

# How to Pick a Lock Guide



So you want to learn [how to pick a lock](#)? Well you have come to right place. The reason you have stumbled upon this guide is likely to answer these two questions:

- 1. Is it difficult to learn how to pick a lock?**
- 2. How do I learn this craft of lock picking?**

In regards to the first question, learning how to pick locks is in fact a very simple skill to acquire. There is a common misconception that learning how to pick a lock is inherently difficult and requires hours upon hours of sitting quietly in a candle lit room with nothing but a set of lock picks, gobs of patience, and a lock to pick. Furthermore, that you must achieve some Zen like focus to have any success at lock picking. But it is in fact quite the opposite. The basic concepts and techniques of lock picking can learned and applied within hours. It can also be practiced in any environment in which both hands are free, such as watching TV. This all being said, lock picking is still a skill and like any skill, mastery requires patience and practice.

So how do go about learning this craft of lock picking? The first step of acquiring any new skill is learn the basic theory and techniques behind it. The purpose of this guide is to teach you the very fundamentals of lock picking and written for the absolute beginner. With this guide you will learn how locks work and how to pick them. Furthermore, upon completion of this guide you will have the knowledge to tackle any pin and tumbler lock that stands in your way. With that let's get started!

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## Introduction to Lock Picking

So what exactly is lock picking? A professional locksmith could define lock picking as the art of examining and then manipulating the internal components of a lock with the goal of disengaging the lock mechanism without using the original key. But to the newbie, this mumbo jumbo can simply be translated as the act of bumping a few metal pins up and out-of-the-way so they no longer block the lock from turning.

There are many different [types of locks](#) utilized today, but all are based on fairly simple concepts. For the purpose of this guide we will be focusing on the most basic and commonly used lock today, the pin tumbler lock. This type of lock is what you will find on most deadbolts, door knobs, or padlocks and is both exceedingly simple in its design and one of the easiest locks to pick.

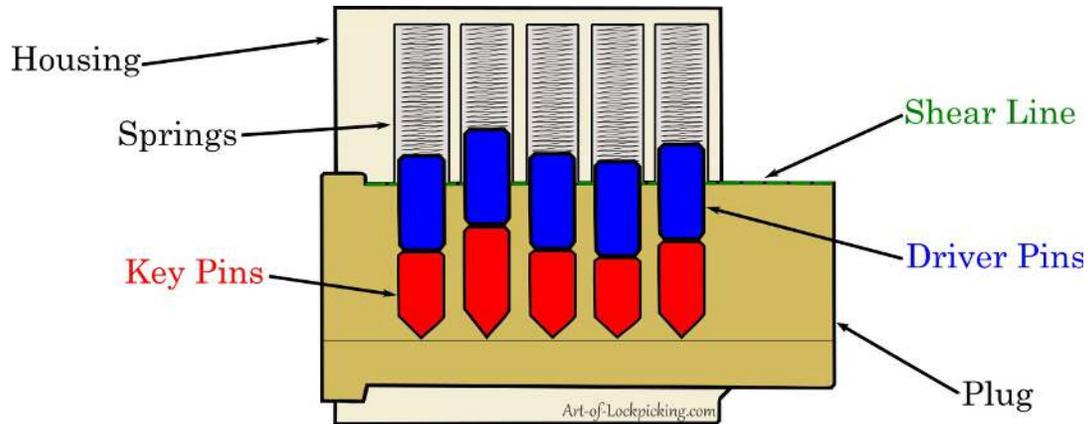
## Legality of Lock Picking

The greatest deterrent of those interested in lock picking is not the skill itself, but its legality. In the eyes of society, lock picking has an extremely negative bias attached to it. It is because of this bias that many people believe that owning lock picks must be unlawful. But in truth, owning and utilizing a set of lock picks is legal in most states and countries, so long as you have permission by the owner of the lock. In regards to the United States, there are only four states in which possession of lock picks is illegal. These states are Mississippi, Nevada, Ohio, and Virginia. For more information on the legality of lock picking in your state or country check out [lockwiki.com](http://lockwiki.com).

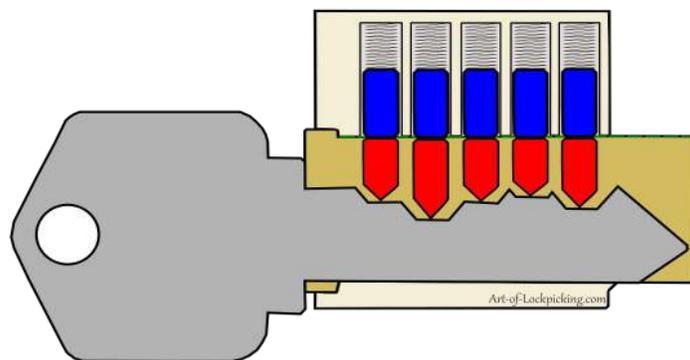
## How a Pin Tumbler Lock Works

Throughout this guide we will be referring to the most common type of lock, the basic pin tumbler lock. The first step in learning how to pick a lock is to actually understand exactly how the lock itself functions and to do so we must first take a look at its anatomy.

The simple pin and tumbler lock has five main components. The housing, the plug, **driver pins**, **key pins**, and springs. The housing is what contains the entirety of the of lock and hold everything together. The plug is where the key insert is located and contains a line of holes in which the **key pins** and **driver pins** are located and held down by the springs.



The most important concept to take away from the anatomy of the tumbler lock is what lock pickers refer to as the “**shear line.**” This line is the area between the plug and the housing and is the reason why the lock won't turn without a key. When the key is placed into the cylinder, it pushes the **key pins** flush with the shear line causing the **driver pins** to exit the plug. When the gap between the **key pins** and **driver pins** is exactly that of the shear line we can then rotate the plug and disengage the lock.

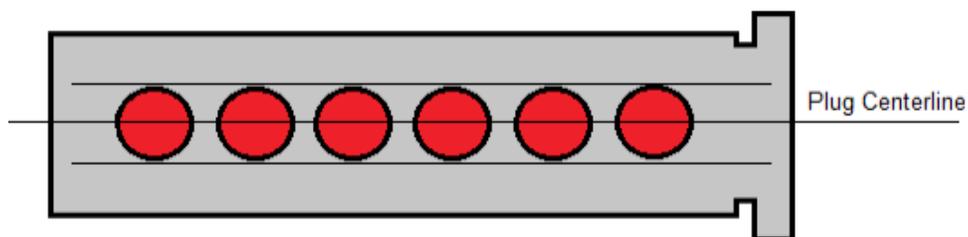


This is the basis of pin and tumbler lock picking, to mimic the key by bumping every pin flush with the shear line and then rotating the plug. But why is it that we can do this in the first place and how is it that we can keep every pin at the shear line without the constant pressure of a key? The answer is simply “**flaws.**”

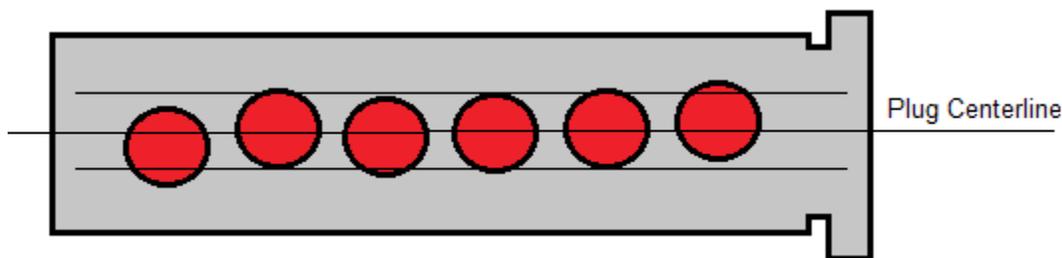
## Flaws Are Good: Manufacturing Tolerances

Nothing is perfect. Nothing can be produced without its flaws or some variation from its ideal design. Everything is designed with a tolerance in mind. It is because of these flaws in production that we are able to manipulate and bypass locks. In the case of the tumbler lock, we have only but to look at the plug.

During production of the plug, holes are drilled to hold the key pins. Ideally these holes would all run down the true center-line of the plug and would be in perfect alignment with each other hole. But again nothing is perfect. Each hole drilled has some variation from both the true center-line and from each other hole. The quality of the lock greatly depends upon the quality and care that is put into drilling these holes. Cheaper locks will generally have a greater variation between holes than that of higher quality locks. In any case, this variation can be as slight as a thousandth of an inch and it's because of this tiny distortion that we gain our ability to pick locks.



*Illustration 1: Perfectly produced lock plug. All pin holes run perfectly down the center line of the plug*



*Illustration 2: An exaggerated example of a real lock plug. All pin holes vary in distance from the true center-line of the plug.*

There is an important term that lock pickers refer to as the “**binding pin.**” This pin is defined as the pin furthest from the plug's true center-line. If you were to attempt to rotate the plug without the key, the binding pin would be the first in the line of pins to stop the plug from turning. It will become bound between the housing and the plug before any other pin. Because of the way the pin holes are drilled into the plug, the binding pin has a slight likelihood of being either the first or last pin in the plug, but regardless of this tendency, it's more likely for its location to be completely random.

Before we move on lets review the two essential concepts required for understanding how to pick a lock.

- 1.We must raise the pins to the shear line in order to turn the plug and open the lock.
- 2.Because of manufacturing error, the pins all hold a different distance from the center-line of the plug. The pin furthest away from the center-line will also be the first pin to bind if the plug is rotated without the key. This pin is called the binding pin.

With an understanding of these two basic concepts we can at last begin to take our first practical steps in learning how to pick a lock.

## Lock Picking Tools Required

While lock picking can be accomplished by means of a couple [bobby pins](#), having the right tools will exponentially increase your success in both picking locks and developing your skills. A basic set of lock picks is relatively low-cost investment and will included all the tools you need. A fantastic lock pick set for beginners is [SouthOrd's 5 piece lock picking set](#).



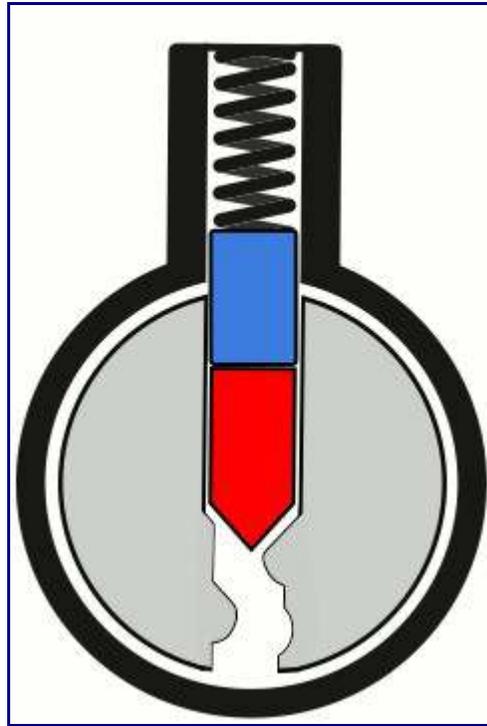
Once we have our picks, we can get down and dirty.

## The Tension Wrench

The first order of business is learning how to properly use the tension wrench. This little bent piece of metal is used to accomplish two things. Firstly, it acts similar to the key where it gives us the leverage we need to turn the plug. But more importantly, this tiny wrench is the tool that helps us to keep the pins at the shear line as we pick them. Here is how it works. As we put slight tension on the wrench, the binding pin will stop the plug from rotating.

It's here that we can now understand the importance of the binding pin. As the pin begins to bind, we push it up past the shear line with our pick and once up and out, the lock will turn ever so slightly as the plug finds the next binding pin to stop on. But what also results is if you maintain

the correct amount of tension on the wrench, the driver pin will remain out of the plug and above the shear line while the key pin falls back into its hole. While the plug only turns ever so slightly, it is enough for the driver pin to catch on the top of the plug and if the tension is released the pin will fall back.



So now that we know what we are trying to accomplish inside the lock, let's get down to it. Take your tension wrench and insert the shorter end into the lower part of the keyhole. While not always necessary, we sometimes need to determine in which direction the plug turns. To accomplish this apply pressure to the tension wrench clockwise and then counterclockwise. The plug should turn slightly both ways before it stops. As you rotate the plug both ways, focus on how the tension wrench feels as it stops. If it feels stiff and has little give, this is likely the wrong direction of rotation. Whereas the right direction of rotation will feel mushy and give a little more. Something else to keep in mind is some cheaper locks will open in whichever way you rotate the plug, such as the majority of padlocks.

Once we are aware of which way the plug turns we can begin to put tension on the wrench in that direction. The amount of tension we exert is key to successfully picking the lock. If we exert too much pressure the pins will bind below the shear line. If we don't use enough tension the pins will simply fall back into the plug. Developing this feel for the tension wrench is the primary skill involved in lock picking. A general rule of thumb when using the tension wrench is to use one finger and start with the slightest touch, increasing pressure as you find it necessary. As we apply slight tension on the plug, the binding pin will begin to bind. The next step is to find this pin and push it above the shear line.

## Picking a Lock: Single Pin Picking

So now that we know all this mumbo jumbo we can finally address the task at hand, picking a lock. While there are multiple methods that one can use to pick a lock, we are first going to look at the method called “single pin picking.” In this method we simply bump each individual pin up one at a time using a hook-type pick. While single pin picking is not the fastest nor easiest method, it is the best in regards to learning how to pick a lock as it gives us a better understand of exactly what is going on inside a lock. Obtaining this understanding can be the difference between the mediocre and the master. With that being said, let's give it a shot.

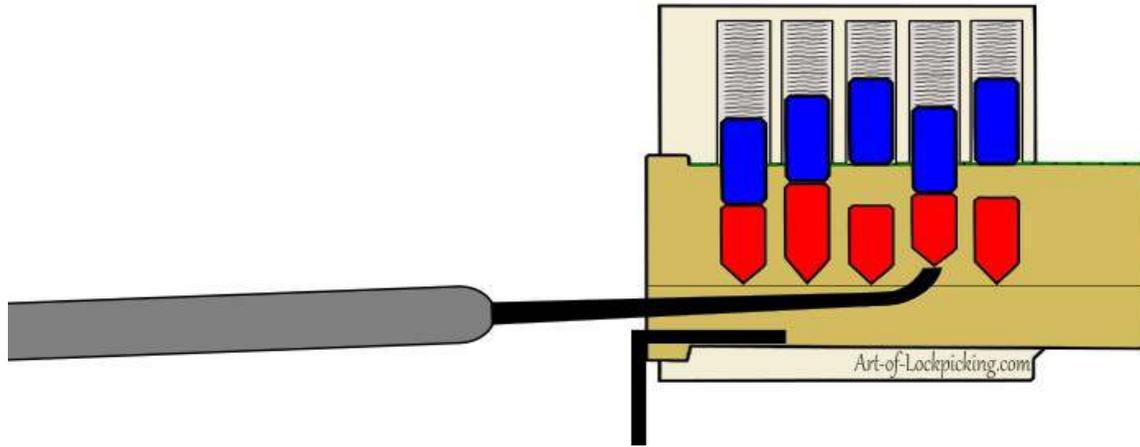


The first thing we have to do is locate the binding pin. Insert your tension wrench and give it the necessary pressure to bind the first binding pin. You will need to keep tension on the plug during the entire process of picking the lock. Next insert your pick into the top of the lock and, starting from either the front or back, begin to cautiously probe each pin by lifting it up slightly. As you push each pin up, gauge how difficult it is to move. Most of the pins will be relatively easy to lift with the exception of the binding pin. This pin will feel stiff and if you were to release the tension on the plug it would again feel like the rest of the pins.

Once we have found our first binding pin we need to raise it above the shear line. While continuing to apply light pressure on the tension wrench, begin to gently lift the binding pin. When the pin reaches the shear line there will be a very slight give in the turning of the plug. You may also feel a slight click vibrate through your tension wrench. These both are very good indicators that you have successfully "picked" the pin, or what is also known as “setting a pin.” If you were to at this point release tension on the plug, you would hear the pin fall back into place. Note here that you have only lifted the driver pin out of the plug and not the key pin so don't be alarmed when you still feel it wobbling around inside the plug.

As a result of setting the first pin we have removed the first binding pin from interfering with the plug. Because of this, the plug will turn until it hits the next furthest pin from the center-line. This becomes our new binding pin and is our next target. Just like with the first pin, you will need to probe the remaining pins to find the new binding pin. Once found, slowly lift it up past the shear line until you again feel the click and give of the plug and it turns ever so slightly.

As we continue to apply pressure on the tension wrench, repeat the same steps of locating the new binding pin and setting it. Once all the pins are set, the plug will give and allow us to fully rotate it as if we had a key. That's all there is to it!

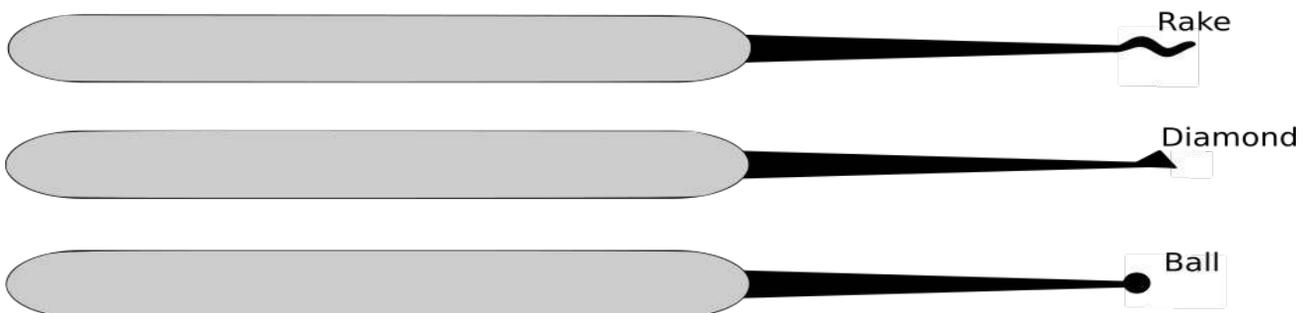


If by chance the pins either don't set or keep falling, it is likely that you need to re-adjust the amount of pressure that you are applying to the tension wrench. With some practice you will develop a feel for exactly how much pressure to exert throughout the entire process. Additionally, check out our guide to [honing your single pin picking skills](#).

## Picking a Lock: Raking

The next method we will look at is raking. Raking has currently become the most common method for lock pickers as it's quicker and the easiest way to pick a lock. Raking is accomplished by inserting your pick into the back of the lock and quickly pulling it across the pins repeatedly with an upward force while at the same time applying tension on the plug. This will cause the pins to bounce up above the shear line. While it works for most cylindrical tumbler locks, this method will struggle if the pins have any dramatic changes in size. An example of this would be as follows: one short pin – one long pin – one short pin – one long pin.

While raking can be accomplished with just about any type of pick, it is most commonly and more efficiently done with a rake-type of pick. These picks commonly have a wavy edge but can also include picks such as the diamond or ball pick. Although there are many variations of each type of pick, a basic example of each can be seen below.



Similar to single pin picking, the success we have in raking depends vastly on the use of the tension wrench. Too much tension will cause the pins to bind below the shear line, while with too little tension the pins will again fall back into place. With that being rehashed, let's get raking.

Just as before insert the tension wrench into the bottom of the keyhole and apply slight tension to the plug. Now insert your pick into the back of the lock while applying an upward pressure on the pins. Gently snap the pick out in a scrubbing sort of motion being sure to bump all the pins on your way out. Repeat this three or four times until all of the pins are set and the plug turns. If the lock does not unlock within five rakes, release the tension on the plug and carefully listen for any set pins to drop.

If you do not hear any pins drop back into place this means you were either using too much tension or not enough. Adjust the tension either lighter or heavier and try raking the lock again. Continue doing this until all the pins set and the plug turns. With practice you will gain a feel for the appropriate amount of tension to place on the plug as you rake and will soon be able to open a lock within your first couple attempts. If raking doesn't seem to be working on a particular lock, it can still be used to set several pins and you can finish off the lock with the single pin picking method.