

Lockpicking 101:

Please grab a:

1. Lock & Key



2. Pick



3. Torsion Wrench



If we run out, please find a partner with tools

Intro slide, leave this up while people come in and get seated.

Lockpicking 101:

Jo Rock

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Hi All! I'm Jo an amateur lock picker and professional computer geek. I'm going to talk everyone through the basics of how to pick a lock and get you all hands on and practicing as soon as possible. My hope is that at the end of this session most of you will have popped open a lock and had time to start worrying about how easy it is for someone to be getting into your apartment right now. So lets get the preliminaries out of the way.

Legality & Ethics

The law varies by state.

Let's not get into ethical subjectivism, okay?

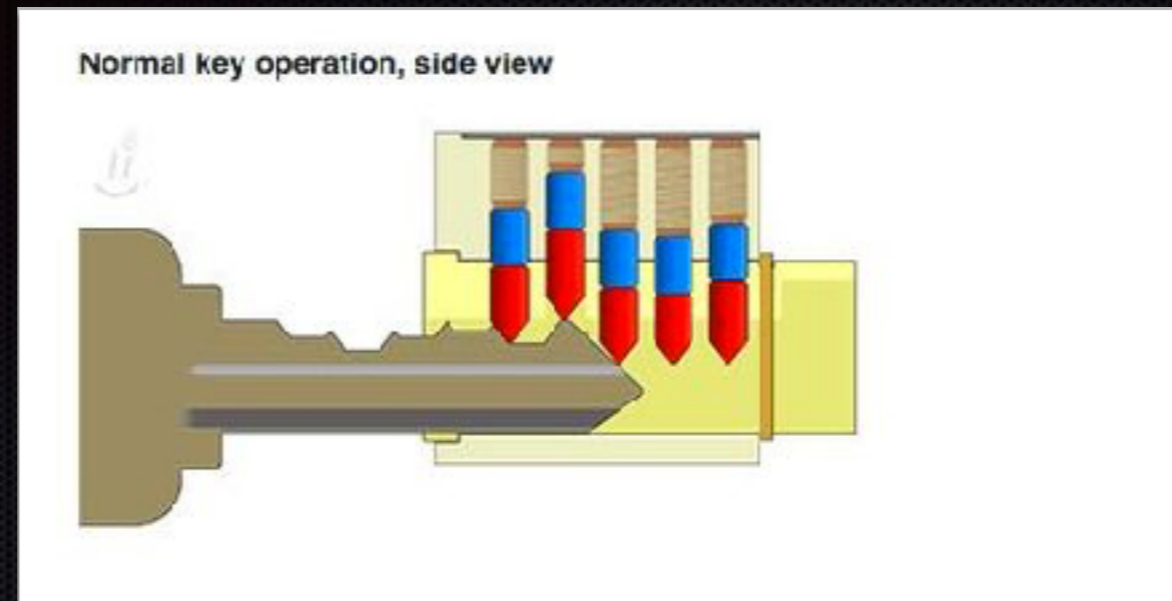


There are obviously both ethical and legal implications to possessing & using and sort of lock picking tool. I am NOT a lawyer, your priestess, or guidance counselor.

Burglar's tools; possession. Any person who shall knowingly have in his possession any nitroglycerine, or other explosive, thermite, engine, machine, tool or implement, device, chemical or substance, adapted and designed for cutting or burning through, forcing or breaking open any building, room, vault, safe or other depository, in order to steal therefrom any money or other property, knowing the same to be adapted and designed for the purpose aforesaid, with intent to use or employ the same for the purpose aforesaid, shall be guilty of a felony, punishable by imprisonment in the state prison not more than 10 years.

-THE MICHIGAN PENAL CODE Act 328 of 1931

In Michigan lock picks are ostensibly legal unless you have a intent to use them to commit a crime.



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How A Lock Works

Pins (tumblers) - cylinders of metal that slide, have a break in them. They are usually spring loaded.

Barrel or cylinder of the lock - the central part of the lock that turns with the key.

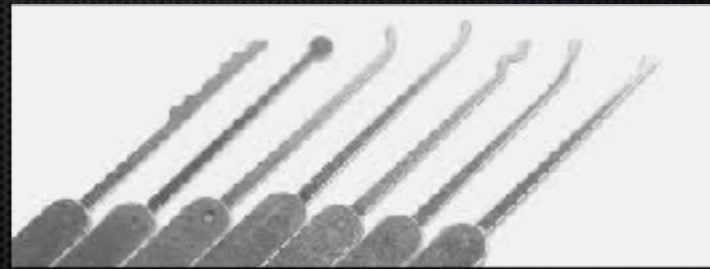
When you put the correct key in, the break in each pin lines up with the edge of the cylinder and nothing obstructs the cylinder from turning. When you put an incorrect key (or no key) in, the solid portion of the pin obstructs the cylinder from turning.

Tools: just the basics

- Torsion Wrench



- Pick



A torsion wrench is just an L-shaped strip of flat steel. We use it to turn the barrel

Picks come in many sizes and shapes but they are also just a strip of steel shaped to allow you to manipulate the pins in a lock.

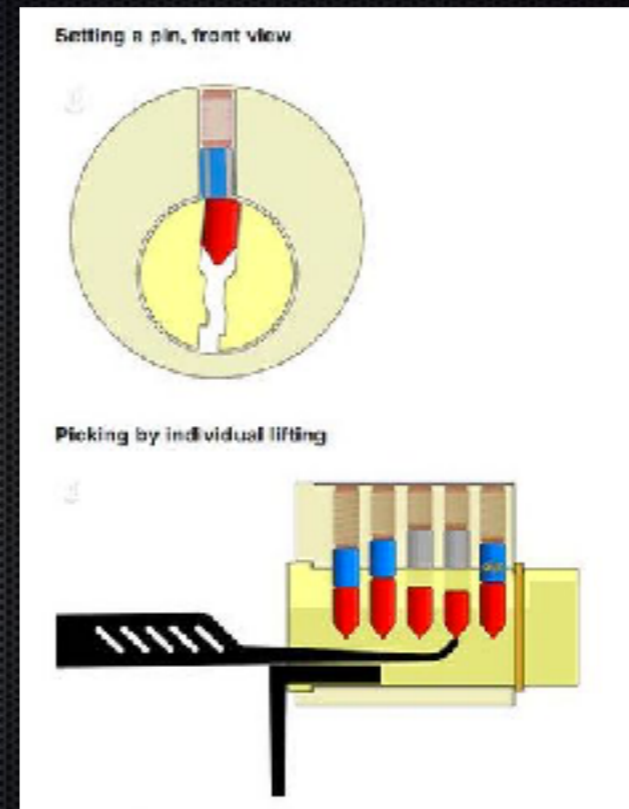
Two quick questions in preparation

- Where are the pins, on top or bottom?
- Which way does the barrel turn? Hint: clockwise :)

Take a look at your lock. Put the key in and see which way the key goes in and which way it turns and how much pressure it takes to turn it. With an unfamiliar lock you won't always know, but for this session just use the key a few times to see how it goes. In general if you look at the lock face you can see the grooves that show the "bottom" of the key. The pins are opposite.

Lets do this!

1. Insert the wrench and pick
2. Set the pin by turning the lock slightly
3. Maintain pressure
4. Rake the pins with your pick



Images courtesy of Deviant Oilam at tool.us, Creative Commons

Okay go ahead and give it a try. Your goal is to get all the pins lined up so the cylinder will turn, but the mechanics of doing it are pretty simple. Insert the tools. The short “L” of the wrench goes in like a key. The pick goes in with the picking part aimed up at the pins, where the ridges and valleys of the key normally would go. You apply a little pressure with the wrench so the lock is trying to turn, then you drag your pick back and forth across the pins until the sucker pops open. Sometimes you have to ease up a little on the torsion or apply a bit more pressure to get it to turn. Start raking the pins from the farthest back. Sometimes you can feel the lock give a little as you get a pin in place or “stick” when one is pinned too hard by your torsion. Raise your hand if you have any question or need help. I’ll give you a few minutes to try and start walking around.

Feel free to whoop loudly and make fun of those less lucky when you get your lock to open.

What about?

Lockpicking guns and cylinder locks and keys with two sides and warded locks and security systems and slimjims and master keys and handcuffs and disk tumblers and bump keys and pick bouncing and elastic deformation and safe cracking and elliptic curve Diffie–Hellman agreement scheme encryption keys?

We're running out of time, so we need to wrap this up and let the next class get setup. I'm sure some of you have a load of unanswered questions.

There is a lot to learn if you really want to get into lock picking and a variety of clubs dedicated to the craft. Start with Google and maybe your local maker space or hit me up any time you see me wandering about and I'm happy to tell you what I know to get you started.

Conclusion

- Thank you everyone for being my guinea pigs, I've never taught this course before. If you have any feedback please let me know in person or via email.
- Please return the locks and tools to the bins on the way out so I can keep teaching this to others.
- Contact me at: mrjosephrock@gmail.com
- I'll have a few locks and tools with me as I wander the convention if you want another shot at it.

Thank you everyone for being my guinea pigs, I've never taught this course before. If you have any feedback please let me know in person or via email and I'll try to improve for next time.

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I'll have a few locks and tools with me as I wander the convention if you want another shot at it. I also have some more complicated locks and transparent locks of various types if you want to take a look.