## Sump Pumps by Finn Home Inspectors

Sump pumps are used to eject water from basements/crawlspaces. The sump pumps are put in a sump pit which is below the basement floor, this way they can pump the water to a level below the floor and hopefully keep the basement dry. Water that enters between the wall and floor or through a crack may run across the floor or gather in a puddle, even if you have a sump pump. One way to move the water on the slab to the sump pit is to add drainage below the slab. A simple and quick way to add under slab drainage is by drilling holes in the floor where the water enters with no drain pipe (often depends on what type of dirt/stone is below the slab).

HOW THEY WORK: Sump pumps have a float that moves up and down with the water level.
There are two types of pumps most often used, a submersible (the entire unit is below the water) and the pedestal (the motor is elevated above the water level). See sketches below.

Adjusting the points to turn the sump on and turn it off on a pedestal you simply move the stops on the float shaft up or down. On the submersible you adjust the vertical position of the entire unit, see diagrams below.


Above - is a submersible sump pump.
The Blue arrow shows water level where the sump turns ON. The Yellow shows the water level where the sump turns OFF.

Above - is a pedestal pump. On the float shaft the Blue arrow shows the adjustment for turning the pump OFF. The Yellow arrow shows adjustment for turning the pump ON as the float rises

Below is a sump pump that has a battery. In areas with periodic power outages or basements that must absolutely be kept dry this is an option.


