**nocLock System Reliability Test**

**Test ID:** Test Case ?.?

**Test Description:**

This procedure has been created to test the reliability and robustness of the nocLock system as it is implemented in a general use- case scenario, this test will be accomplished by setting up the entire system to replicate a real life situation and securing the knock sensor to an acrylic surface with a quarter inch thickness. A variety of test will then be completed to test various aspects of the system.

**Equipment:**

1. Fully assembled nocLock system
2. 9VDC Voltage Source > 1500mA current rating
3. Acrylic knocking surface (quarter inch)

**Reference:**

1. T02\_nocLock\_rev3.sch (for reference)
2. System setup diagram (for reference)

**Setup:**

Fully assemble system with all external peripherals, and attach securely attach piezo element to knocking surface. Prepare system by programming the nocLock with a simple 3-knock sequence with a 3 second delay between each individual knock

**Procedure:**

* Connect all external peripherals (LED, Solenoid, Unlock button, sensor and power)
* Confirm functionality of all sub-systems.
* Program system with simple knock

**-**Press program button

- knock, count to 3.

- knock, count to 3.

- knock, count to 3.

* Confirm knock sequence.
* Begin testing.

