

Inoperable or Sticky button

Have you experienced either a button not working or seemingly stuck on? Resident calls about a crossing



with a button not activating the crossing - only to get there and you have no problem using the button, activating the system as expected. Or resident or staff calling to let you know a crossing is in over / extended flash.

These are no doubt to the rugged construction of these units. But on occasion I receive calls as mentioned above, seemingly only during the winter months. It got me thinking, what if moisture is getting in some how and freezing. Both incidents mentioned can be accounted for - moisture freezing behind the silver dome preventing enough movement to

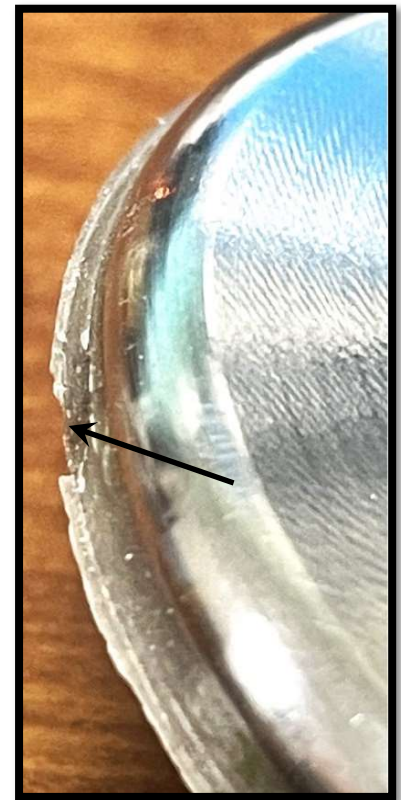
allow the button to activate the system. Or frozen moisture is preventing the domes release, placing an extended call on the system - also causing periodic beeping. How is this happening?

Thinking these might be frozen, I tried a micro-torch, gently heat the silver dome. Almost as soon as I started, there is an accumulation of moisture on the face of the silver dome. Continuing to heat evenly until this moisture is gone, the button returns to normal operations.

This season we came across a unit where heating the silver dome did not work. We replaced the button with a new one and took the one we removed back to the workshop to troubleshoot the issue. When the dome was removed we did find some moisture on the back of the dome and recessed deck behind it. Further, we also noticed moisture on the recessed foam ring in the recessed deck. I might add, the workshop is not heated, so this eliminates condensation forming as a cold object is brought into a moist warm area.



There is very little room between the outer circumference of the silver dome and the recessed deck of the body of the Bull Dog. When we removed the silver dome we did notice a very thin line of what looks like silicon around it. It is expected this is / was acting similar to a gasket. Closer inspection to the silicon we could see some irregularity to its uniformity - this could have been damage from



when we disassembled the unit. Or this maybe this is how moisture was able to get in.

I called the manufacture and explained what I thought was happening. Being robust, I suggested these would be a great candidate to be refurbished instead of discarding. They were kind enough to search through their assembly drawings and confirm it was an exterior GE Silicone used.

The button we took to the work shop, we brought back to the office. Now fully disassembled, it was left out in the open to allow it to dry out.

The refurbishing starts with a thorough cleaning of all surfaces were the silicon will be applied. We seen silicon also on the outer raised rim of the grey foam ring and found a ring of silicon between the bull dog body and the epoxy electronics. We got a small tube of GE Silicon, the 83ml tube size. A tiny hole was made in the nozzle so it was easier to direct the silicon where it was needed.

The Bull Dog now assembled, the GE Silicon applied, then set a side to allow it to cure. This Bull Dog will be place back into service from where it was removed.