The Lock

If you have been to the lake in the past four weeks you very well may have found that the familiar electronic lock was not on the door to the clubhouse? I want to bring you up-to-date on the situation. The club purchased the lock in 1997, shortly after the founding of our club. I do know we have worn out three or four keypads over the past thirteen years; it's the "0" and "1" key buttons that eventually stop functioning.

This time it was not the keypad. The mechanical mechanism (called the actuator) was wearing out. First, in early March, the latch pin (the part that retracts when we open the door) gave up the ghost. That part was purchased locally.

Two or three weeks ago, on entering our door code we were greeted with either a red light and no entry, or rapidly flashing red and green lights and still no entry. John Ruiz and I removed the lock, replaced the batteries, checked connections, etc., and it worked, but for only a short while before repeating the failure. I took the lock home with the intention of calling the Omnilock repair facility for their expert assistance.

Before I got around to making the call, I carefully examined the interior of the lock. What did I discover, but a sticky substance on the electronic circuit board. A substance that looked very much like the residue of a spilled Coca Cola. From my past experience (though long, long ago) as a computer technician I knew that spilled sodas can and do cause electrical problems. So, being an optimistic sort, I carefully cleaned the lock's circuit board, first with water, then with alcohol. The lock once again worked. I kept entering codes and testing the lock just to make confirm that it was OK. Sure enough after a fairly short time, the red-green flashing light symptom reoccurred.

Time to call in the experts! I called COR Security in California and worked with their Omnilock specialist. We, COR Security and I, agreed that it was possible for the cause of our problem to either be in the actuator, or in the electronic circuit board. We were not able to resolve the issue over the phone, so I sent the lock on an overnight trip to San Marcos, CA. Guess what – the lock initially worked for them too! However, after a short while it acted up again.

COR called me to let me know that they found two potential causes of our problem: a) the connector between the motor that operated the actuator's opening mechanism and the circuit board did not have sufficient tension to make good contact; and b) the actuator was badly worn from 13+ years of use. Since the connector (in #a above) and the worn out actuator were both part of a single replaceable assembly, I elected to have the lock sent back with a new actuator.

John Ruiz and I reassembled and reinstalled the lock. We were very impressed with the improved design and operation of the new actuator – it was years ahead of the old actuators' design. We reprogrammed it and checked it out. Initially everything worked fine. But after about 15 or 20 minutes it went "kaput" again. By now it was very apparent that we were experiencing a failure of the electronic part of the lock. A few years ago we upgraded the lock to handle our increasing membership. All that was required for the upgrade was a replacement circuit board. I had the original board at home.

Fortunately there is only one part different between the two circuit boards, the memory chip that holds a larger number of codes. We installed the larger capacity chip in the "old" circuit board, reprogrammed it and installed it. Everything worked OK. At the time I left the lake Sunday afternoon, it had been working for about 3 or 4 hours. I have not had any calls informing me of lock malfunctions, so very likely our problem is behind us.

Thanks for your patience.