

Introduction to Lockpicking

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DEF CON 17

About Me

- Longhorn Lockpicking Club
- UT Austin ISO
- CS Undergrad

Format

- First year with Thursday Events
 - Long time slot
 - People most likely will come and go
 - Split time into three portions
 - Originally intended to be “hands on” workshop-esc
 - “Lost” bag
 - Picks
 - Locks
 - LSI / LLC Event

Format

- Adventure ensues:
 - WTF can I do besides bore people for 3 hours
 - Teach Lockpicking theory
 - Helps Lockpicking Village ?appreciation?
 - Entertain?
 - Build a Demo Lock
 - Materials scrounged up from walking distance
 - Started building at 11:30 AM Yesterday (WED 30JUL09)
 - Looks utterly disgusting, but still functional-ish
 - Redo Powerpoint

Prelim Q & A

- Yes?
- No?
- READY GO

Lockpicking Background

- Why Lockpicking?
 - Why “hacking”?
 - Same reasons, more or less
- Groups
 - Locksport International (LSI)
 - The Open Organization Of Lockpickers (TOOOL)
 - Longhorn Lockpicking Club (LLC)
 - Fraternal Organization Of Locksport (FOOLs)
 - Others exist

Legality

- Check local laws
 - In general, but not always, it is usually ok to pick your own locks, or locks you have explicit permission to pick
 - It is not always ok to Carry lockpicks
 - EX: NYC and Washington DC
- I have no idea what the laws in your particular location are.

Locks

- Various ways to group
 - Security Level
 - Pretty arbitrary grouping
 - Operation
 - Electronic
 - Mechanical
 - Electromechanical
 - Housing
 - Mostly obvious

Pin Tumbler

- Focus will be mostly on these locks
 - How they work
 - How we pick them open

Pin Tumbler Locks

- Housing
 - Green
- Plug
 - Yellow
- Driver Pins
 - Blue
- Key Pins
 - Red
- Shear Line

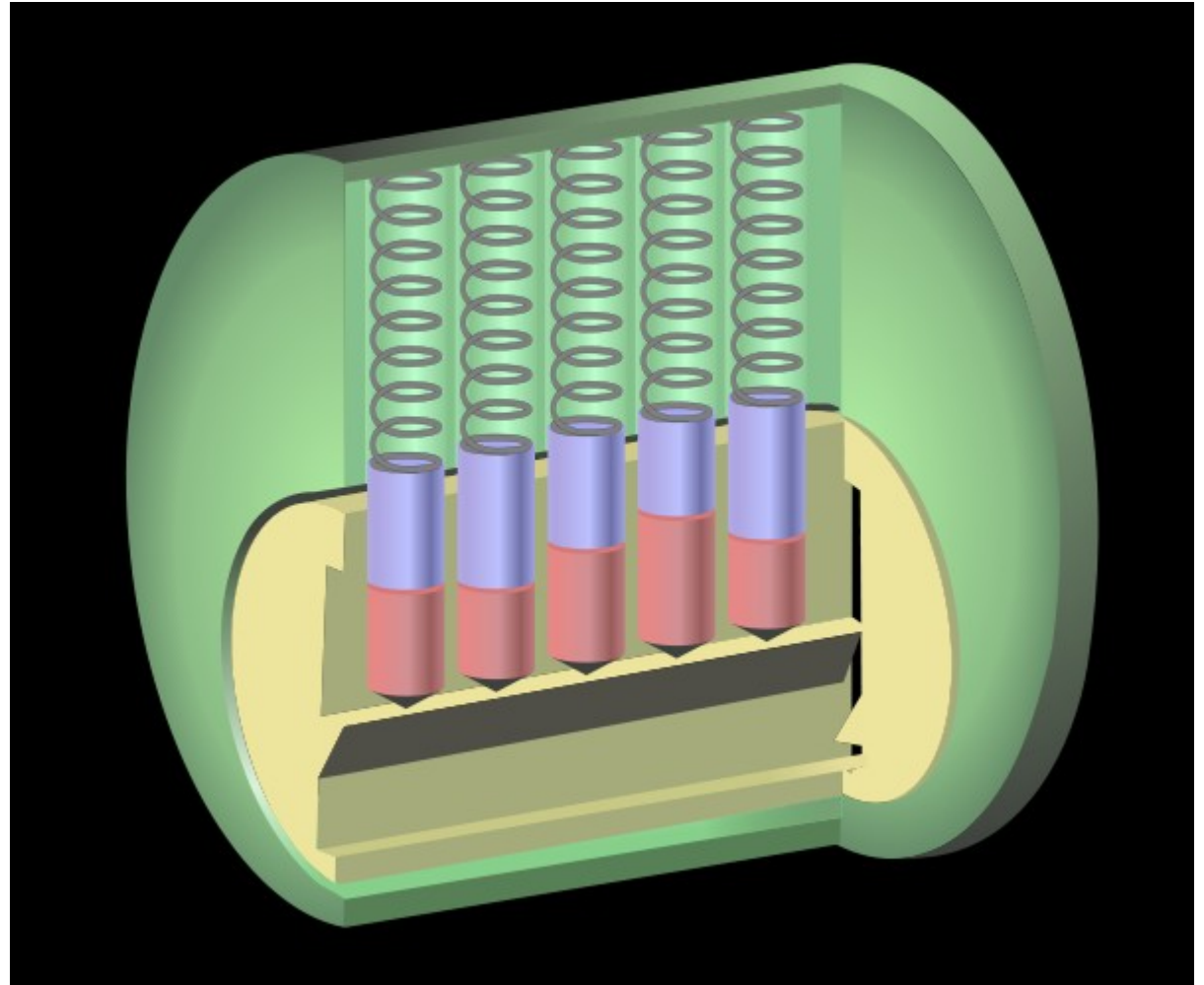


Image from wikipedia.org

- The point where the plug meets the housing

Pin Tumbler Locks

- Peaks and Valleys on Key raise pins
- Correct key raises top of key pins to shear line

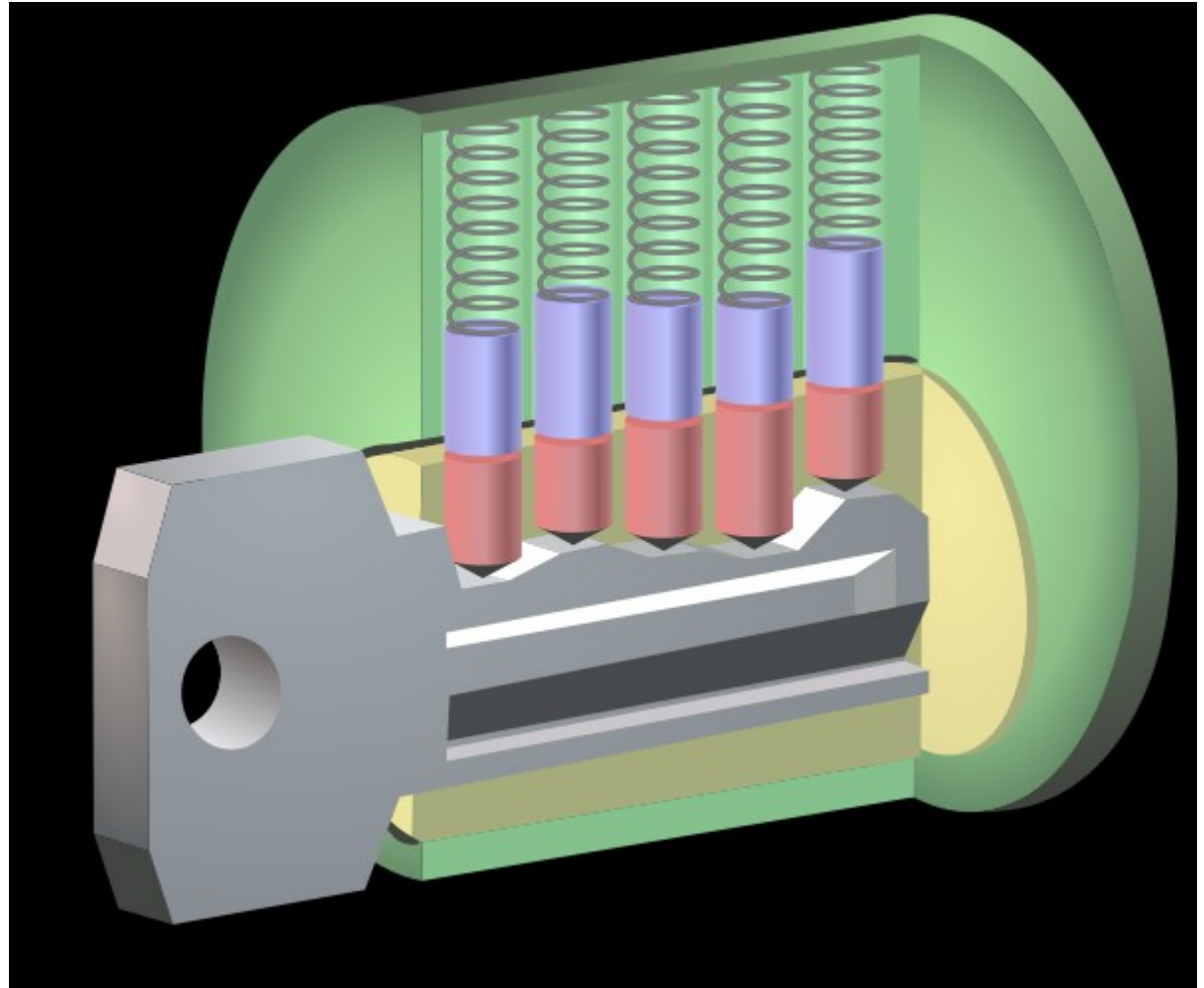


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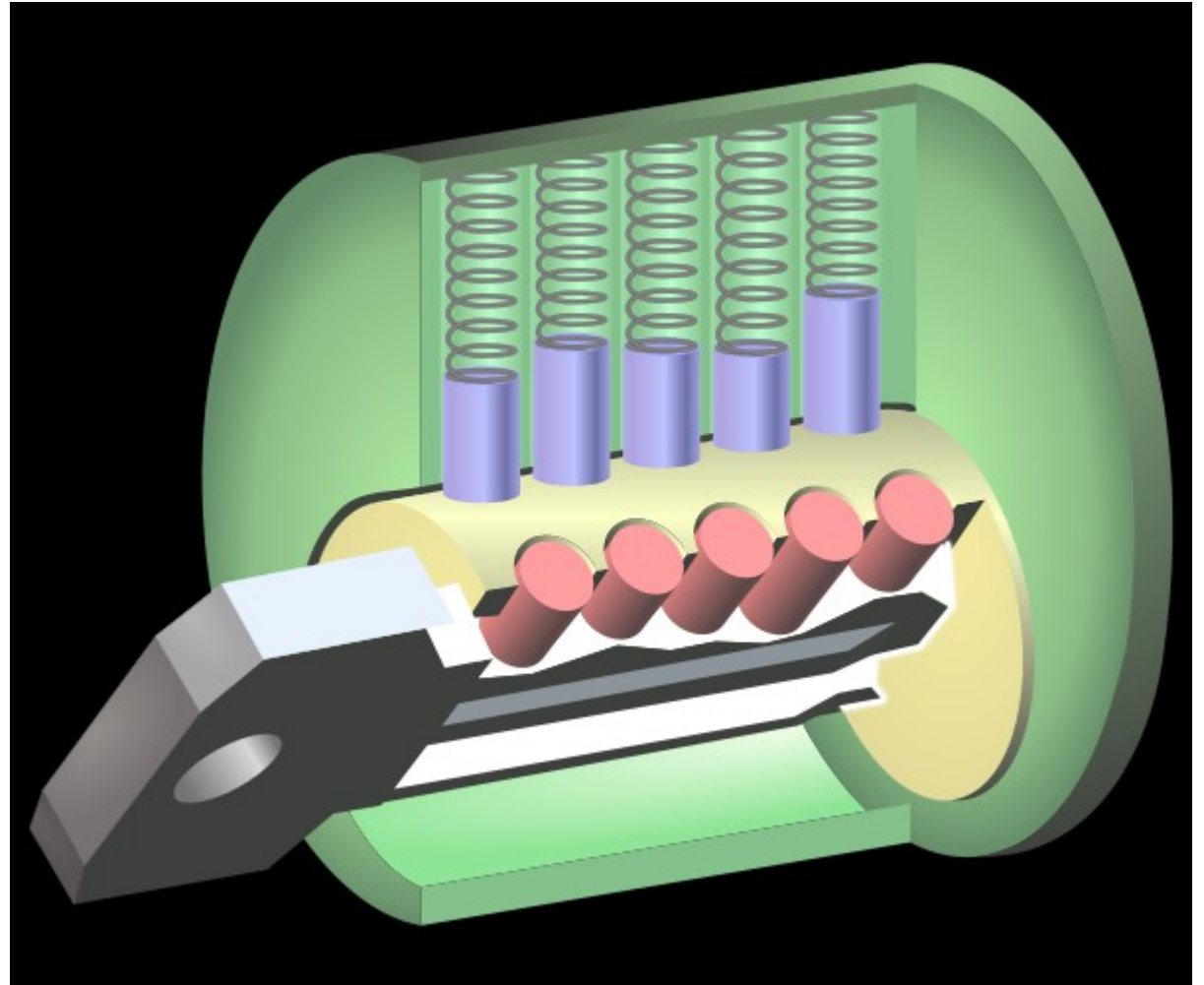


Image from wikipedia.org

Pin Tumbler Locks

- Wrong key puts pins at wrong height

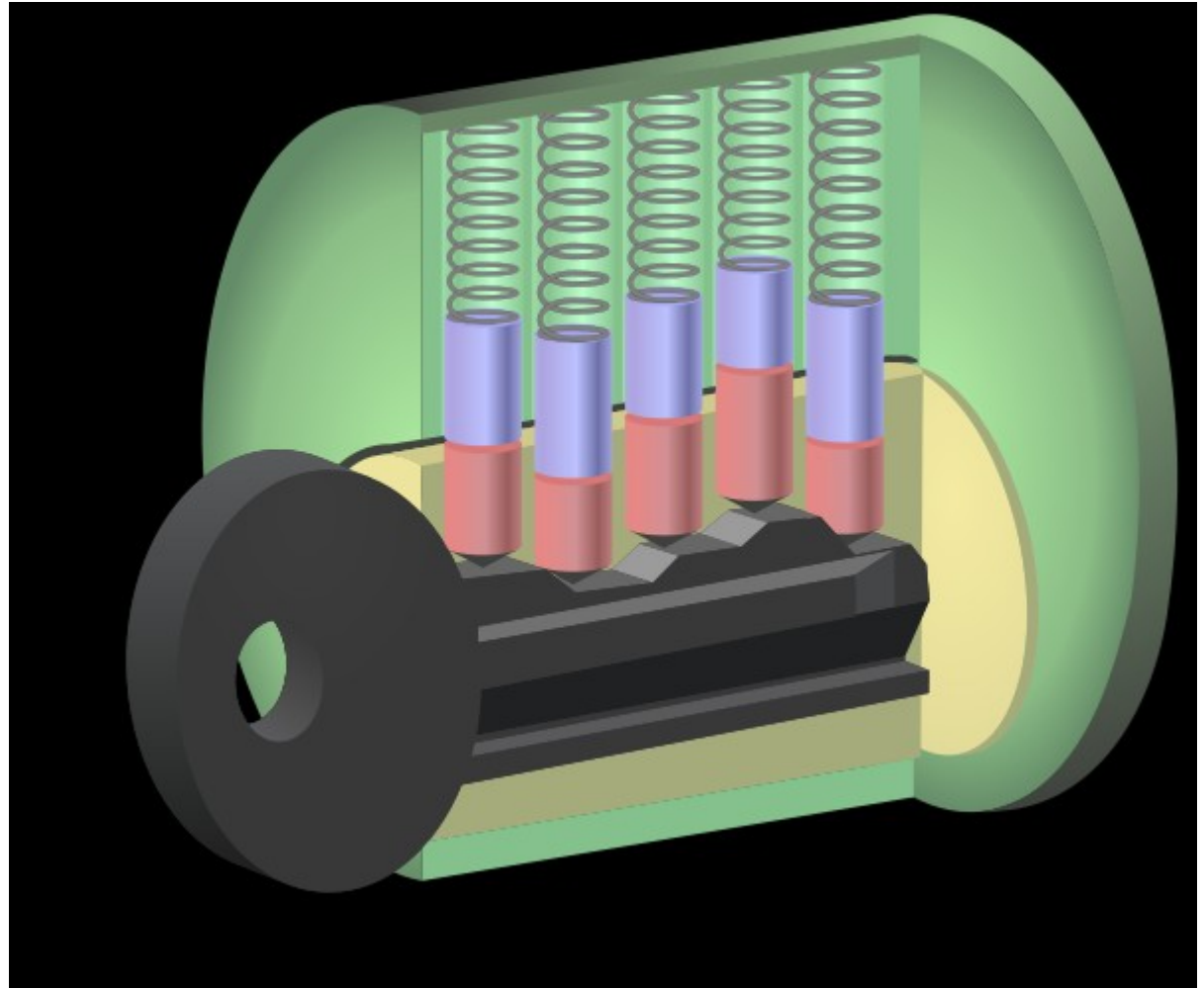


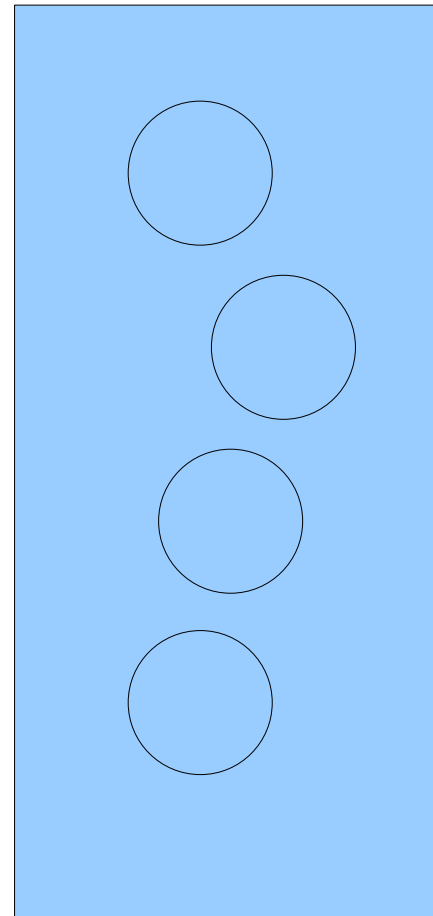
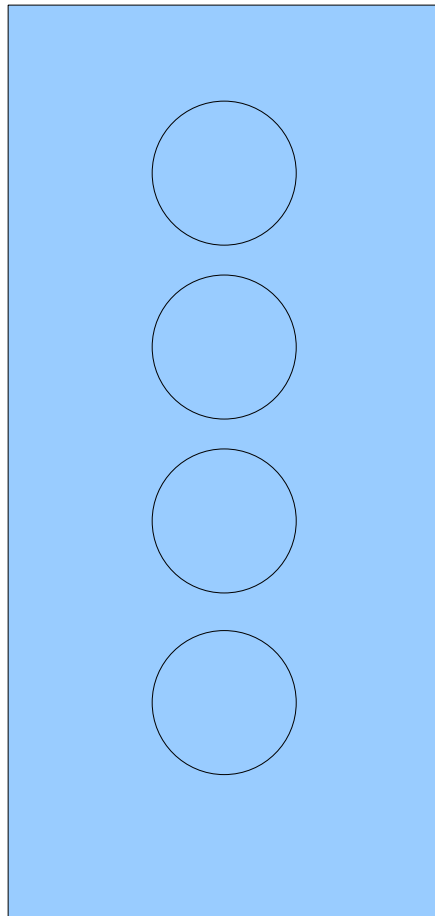
Image from wikipedia.org

Pin Tumbler Locks

- How do we lockpick?
 - The lock opens when the key is inserted, which raises the pins to the correct height.
 - If we can raise the pins to the correct height, we don't need the key.

Pin Tumbler Locks

- Mechanical Tolerances



Pin Tumbler Locks

- Single Pin Picking
 - Hooks
- Multiple Pin Manipulation
 - Rakes



Pin Tumbler Locks

- Security Features
 - Security Pins
 - Spool
 - Mushroom
 - Serrated
 - Sidebars



Additional Info

- These slides, as well as more info will be available via:

obsinimize.com

- I can be reached at:

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