S&G Mechanical Lock Trouble Shooting

FAQ's

- 1. Mechanical Locks should be serviced by a qualified locksmith periodically depending on use, in a normal setting once in the first 7-10 years is recommended.
- 2. If you have trouble opening your lock, and do succeed in opening it, do not lock the safe again until you are certain there is not a problem.
- 3. All Mechanical locks on Fort Knox safes can be replaced with an Electronic lock, a Retro-fit kit can be purchased through your dealer or direct from Fort Knox.
- 4. In addition to the troubleshooting found below this link will take you to Sargent & Greenleaf's troubleshooting site:

http://www.sglockhelp.com/troubleshoot/info.php?id=9

Proper Dialing Technique

A very high percentage of lockouts are due to the end user's improper dialing of the combination lock. There is a simple, definite procedure which must be followed to achieve consistent success. An important point to remember is that there are usually two index lines on a dial ring. The one at the twelve o'clock position is used in dialing open the lock. The mark at the eleven o'clock position (if present) is used only for changing the combination.

While performing any procedure involving dialing numbers into the lock, it is important to view the dial and ring straight on. This helps ensure the number you are entering will be aligned directly under the index mark. If you dial past the intended number even slightly, begin the entire dialing procedure again.

The procedure for a Sargent & Greenleaf three-wheel lock is as follows:

- 1. Turn the dial left (counterclockwise), stopping the fourth time the first number of the combination aligns with the opening index.
- 2. Turn the dial to the right (clockwise), stopping the third time the second number of the combination aligns with the opening index.
- 3. Turn the dial to the left (counterclockwise); stopping the second time the third number of the combination aligns with the opening index.
- 4. Turn the dial to the right. Some resistance should be felt as the mark representing "97" comes under the opening index, and the dial should reach a positive stop near "87." The lock is now open, turn the opening handle to release the door.

During the dialing process, it is normal to feel more resistance each time the dial is turned a complete revolution. Each turn of the dial engages another part of the mechanism, creating more resistance to dialing.

Most common issues found can be overcome by following one of the techniques below:

The first technique involves manipulating the numbers in your combination, you will work with one number at a time, and all three numbers at the same time.

The following example is shown using a combination of 50-20-50; you will apply the same process using YOUR combination numbers.

Adjust all Three Numbers same time			Adjust one Number at a Time		
55	25	55			
54	24	54			
53	23	53	50	20	51
52	22	52	50	21	50
51	21	51	51	20	50
50	20	50	50	20	50
49	19	49	49	20	50
48	18	48	50	19	50
47	17	47	50	20	49
46	16	46			
45	15	45			

The second technique involves vibrating the lock after the code has been dialed into the lock:

- 1. Dial the correct combination numbers, after you have dialed to the third number of the combination, turn the dial to the right (clockwise) to 0.
- 2. Rattle the opening handle vigorously left and right several times to cause vibration
- 3. Using the palm of your hand you may add more vibration by striking the face of the dial, do not hit to hard or hurt yourself.
- 4. Continue to turn the dial to the right, it should stop at approximately 87 if the procedure worked and the handle will turn to open.