amp breaker is recommended to feed the Alarm/Pump disconnect panel from the main power source.
- The conductors feeding Main Source Power must be 10AWG copper or larger, per NEC 310.16.
- Panel should be installed 3' or higher off the ground.

Supply Cable Notes:

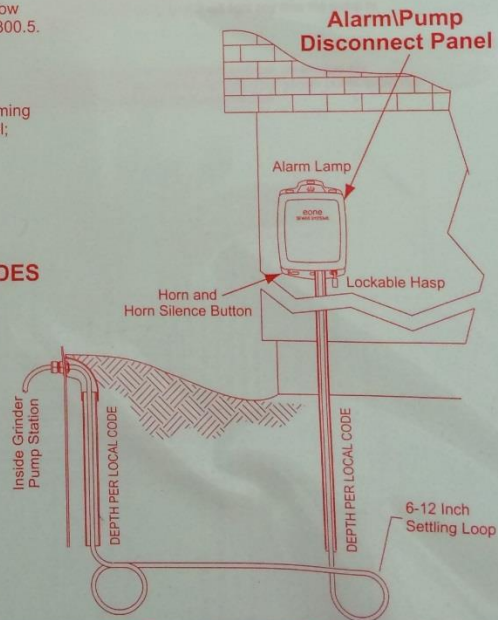
- Unprotected supply cable must be buried a minimum of 24" below grade or it must be protected by appropriate conduit, per NEC 300.5.
- Supply Cable Voltage Drop 12 AWG Wire
120 VAC Pump = .195 Volts per foot of cable
240 VAC Pump = .098 Volts per foot of cable
- Maximum recommended length of 12 AWG supply cable, assuming supply voltage is within 5% of pump nameplate voltage at panel;
120 VAC = 60' (minimum voltage at pump is 108 VAC)
240 VAC = 150' (minimum voltage at pump is 216 VAC)
- Consult your local distributor if longer distances are needed.
Underground Splices are not recommended.

**FOLLOW YOUR LOCAL AND NATIONAL CODES
WHEN INSTALLING THIS PRODUCT.**

Start Up Procedures

*(To be performed with enough water in unit to operate the alarm)
Ignore any trouble indications during this procedure

1. Inspect the station for burial depth, grading, damage, electrical connections, etc.
2. Verify the panel is wired properly (see pg. 5), and is damage-free.
3. Verify the conduits are sealed and no exposed wires are outside the panel.
4. Verify the incoming voltage is between 216V and 264V.
5. Turn on the alarm breaker. Alarm lamp & buzzer will come on. Silence the buzzer.
6. Turn on the pump breaker (Trouble LEDs will be flashing).
7. Verify the pump runs for approximately 1 minute after the alarm light shuts off.
8. After the pump shuts off, press the Push-to-Run button to verify operation.
9. Turn all breakers off, and back on to clear and reset panel.



Refer to nameplate for panel part number

e one
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OPTIONAL WIRING DIAGRAMS

REFER TO FACING PAGE FOR MAIN WIRING

240 Volt Input on 2 Pole Power

