Solenoids and Large Relays create a lot of interference, this can wreak havoc to nearby electronic devices. If you notice the sound is stopping unexpectedly when controlling one of these devices, this is most likely your problem. The solution depends on whether you are using AC or DC solenoids. For AC solenoids you need touse a capacitor, the best place to install it is as close as possible to the solenoid, if that's not possible thenacross the terminal block may work as well. For DC solenoids you need to use a diode, standard 1N400Xdiodes will work fine, the only place to install these is across the solenoid. See the diagrams below for more information.



USING A DIODE WITH DC SOLENOIDS



