



GRID CONTROLS
356 Lexington Drive,
Buffalo Grove, IL 60089

Manufacture of PVC water flow switches and specialized valves for the spa, rural water-well, water treatment, and aqua culture industries.

Flow Switch Troubleshooting:

Our switch works on force generated by water flow through it and if the water flow is laminar (opposite of turbulent) and above the required flow rate for the switch, the switch should remain on.

For example, M310, 1" switch should turn on between 1 to 1.5 GPM flow and close below 0.5 GPM flow.

Every switch goes through pressure and flow testing before it ships out to customer. However, sometimes, the spring inside the electric switch settles due to shock and vibration. This may change the setting slightly. It may require minor adjustments.

Switch is not turning Off:

When the water through the flow switch is shut down and if the switch is stuck on, lightly tap with the 4" to 6" long screwdriver on the flow switch body. If tapping with screwdriver on the bottom and side of the flow switch body does not turn it off,

- There is a chance that foreign material or derbies came and stuck in the switch. Such material does not allow plunger to go down all the way. It keeps the switch on. It may require cleaning of water flow area of the flow switch.
- Another reason for switch to stay on is a water leakage somewhere in the downstream of the flow switch and the leaked water is flowing through the switch keeping the switch to stay on. Finding such leak and closing it will make switch functional again.

If tapping at either side or bottom of the flow switch turns it off, the setting may have changed and require an adjustment. You can refer to Photo 1. It shows the one of our flow switch M310 with top cover open.

You can see the calibration screw that is inside the red circle. You also see two arrows, one blue and one purple. Take a Philips (+) screwdriver #2. If you turn the screw in direction of blue arrow, it will bring the calibration screw up and bring up the flow switch turn ON and OFF points.

CAUTION: both ON and OFF points will not completely follow each other but will move up. For example, after adjustment ON point move from 1.2 GPM towards 1.5 GPM but the OFF point may only move from 0.3 GPM to 0.4 GPM.

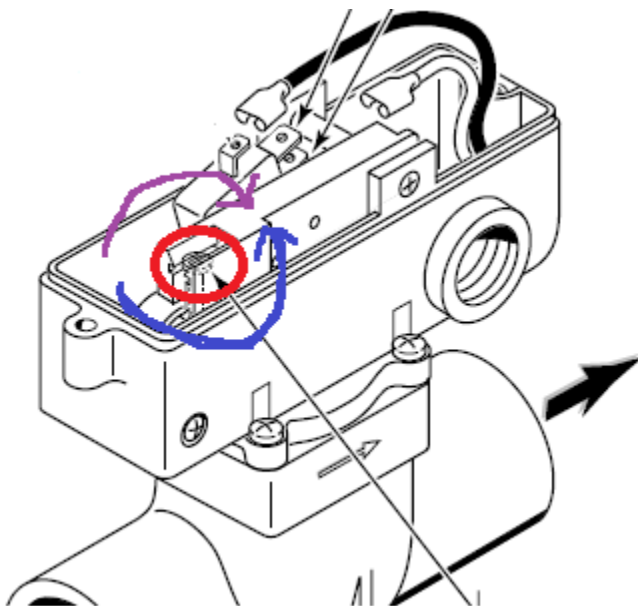


Photo: M310 with top cove open.

Red circle shows the calibration screw.

Switch is not turning On:

1. Make sure there is no foreign material, salt or debris in the water flowing area of the flow switch.
2. Make sure there is enough water flowing through the switch and the flow is laminar.
3. If the switch is still not turning on with water flow but tapping the switch turns it on means it requires slight adjustment,

If you turn the screw in direction of purple arrow, it will bring down the calibration screw and both turn ON and OFF points. Remember both points will not completely follow each other but will move down. For

example, ON point may come down from 1.5 GPM to 1.2 GPM but the OFF point may only come down from 0.4 GPM to 0.3 GPM.

CAUTION: Do not move the calibration screw, too much down. This will set the switch to have low flow ON point and the switch may not be able to shut off when there is no water flow.

if you are doing adjustment, please adjust only $\frac{1}{4}$ turn at a time, check and if the flow switch requires further adjustment. We do not recommend adjusting more than one full turn adjustment in each direction. Please make sure you note down how many times and direction you adjusted so it will be easy for you can come back to original point in case needed.