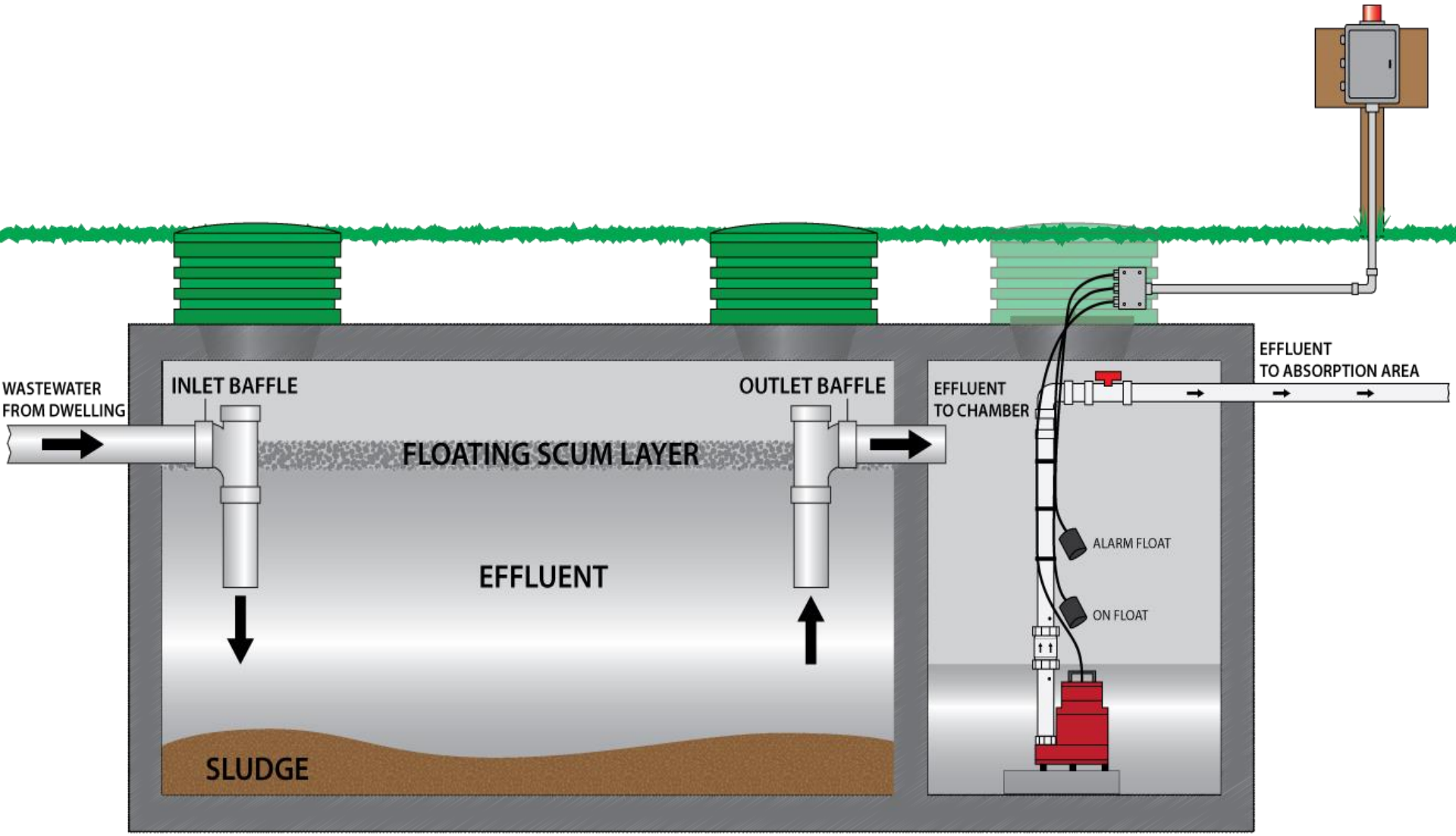
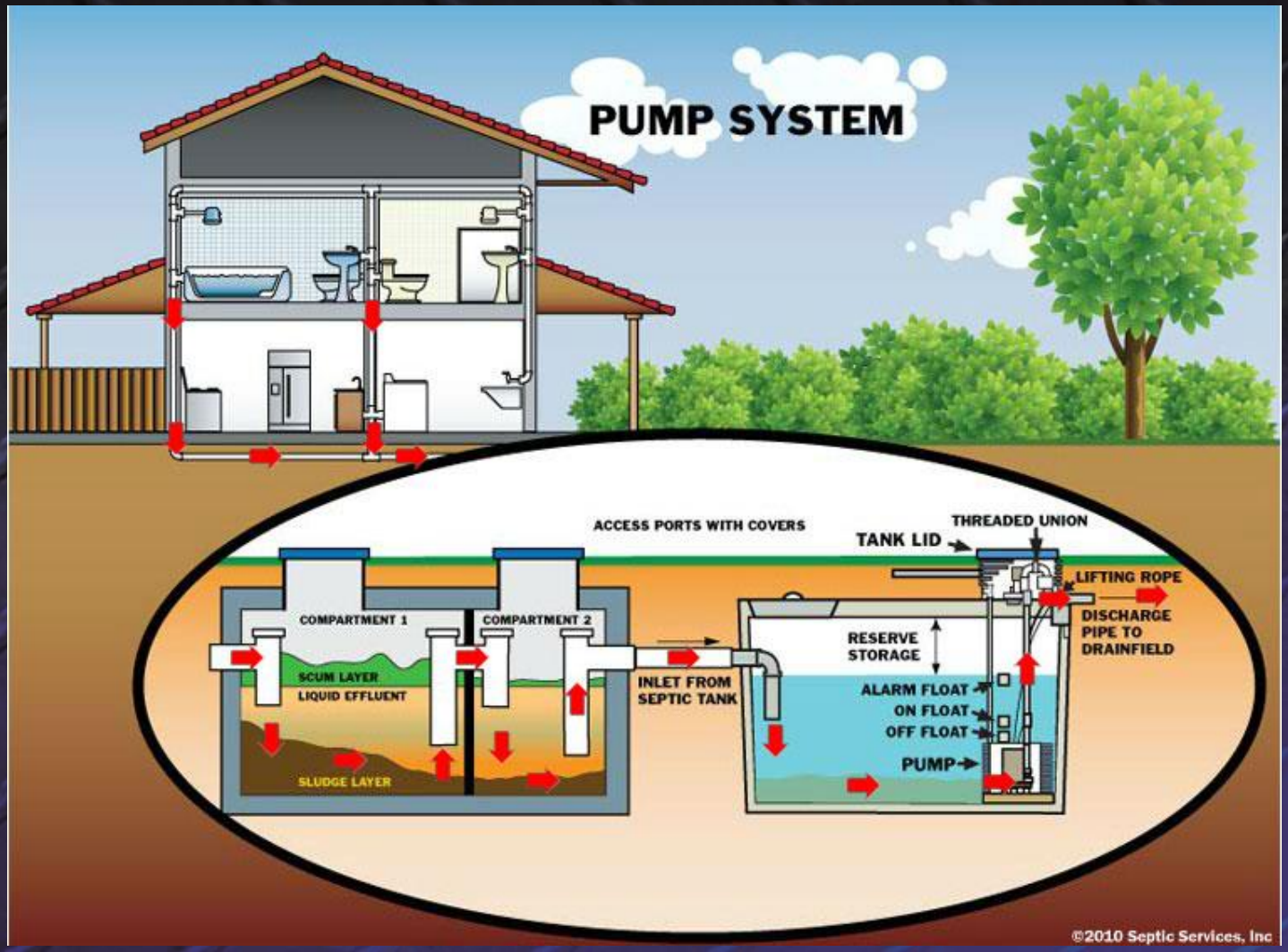
PUMP CONTROLS,

FLOATS, PANELS AND INSTALLATION

Typical Septic & Pump Tank




PUMP SYSTEM
ACCESS PORTS WITH COVERS
THREADED UNION
TANK LID
LIFTING ROPE
DISCHARGE PIPE TO DRAINFIELD
COMPARTMENT 1
COMPARTMENT 2
SCUM LAYER
LIQUID EFFLUENT
SLUDGE LAYER
INLET FROM SEPTIC TANK
RESERVE STORAGE
ALARM FLOAT
ON FLOAT
OFF FLOAT
PUMP
©2010 Septic Services, Inc

Typical Lift Station

TYPES OF FLOATS AND SWITHCES

FLOATS AND SWITCHES

INSTALLING CONTROL PANELS

Best Installation Practices

- Locate control panel where it is easily accessible

INSTALLING CONTROL PANELS

Best Installation Practices

- Locate panel where it is easily accessible
- Use the proper drill bit when making penetrations in enclosure
- Avoid holes in top and sides of panel enclosure

INSTALLING CONTROL PANELS

Best Installation Practices

- Locate panel where it is easily accessible
- Use the proper drill bit when making penetrations in enclosure
- Avoid holes in top and sides of panel enclosure


07/29/2009 11:57 am


07/29/2009 11:56 am


5 11:29


220VAC
ALARM
PUMP
PUMP
RUN
APR 20 2010

DISCONNECT SWITCH

INSTALLING CONTROL PANELS

ELECTRICAL SHOCK HAZARD

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

INSTALLING CONTROL PANELS

Best Installation Practices

- Locate panel where it is easily accessible
- Use the proper drill bit when making penetrations in enclosure
- Avoid holes in top and sides of panel enclosure

- Use proper “Liquid tight” fittings on penetrations
- Seal conduits coming from sewage tank
- Seal off possible ground moisture into panel

INSTALLING CONTROL PANELS

Cable Connectors

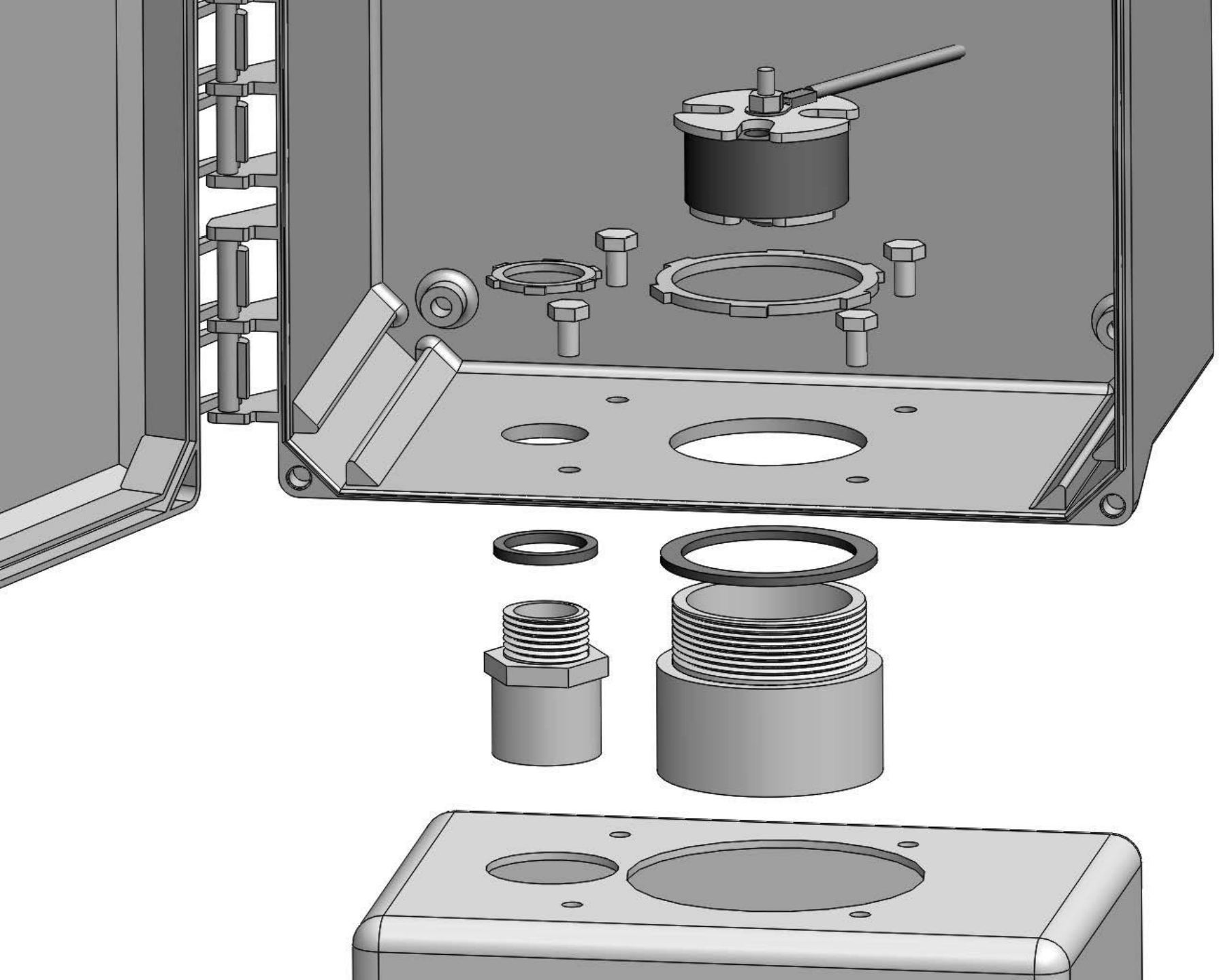
Provides strain relief and a liquid-tight seal. Round or flat models.

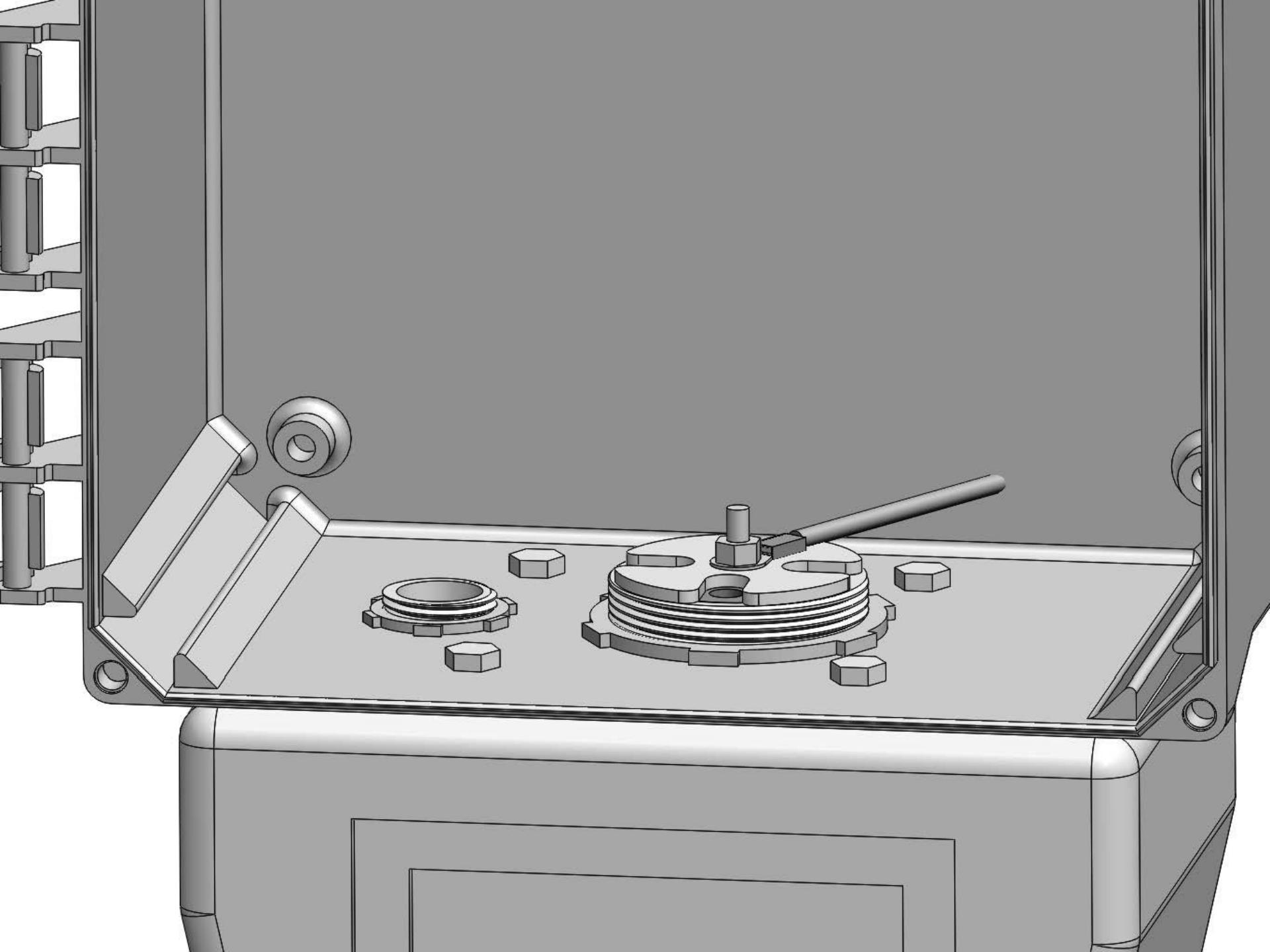
Hub Assembly

Provides liquid-tight conduit attachment location.

Cord Seals

Provides strain relief and a liquid-tight seal.






Floyd Bell Inc
WARNING


SIR
Rhombus


JB Pludger

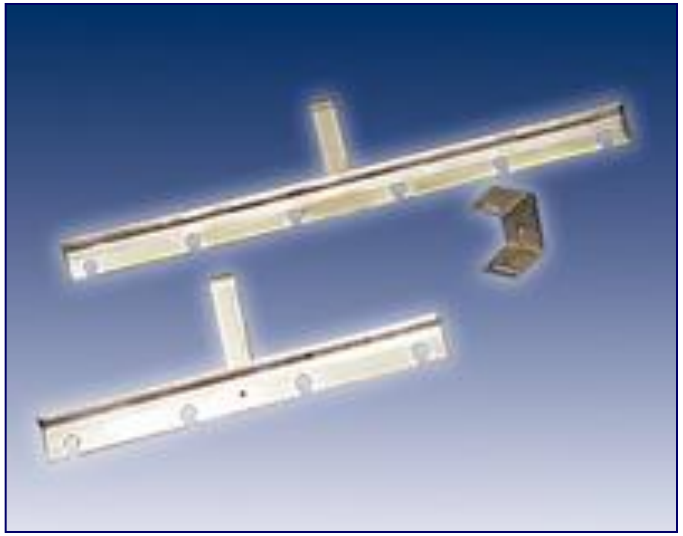
TB1
1
2
3
4
ALARM
FLOAT
PUMP
PUMP ON/
OFF FLOAT
PUMPS MUST CONTAIN INTEGRAL THERMAL OVERLOAD PROTECTION
E-Rhombus

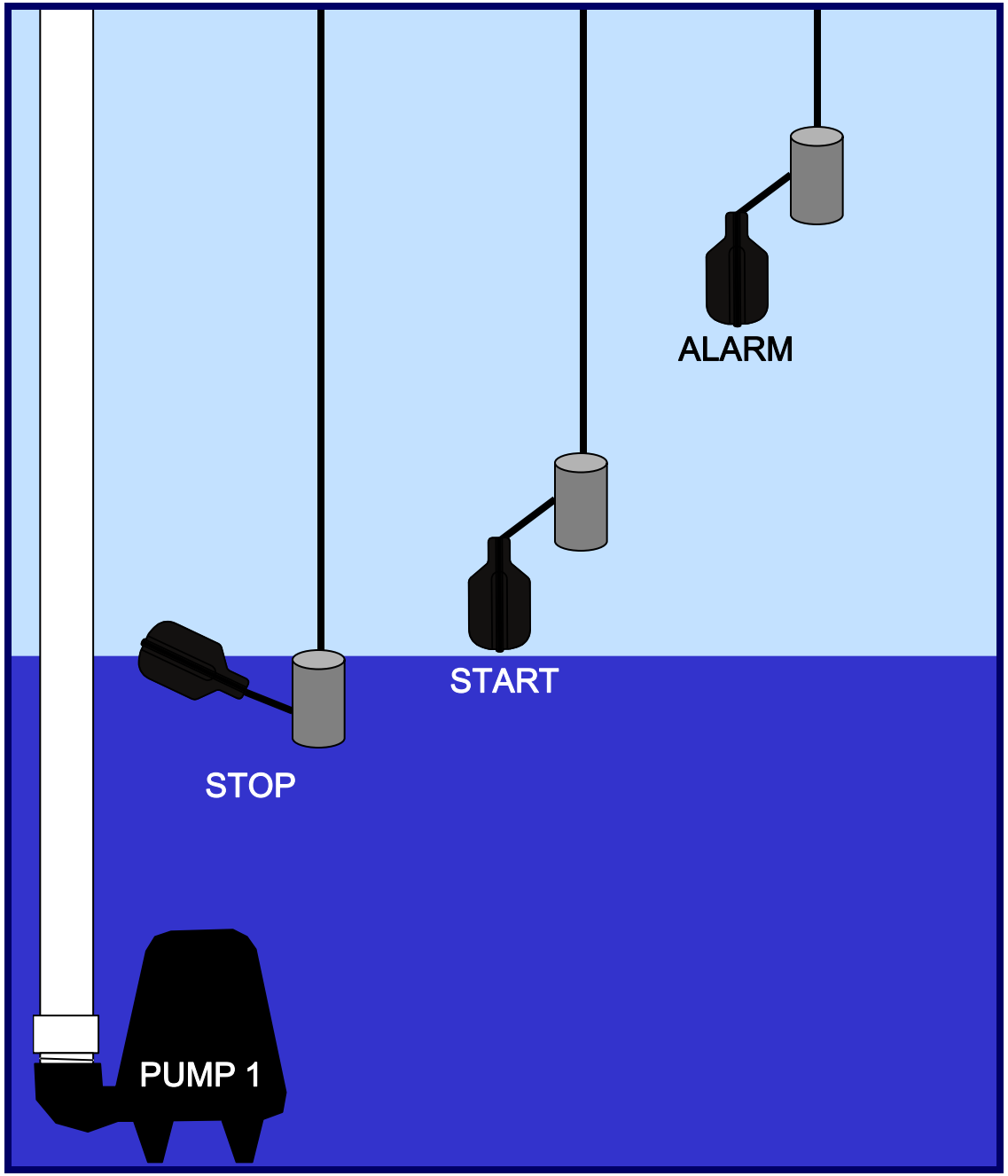

JB Plugger
SIDE RHOMBUS

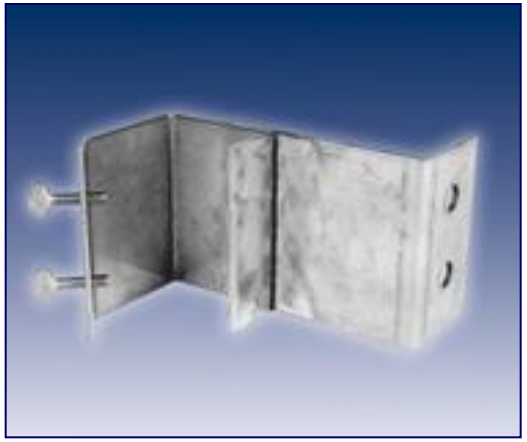
INSTALLING CONTROL PANELS

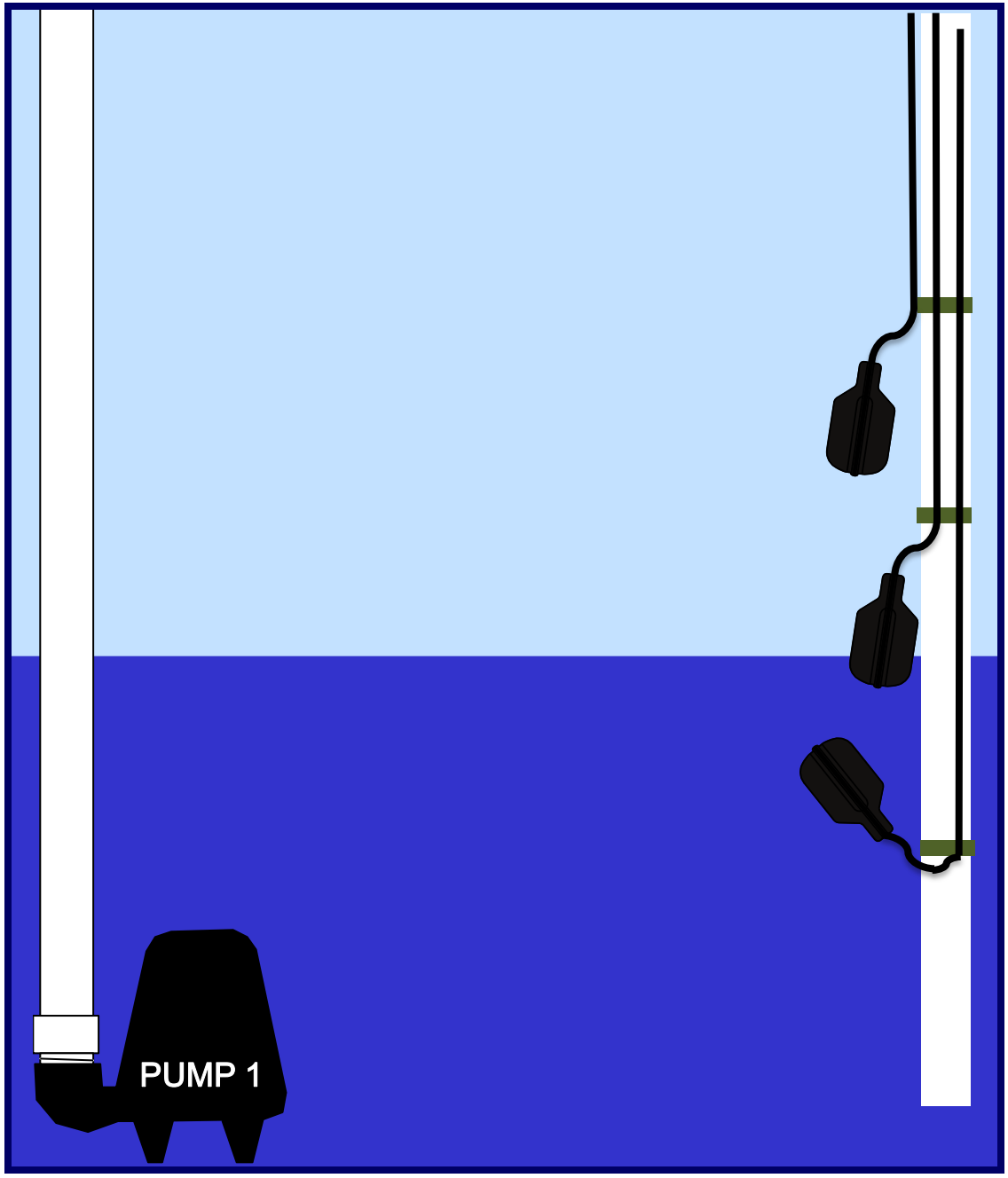
Best Installation Practices

- Locate panel where it is easily accessible
- Use the proper drill bit when making penetrations in enclosure
- Avoid holes in top and sides of panel enclosure
- Use proper “Liquid tight” fittings on penetrations
- Seal conduits coming from sewage tank
- Seal off possible ground moisture from panel
- Mount float switches so they actuate freely
- Mount float switches so they can be easily removed
- Label float switch cables prior to pulling through conduit




ALARM
START
STOP
PUMP 1




PUMP 1

TWO ELECTRICAL CIRCUITS FOR CONTROL PANEL

CONTROL AND ALARM CIRCUIT

PUMP CIRCUIT

SINGLE PHASE POWER

CONTROL AND ALARM CIRCUITS

- **THE CONTROL/ALARM CIRCUIT SENDS POWER TO THE FLOATS.**
- **THE CONTROL/ALARM CIRCUIT POWERS THE MOTOR CONTACTOR COIL, ALL THE LIGHTS, AND THE BEACON & HORN.**
- **THE CONTROL/ALARM CIRCUIT IS SEPARATE ELECTRICALLY FROM THE PUMP CIRCUIT.**

PUMP CIRCUIT

PUMP CIRCUIT IS SEPARATE FROM THE CONTROL/ ALARM CIRCUIT.

PUMP CIRCUIT PROVIDES POWER TO THE PUMP MOTOR.

SAFETY

SAFETY IS THE MOST IMPORTANT THING. IT TAKES LESS THAN 1 AMP OF CURRENT TO STOP YOUR HEART

ALWAYS TURN OFF POWER WHEN WORKING INSIDE A CONTROL PANEL, OR ON ANY OTHER ELECTRICAL DEVICE

- TURN OFF THE SERVICE BREAKER FEEDING THE CONTROL PANEL OR ELECTRICAL DEVICE, USUALLY LOCATED OUTSIDE OF THE CONTROL PANEL.

- TURNING OFF THE BREAKERS IN THE CONTROL PANEL ONLY KILLS POWER TO THE COMPONENTS DOWN STREAM OF THE BREAKER – THERE IS STILL POWER TO THE TOP OF THE BREAKERS AND ANYTHING BEFORE IT IN THE CIRCUIT.

THANK YOU!!!