

Assignment Instructions

1. Review the blogs at <http://www.rekey.com/locksmith/types-of-locks> and <https://www.art-of-lockpicking.com/types-of-locks/> for information regarding a variety of common lock styles and implementations potentialities.
2. Review the article at <https://www.scienceabc.com/innovation/pick-door-locks-pin-tumbler-sherlock-doors-open.html> for an overview of the pin tumbler lock mechanism.
 - 2.1. The pin tumbler lock mechanism is the most widely recognized and utilized lock mechanism within the United States, present in many keyed locks and the basis of this assignment.
3. Pick your first lock (lock #1, the clear, introductory lock).
 - 3.1. The introductory lock is chosen for its simplicity and the inherent learning potential with being able to see the pins being manipulated within the casing.
 - 3.2. Insert the torque wrench into the top of the keyhole, opposite the pins (visible when you look into the keyhole).
 - 3.3. Hold the lock in a comfortable fashion with the keyhole facing you.
 - 3.3.1. *EXAMPLE:* Right-handed picking—Form an ‘L’ with your left hand and with your right, place the lock into your left hand with the torque wrench towards the top. Wrap your thumb around the bottom of the lock. Place your index finger against the torque wrench and wrap your third, fourth, and fifth digits over the top of the lock. Your index finger will provide tension to the torque wrench.



- 3.4. Hold the pick as you would a dart, grasping it with your index finger and thumb, and insert the pick into the keyhole all the way to the back.



3.4.1.



3.4.2.

- 3.5. As you get near the back of the lock, begin applying very light tension to the torque wrench.
- 3.6. When the pick is at the back of the lock, begin drawing the pick forward, pushing gently against the key pins as you continue to provide even pressure on the torque wrench.
 - 3.6.1. Do not provide all the leverage that you can against the torque wrench—only provide small amounts.
- 3.7. Reinsert the pick into the keyway, feeling for pins that are still protruding upwards as you insert the pick to the back and draw the pick forwards quickly, applying pressure against the pins.
 - 3.7.1. The process of pushing and pulling the pick quickly against the pins is called zipping.
 - 3.7.2. If the lock does not open within three to four zips, release tension on the torque wrench and reapply to loosen and release any binding pins.
- 3.8. Repeat the steps above until the lock is opened. The introductory lock may take less than 10 seconds to open but should not exceed 45 seconds. If it takes longer to open, continue practicing until it may be opened in less than 45 seconds.
4. Pick your second lock (Lock #2, SEPOX lock from Amazon).
 - 4.1. The SEPOX lock was chosen for its heavy marketing within the Amazon marketplace and its imitation of a more secure and recognized brand, American Lock (see below for side-by-side comparison of lock images).



- 4.1.1.
- 4.2. Insert the torque wrench into the top of the keyhole, opposite the pins (visible when you look into the keyhole).
- 4.3. Hold the lock in a comfortable fashion with the keyhole facing you.
 - 4.3.1. *EXAMPLE:* Right-handed picking—Form an ‘L’ with your left hand and with your right, place the lock into your left hand with the torque wrench towards the top. Wrap your thumb around the bottom of the lock. Place your index finger against the torque wrench and wrap your third, fourth, and fifth digits over the top of the lock. Your index finger will provide tension to the torque wrench.



- 4.3.2.
- 4.4. Hold the pick as you would a dart, grasping it with your index finger and thumb, and insert the pick into the keyhole all the way to the back.
- 4.5. When the pick is at the back of the lock, begin applying gentle pressure to the torque wrench. Rock the pick up and down within the keyway, keeping the pick entirely within the lock.
 - 4.5.1. The process of rocking the pin up and down within the keyway is called rocking and may be performed with greater intensity.

- 4.5.2. If the lock does not open within a reasonable amount of time release tension on the torque wrench and try again. Consider applying the zip method as identified above in step 3.7.
- 4.6. Repeat the steps above until the lock is opened. The SEPEX lock may take less than 20 seconds to open but should not exceed 45 seconds. If it takes longer to open, continue practicing until it may be opened in less than 45 seconds.
5. Pick your third lock (Master Lock 140D).



- 5.1.
- 5.2. The Master Lock 140D typically contains one-to-two security pins, providing a challenge to opening the lock.
- 5.3. Utilizing the two methods identified above in steps 3.7 and 4.5 (zipping and rocking), the Master Lock 140D may be unlocked within 5 minutes.
6. Test different picks and torque wrenches in the locks to feel how different pick styles effect the pins.