

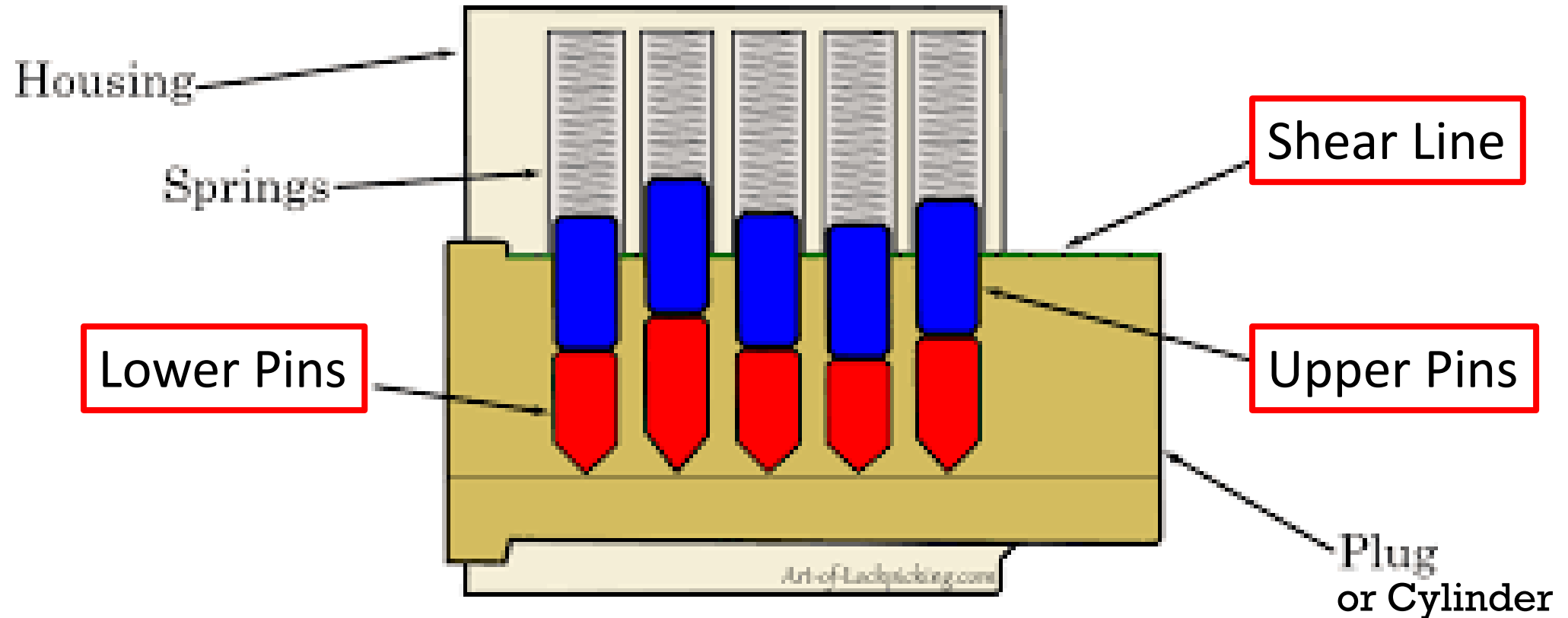
Ways to open a lock by “picking” it



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What is inside a “standard” lock?

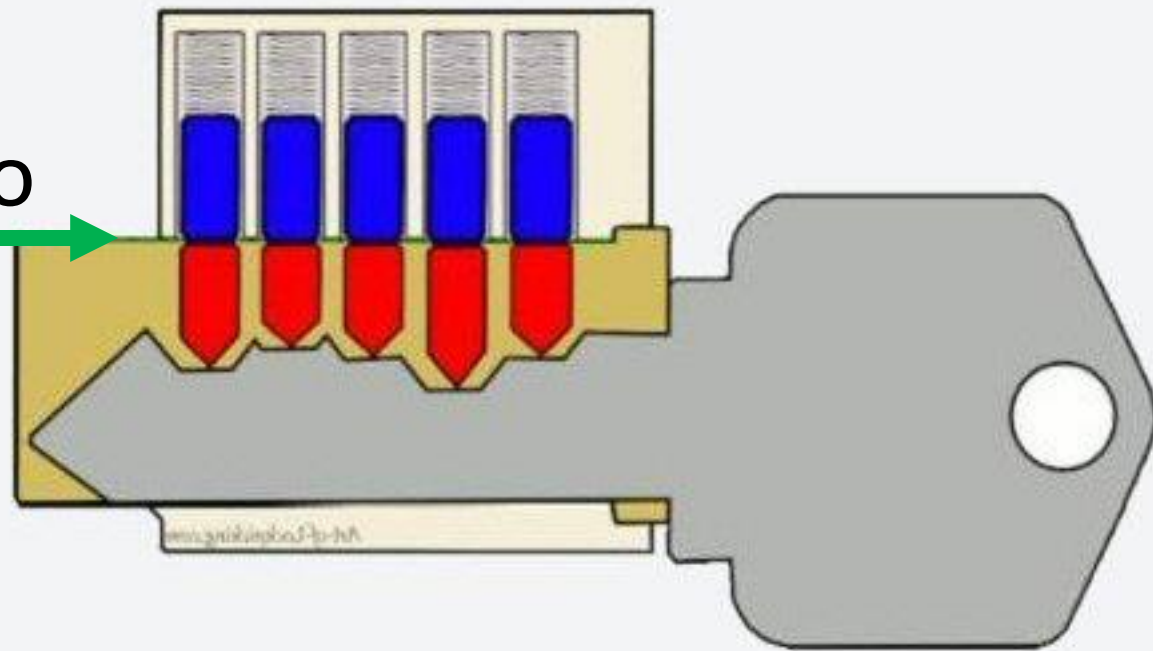
Standard parts names:



How does a “standard” pin lock work?

The key in a pin cylinder raises the pin stacks evenly so that the split between them runs along the “**shearline**”.

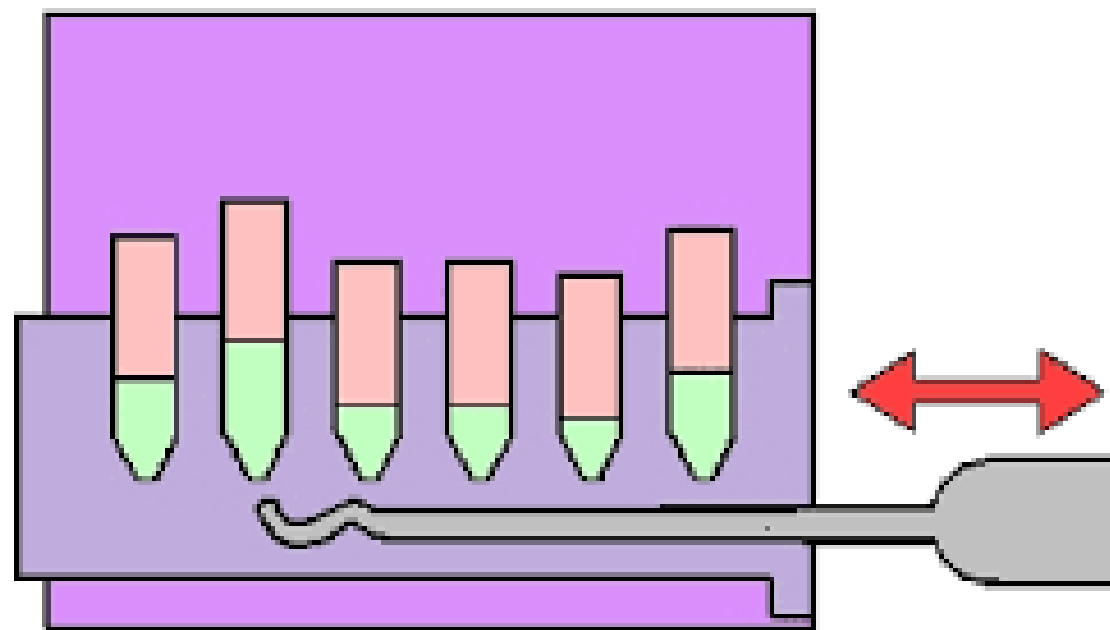
With nothing obstructing it, the cylinder can turn, thereby opening the lock.



Using a rake pick or lock picks

If the objective is to just raise the lower pin, then you could do that one pin at a time using a Rake pick.

But the problem is, “How do you keep the previous pins in the correct “up” position?”

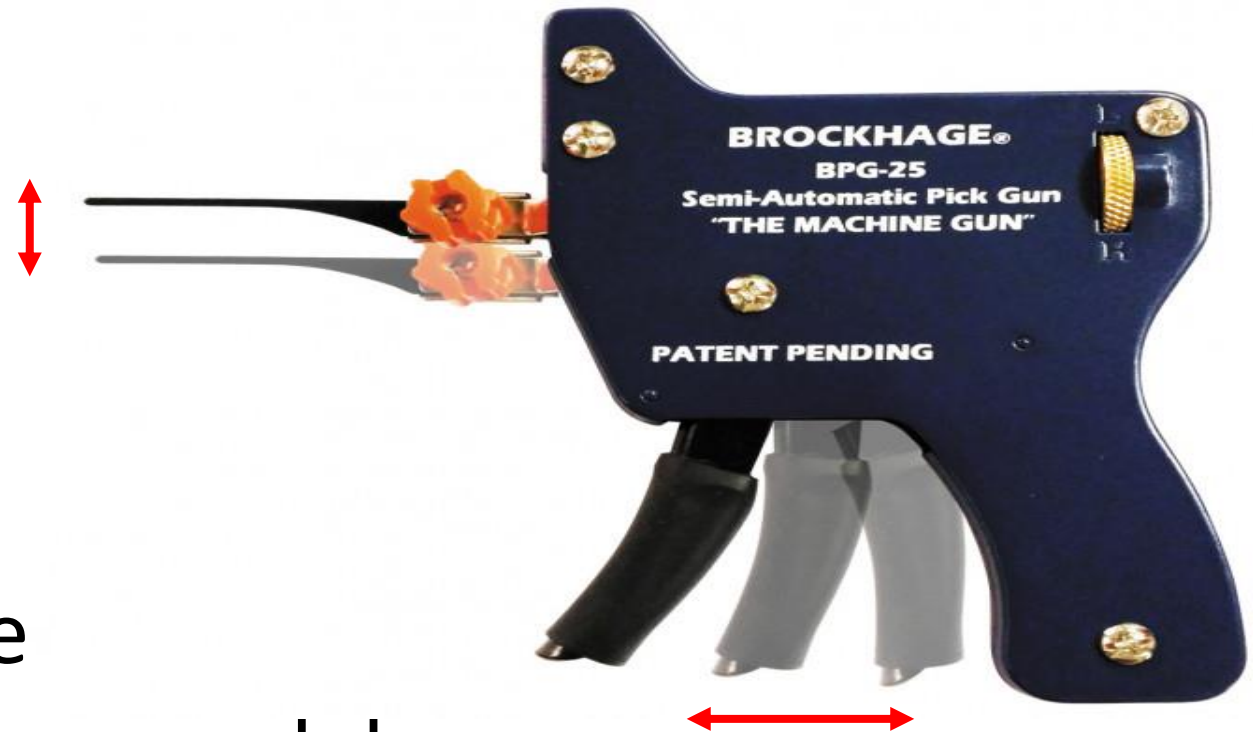


A rake pick is raked in and out of the lock quickly

Using a pick gun

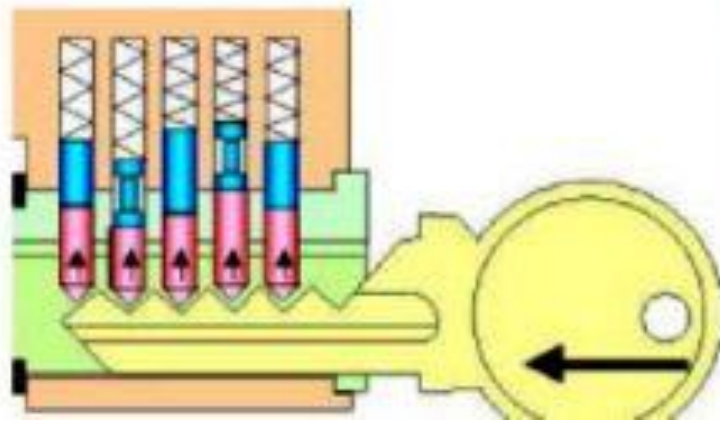
By using “light” pressure twisting the cylinder, sometimes the pins that were already moved up will be caught and “bound”, thereby *remaining in the correct position*.

A great tool to do this quickly, by moving along all of the pins is a Pick Gun. By squeezing the handle, the pick moves Rapidly up and down.



How does a bump key work?

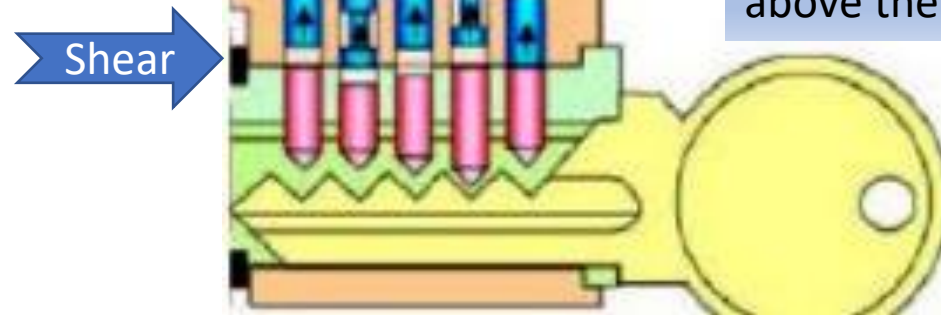
To use a bump key, the "pull-back" method is the most common one. With this method, the key is inserted all the way in, and then pulled back out one notch. While keeping rotational pressure on the key, it is then "bumped" into the keyway with the heel of the hand or with a tool of some sort.



Just BEFORE bumping

The driver pins (in blue) have bounced above the **shear line**, while the key pins (in red) are still below the shear line. As long as the shear line is unblocked, the cylinder can turn and the lock will open.

The "bumper" needs to bump the key hard enough to jar the pins, but not so much that the lock or key is damaged. Bumping the key causes the pins to jump slightly.

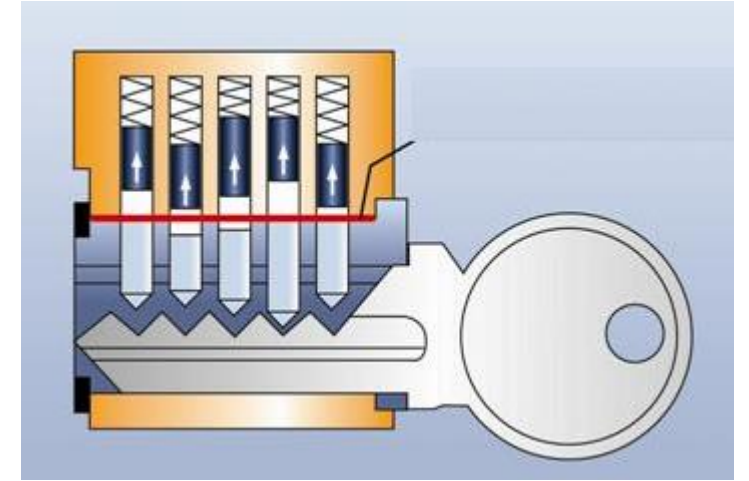


Just AFTER being bumped

How effective are Bump Keys?

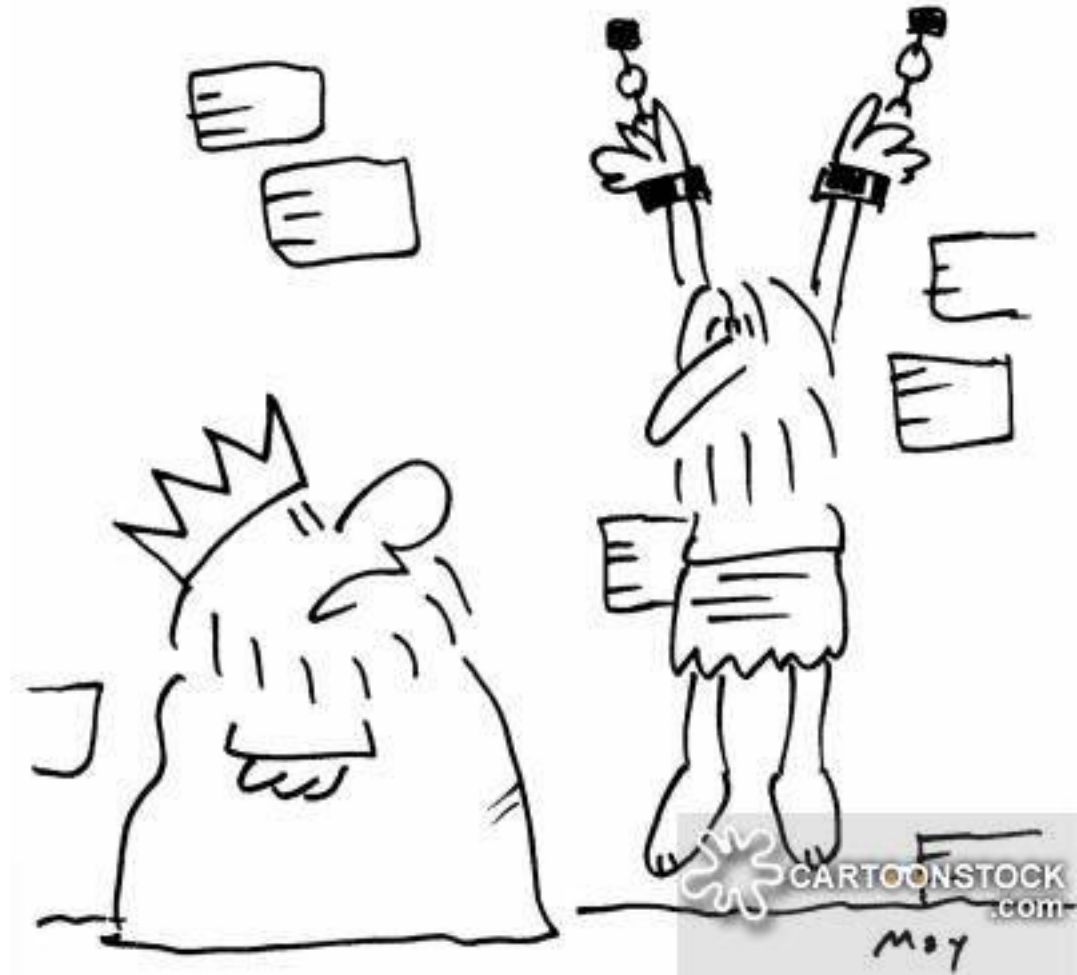
The success of the bumper depends on practice. Very little skill is required, and the learning curve is short. Success will also vary with the type of lock and quality of the key. Keys made from soft metal won't last long. Bumping tends to work better on more expensive locks, since the hard, high-quality parts work more smoothly. BUT they also work well on older, USED locks

Bump keys sometimes deform when they're hit, causing them to jam in the keyway. They can be difficult to remove.



Bump keys and the Law

Owning or possessing a bump key is **not** currently illegal, and bump key sets, and videos on how to use them, are available online. To acquire a bump key, all that's needed is the identification of the manufacturer of the lock.



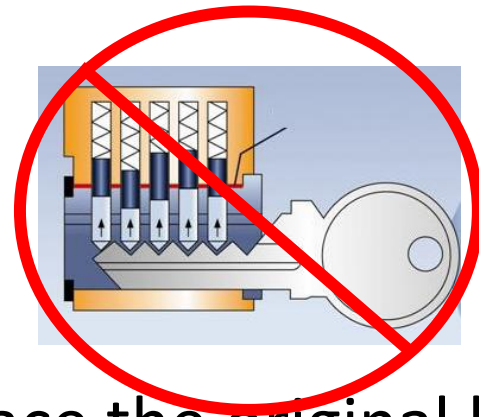
"I know your sentence is up, but the locksmith died last year."

Security for locks

Some companies make locksets designed to defeat bump keys. But many locks that use a key and the pin-tumbler system are vulnerable to bumping. No standards exist which demonstrate resistance to bumping. The resistance to bumping a deadbolt lockset varies with the manufacturer. Some electronic locks that have a key override are also vulnerable to bumping.

Bump-proof locks are rare and expensive. Bump-resistant locks are much more common. Some (but not all) lockset manufacturers include bump-resistant features in their newer locks.

Security for me



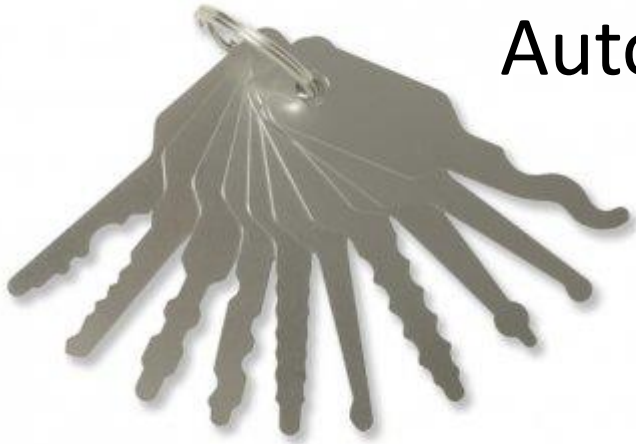
Usually, for less than \$20, a locksmith can replace the original lock pins with "mushroom" pins, sometimes called spool pins, depending on the manufacturer. While these pins will improve the resistance of the lock, they will not make it bump-proof.

Medeco is a company that makes high-end locks. They can provide bump-proof lock cylinders for which a duplicate key is available only through Medeco-authorized dealers. Their cylinders start at around \$100, although their less-expensive cylinders may not be bump-proof.

Tools to assist you



Generic pick set



Automotive picks



Magnifying Headset



Teflon Spray

Locksmith: A speculative profession



"I FIGURE THAT IF I CAN JUST SELL ONE KEY,
I CAN RETIRE."

The end