

Reverse Engineering Locks

stories of some of the greatest (and simplest) attacks against high-security locks



by Deviant Ollam

Event Name

XXXX-XX-XX

Who am i ?



Who am i ?



Who am i ?



**THE
CORE
GROUP**

auditing
assessments
research
trainings

Who am i ?



**THE
CORE
GROUP**

auditing
assessments
research
trainings



workshops
public lectures
lockpick village
contests & games

Pin Tumbler Locks



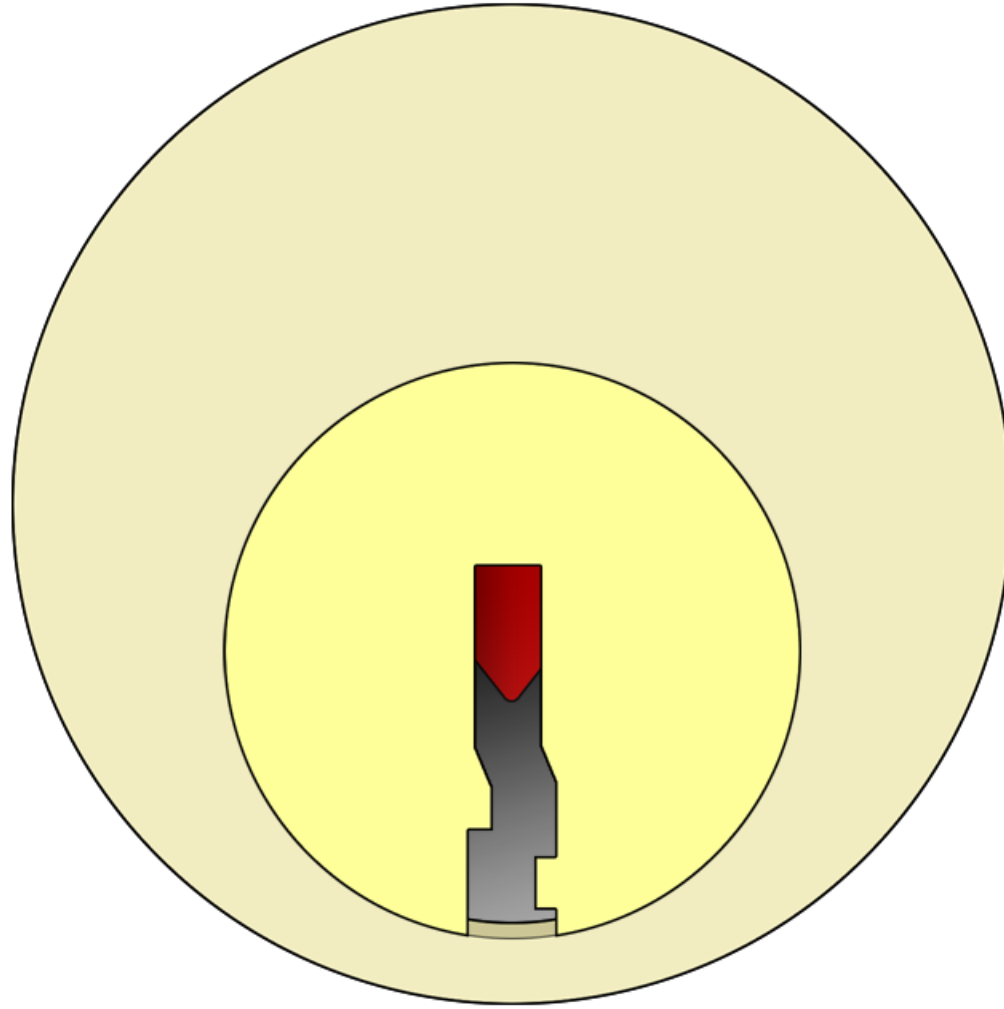
Pin Tumbler Locks



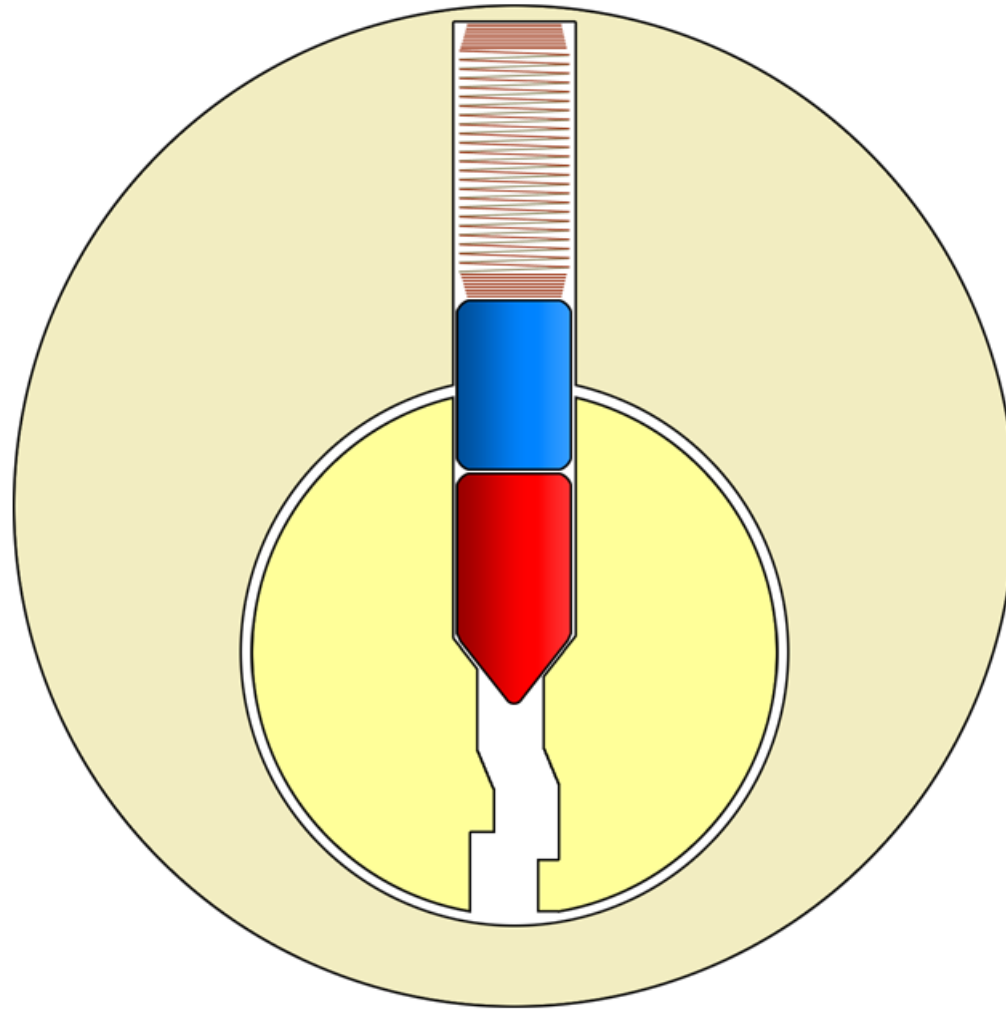
Pin Tumbler Locks



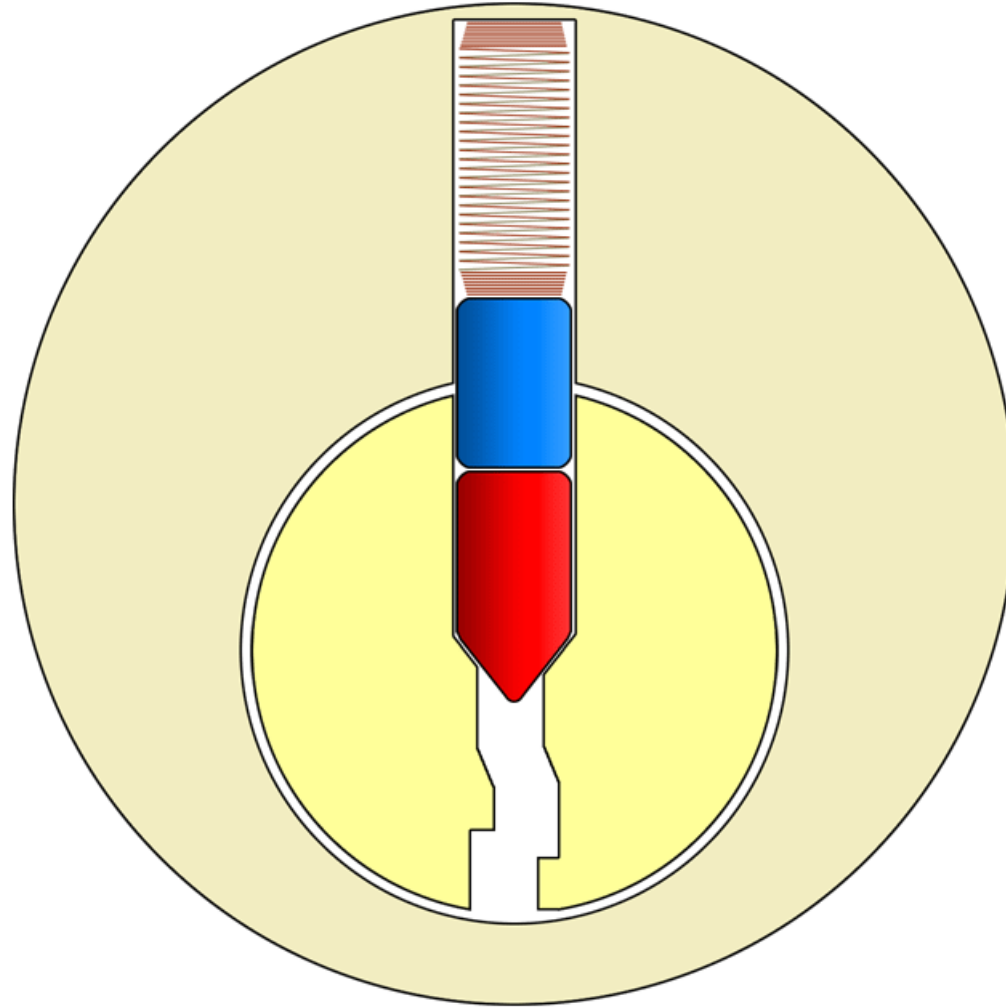
The View From Outside



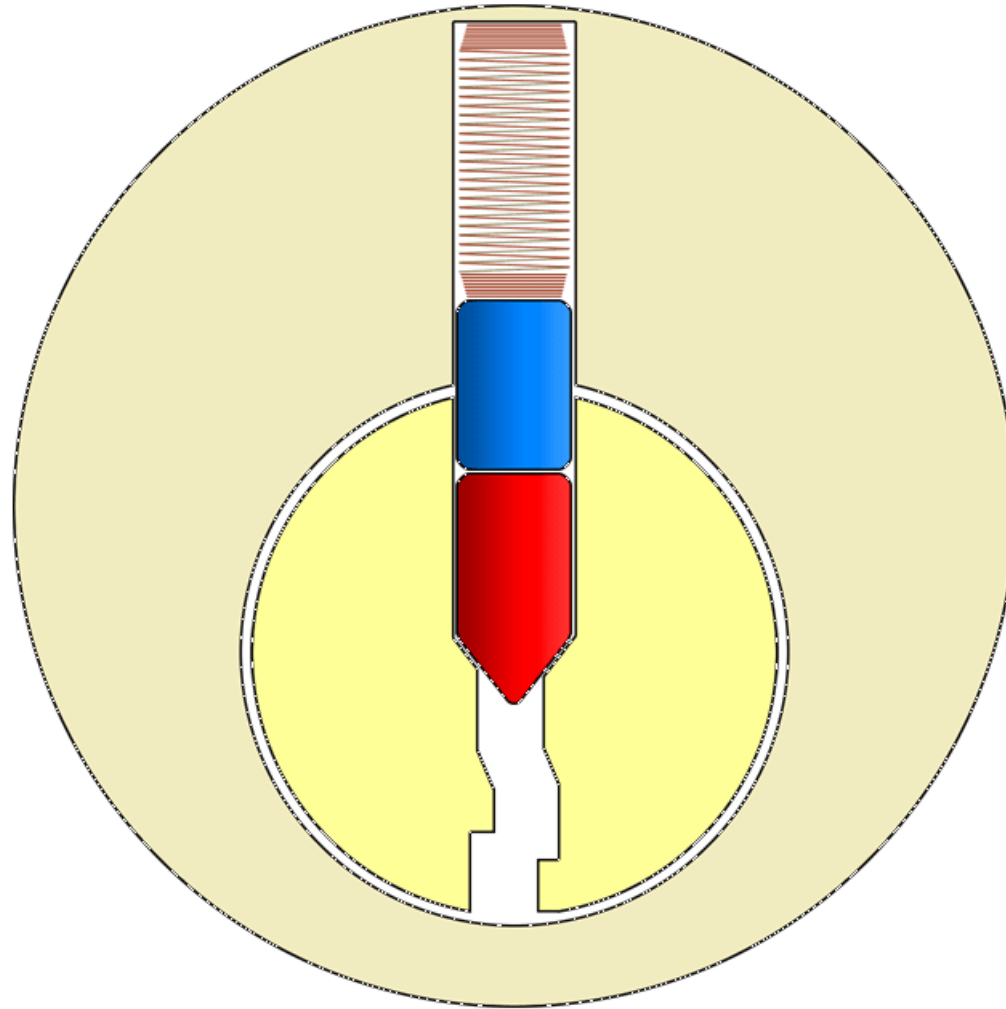
What's On The Inside



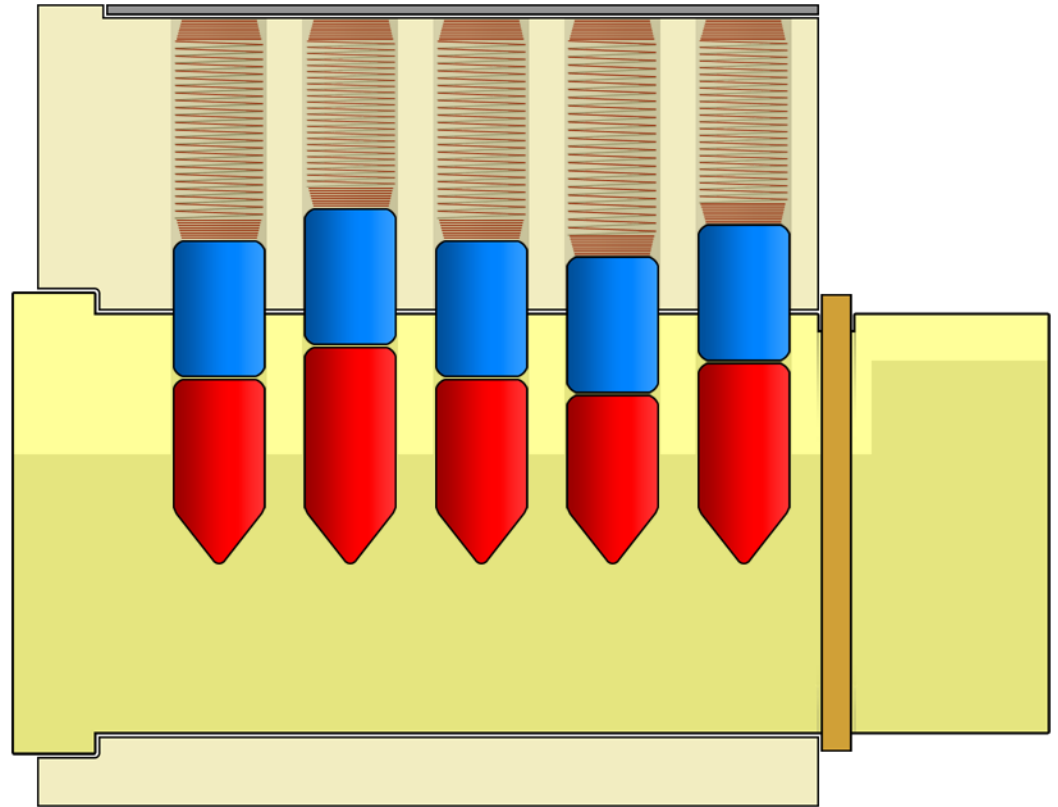
What's On The Inside



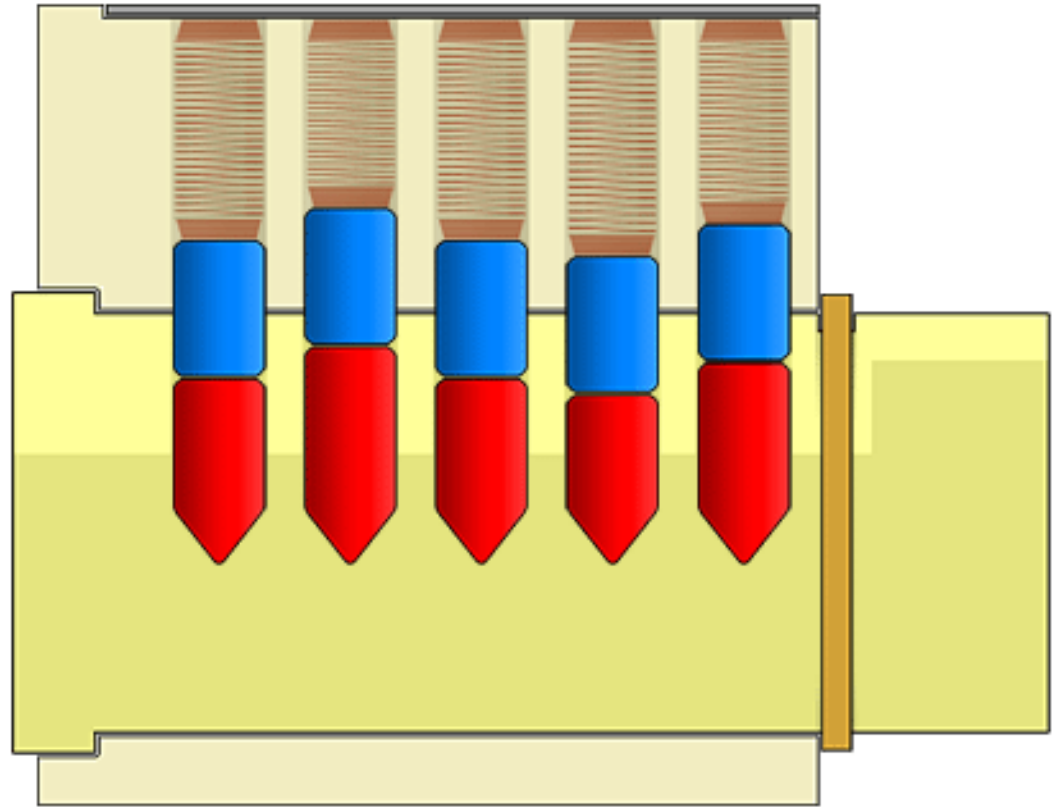
What's On The Inside



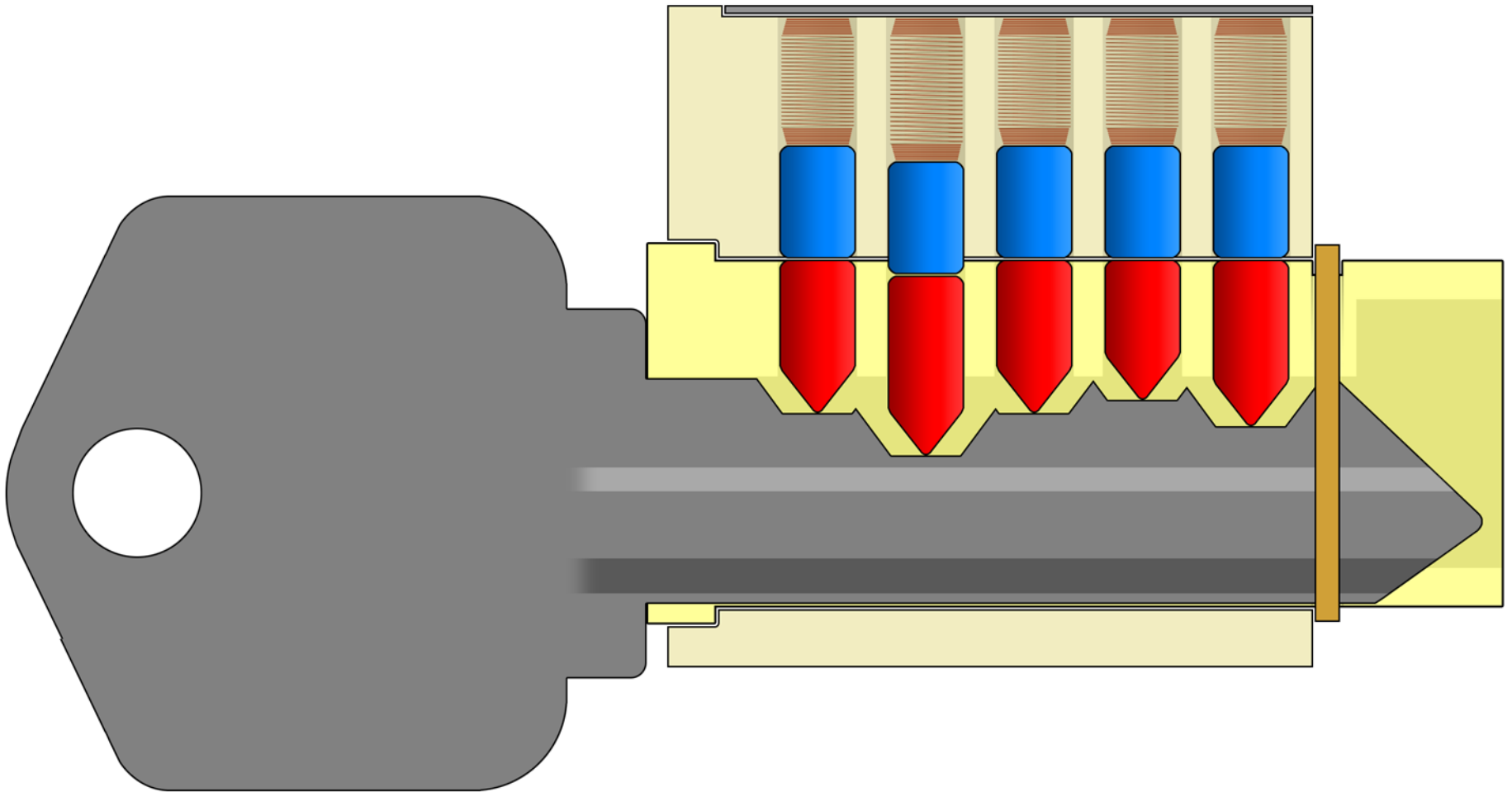
It's Not Just a Single Pin Stack



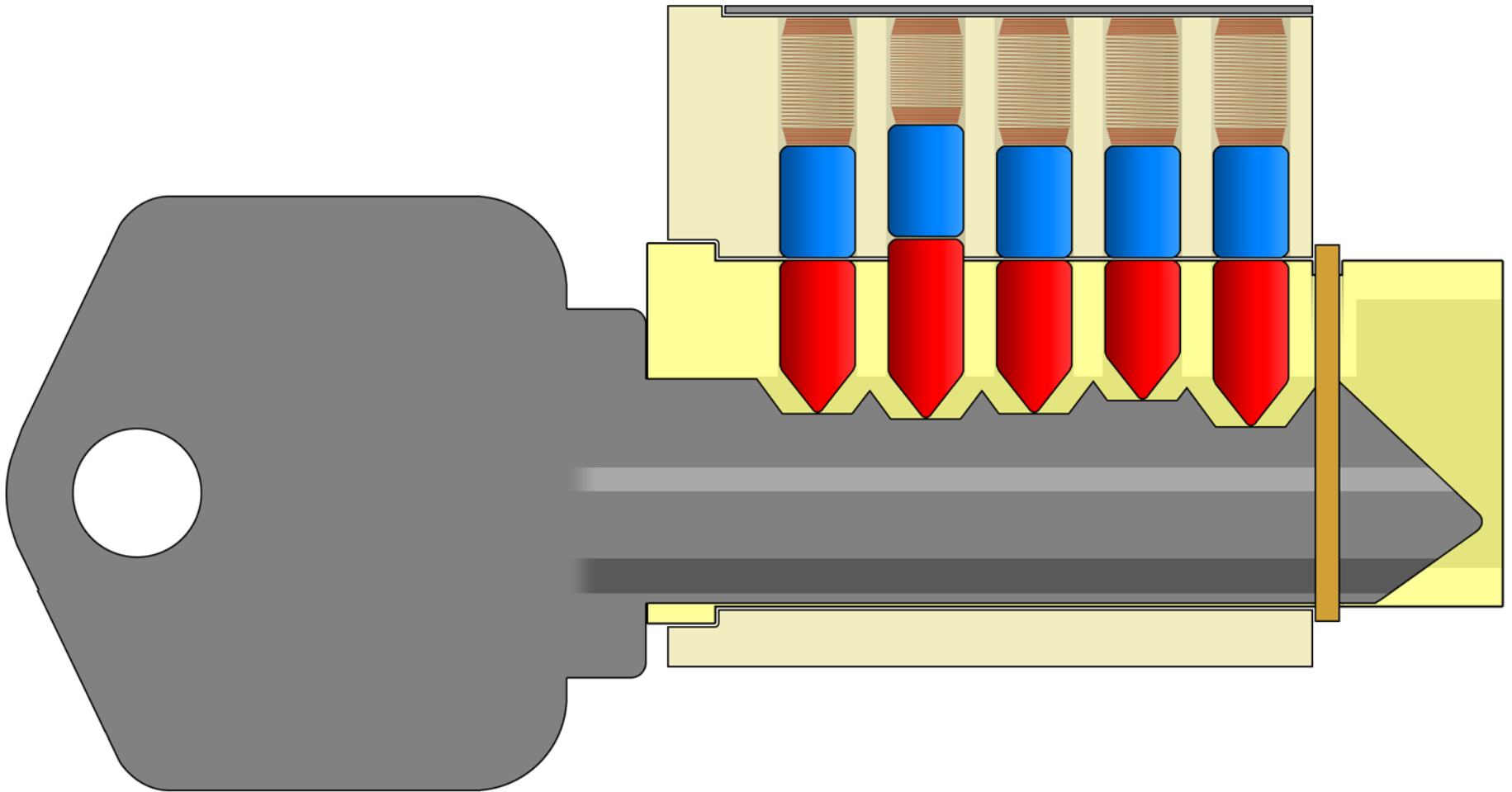
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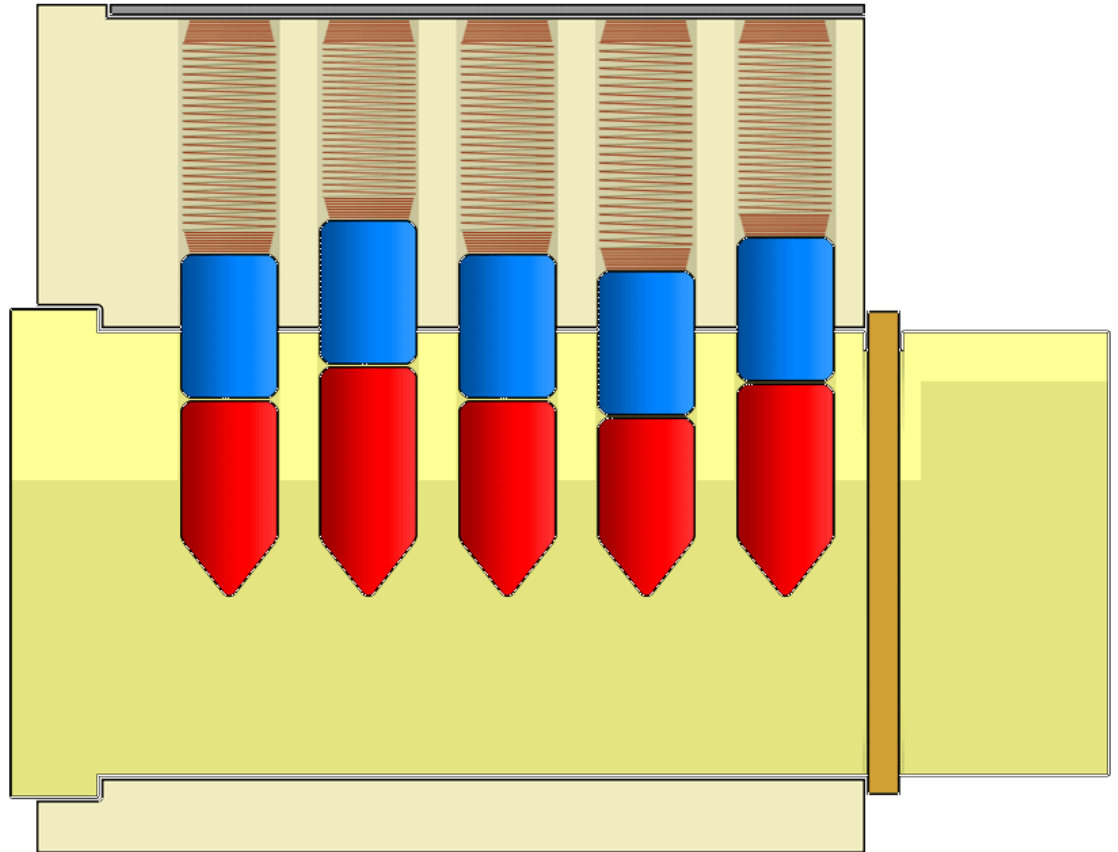
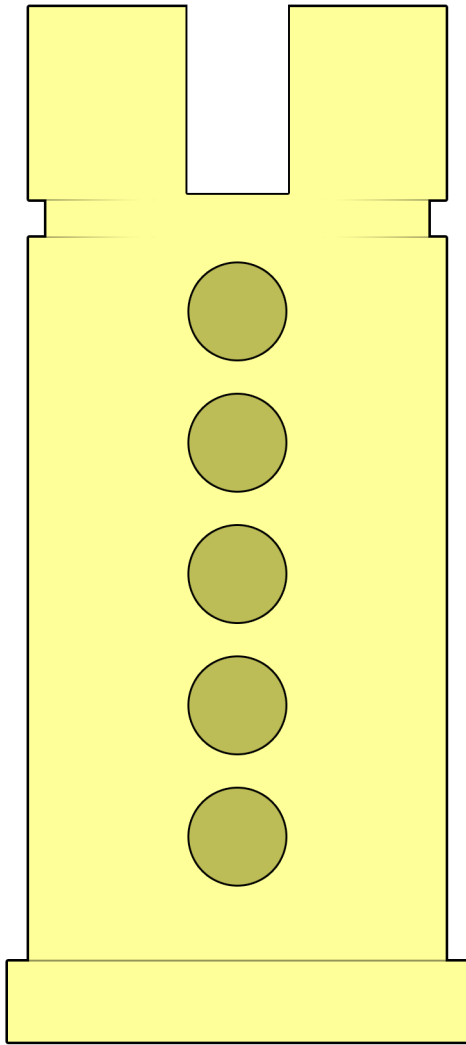
The Key Has To Be Just Right



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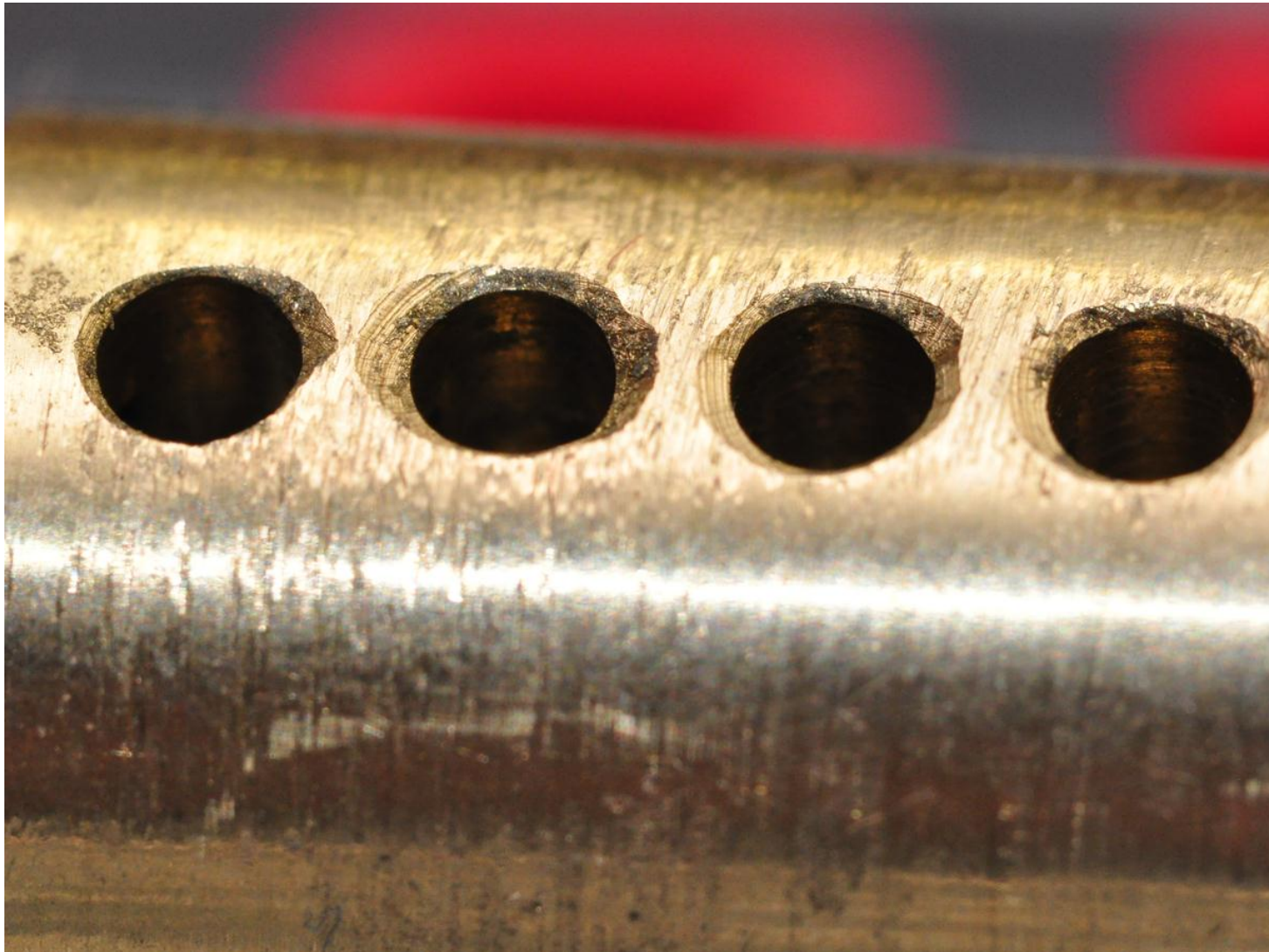


In An Ideal World ...



In The Real World ...

photo by Scorche

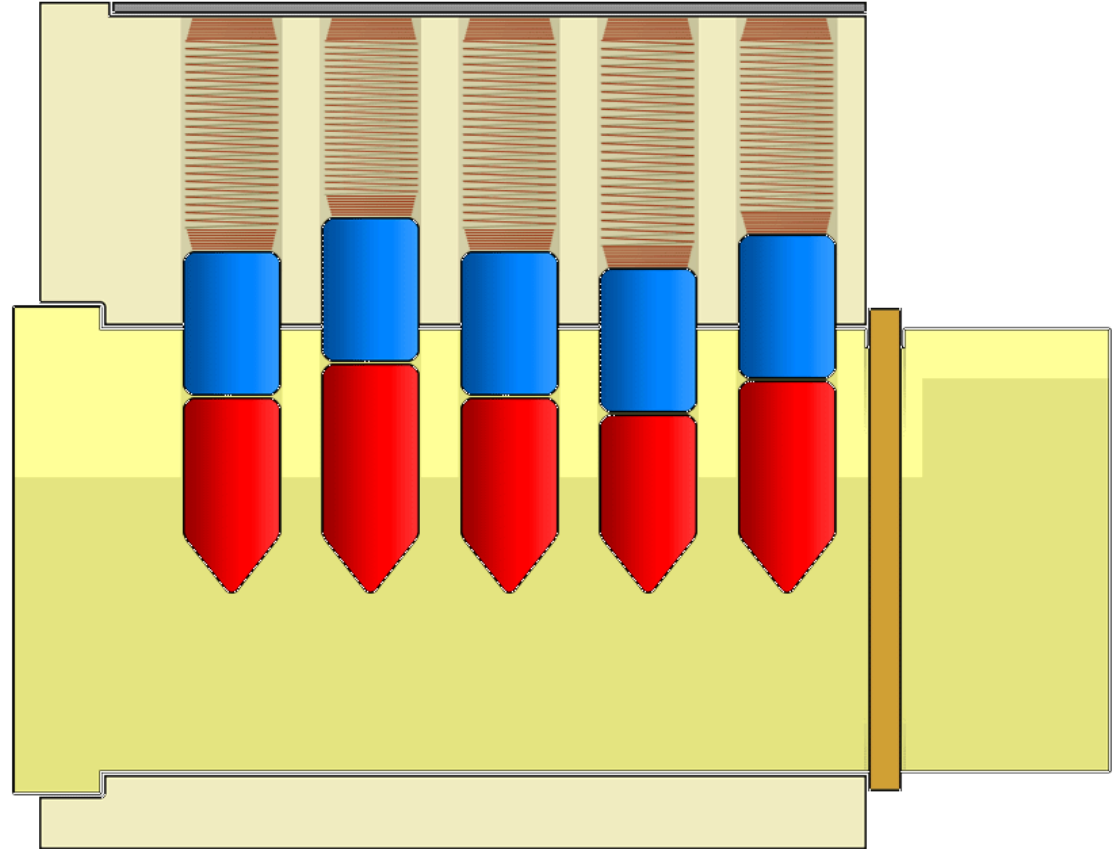
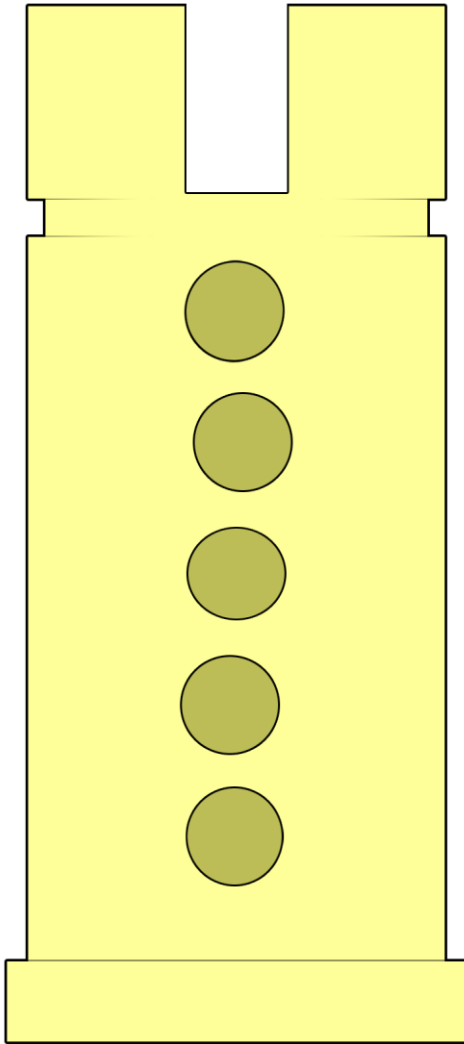


In The Real World ...

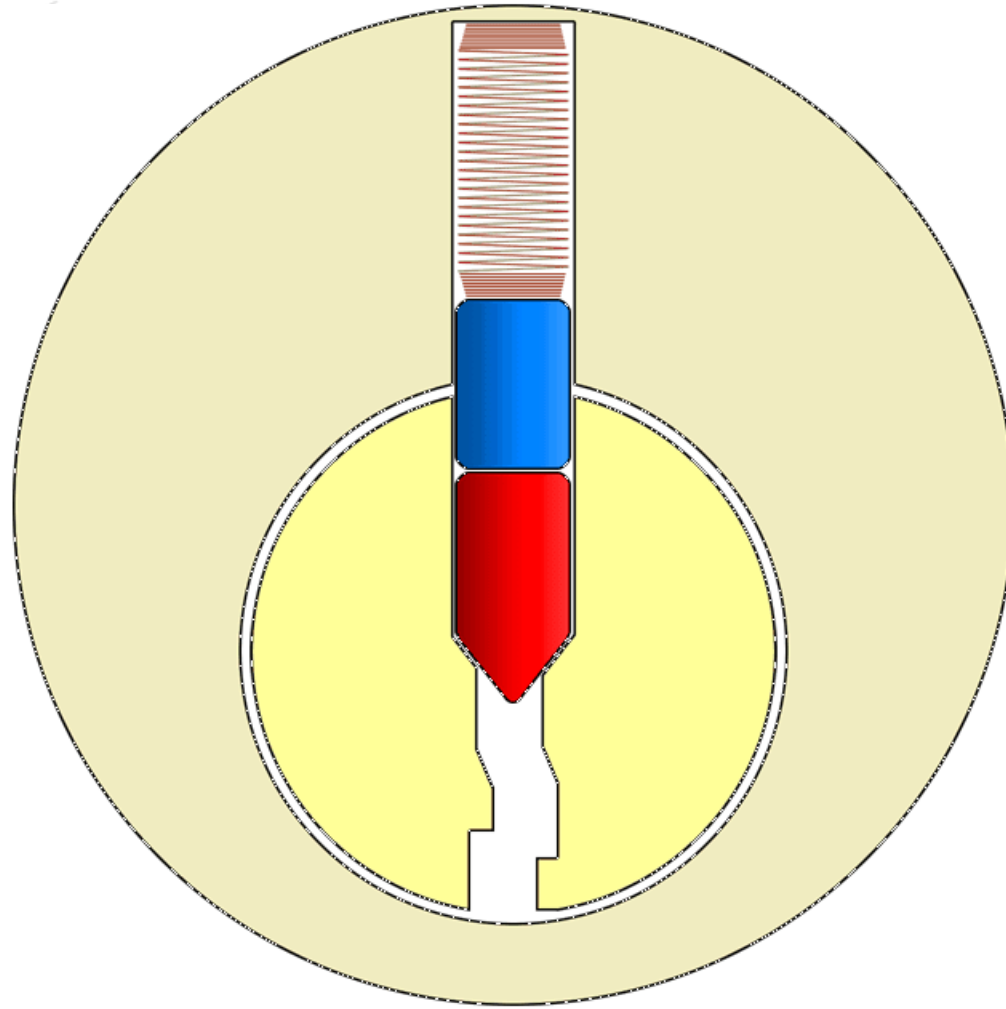
photo by Scorche



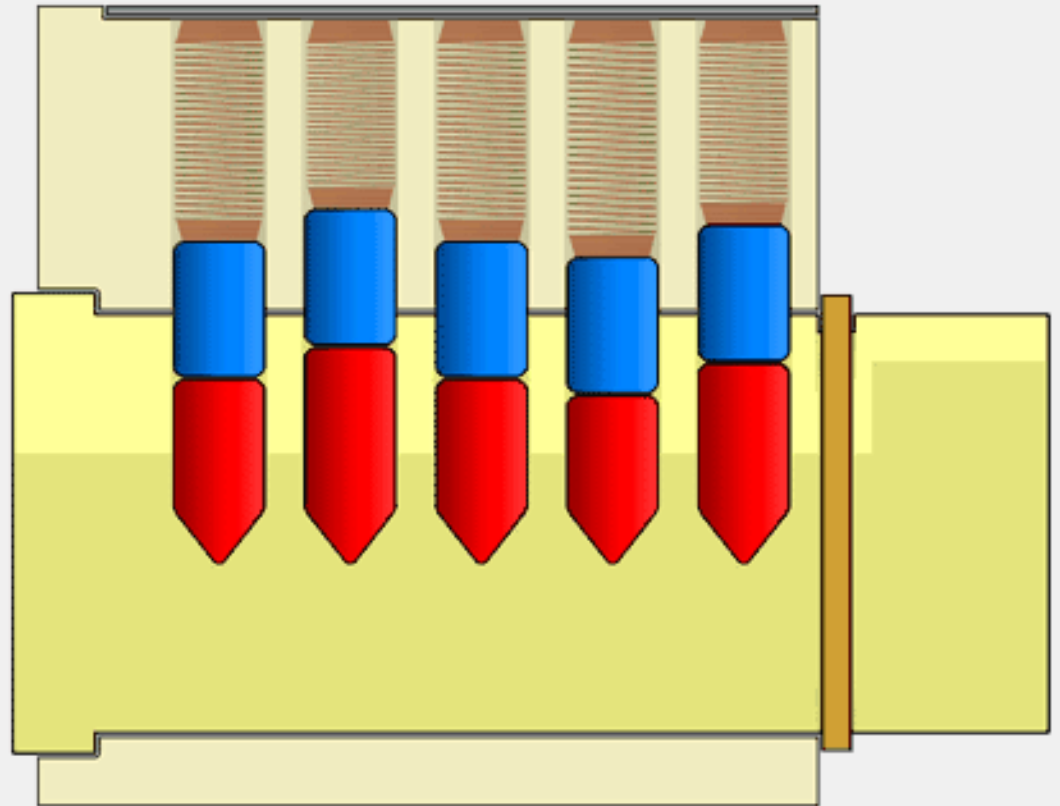
In The Real World ...



Setting a Pin

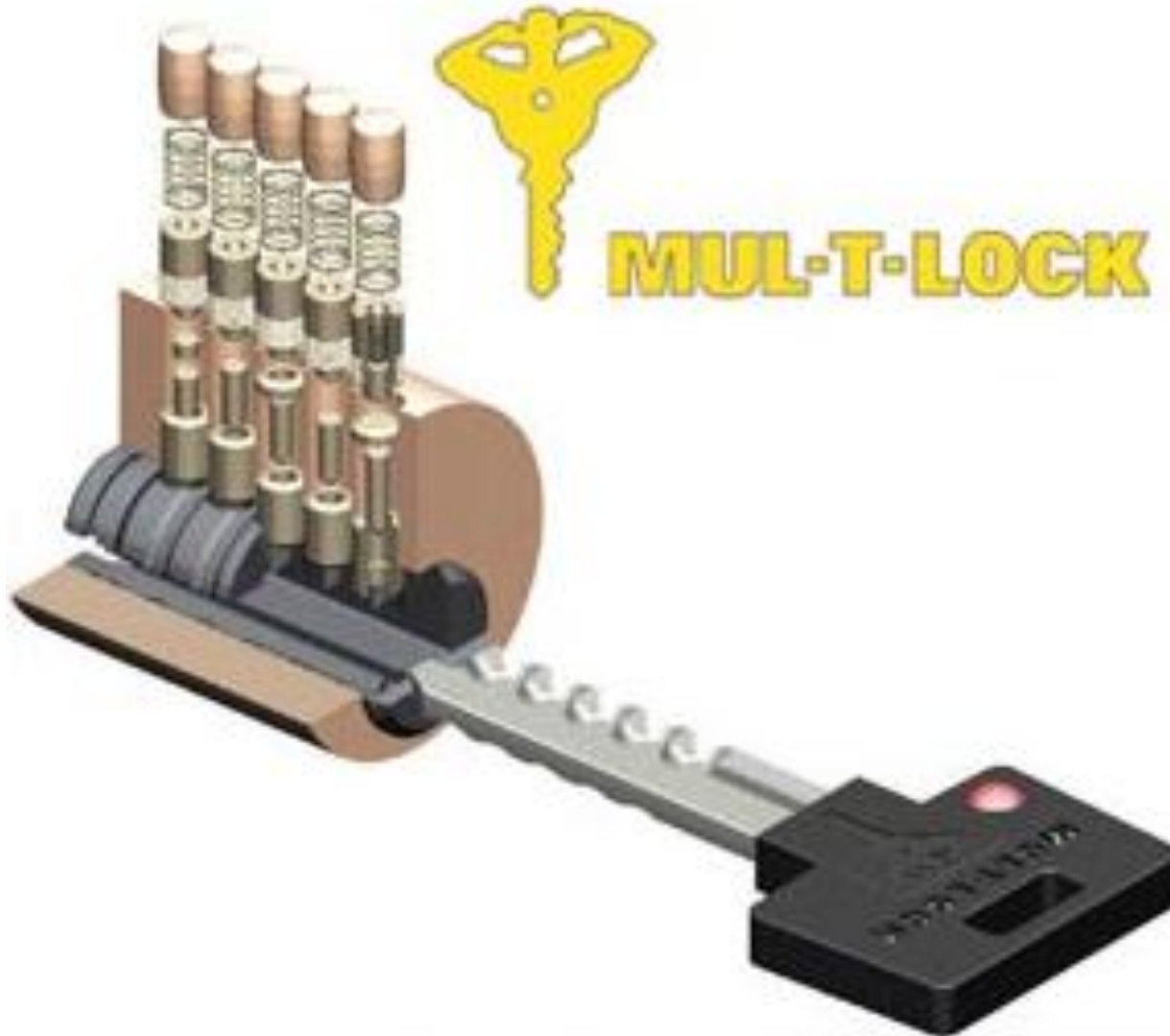


Setting the Pins

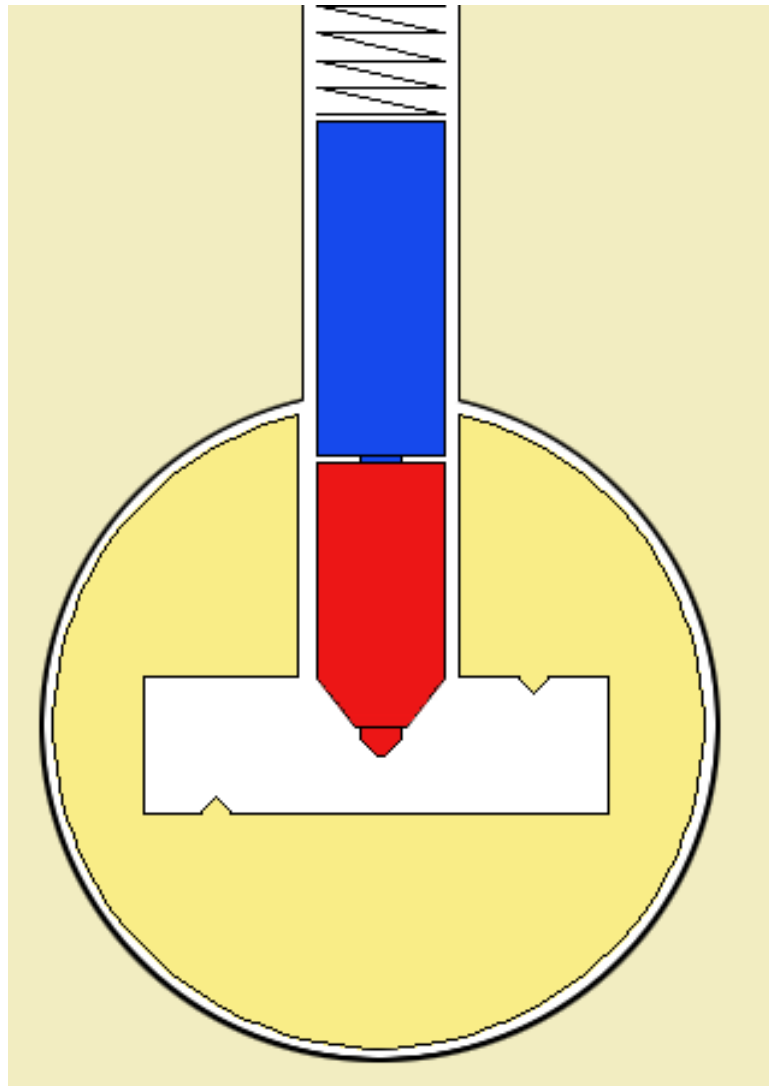


So How Do Some Manufacturers Attempt To Make Locks Better?

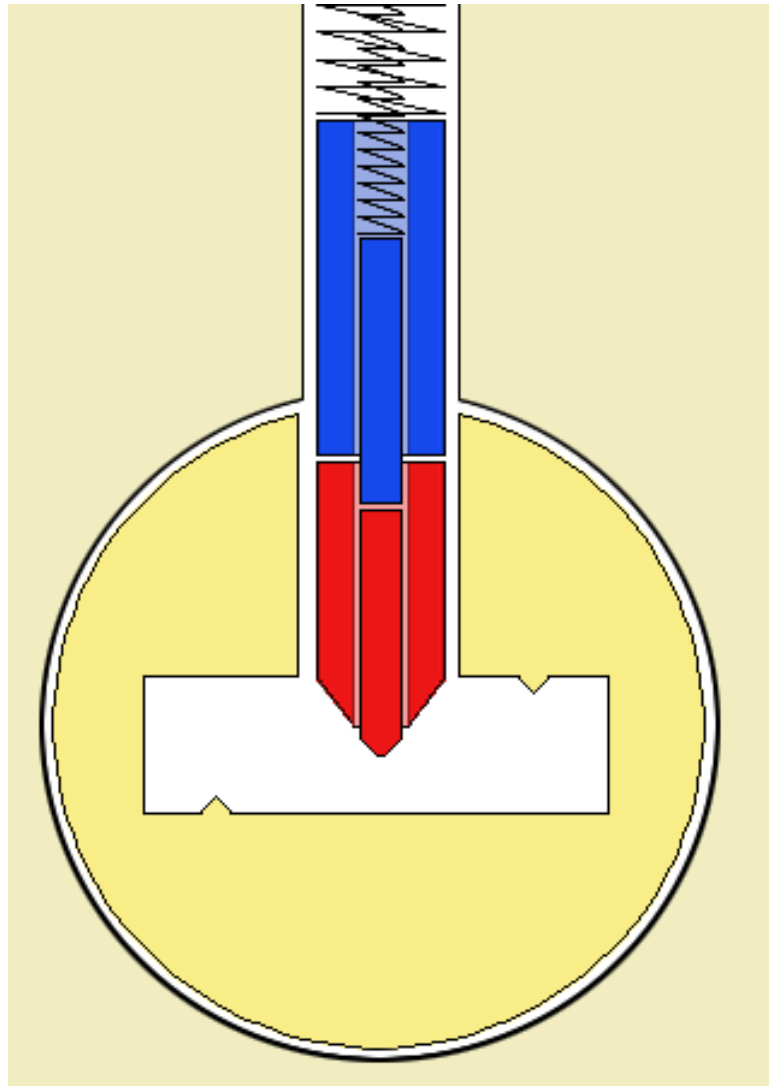
Mul-T-Lock



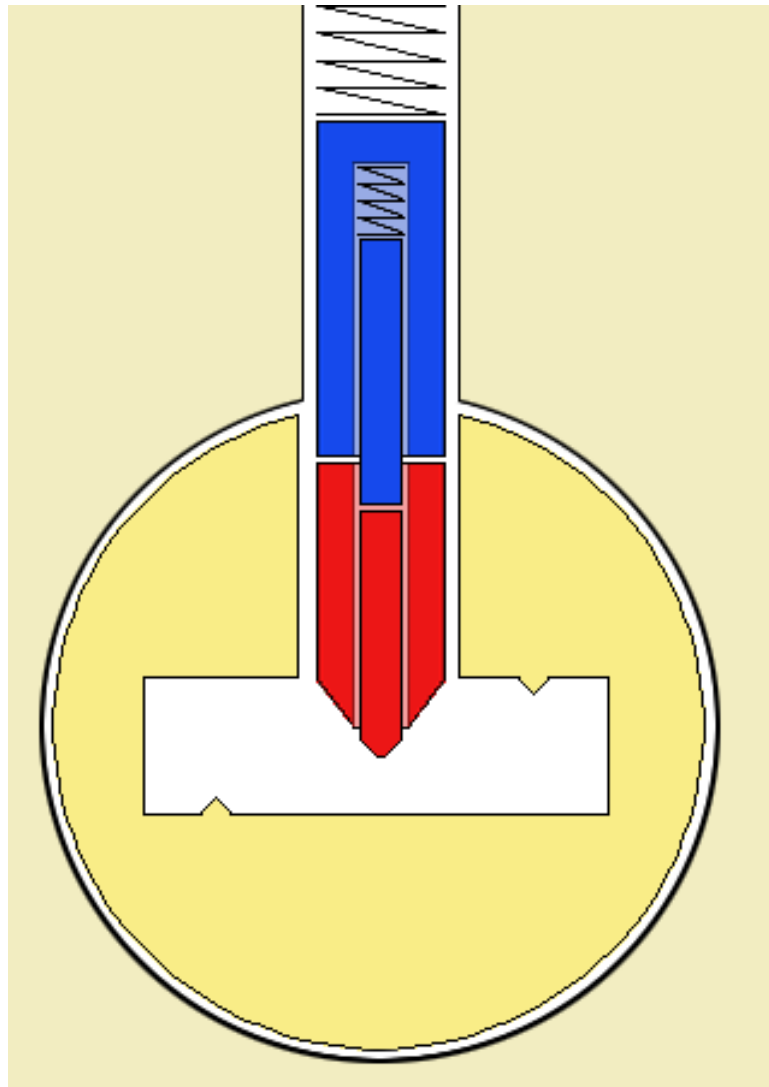
Mul-T-Lock



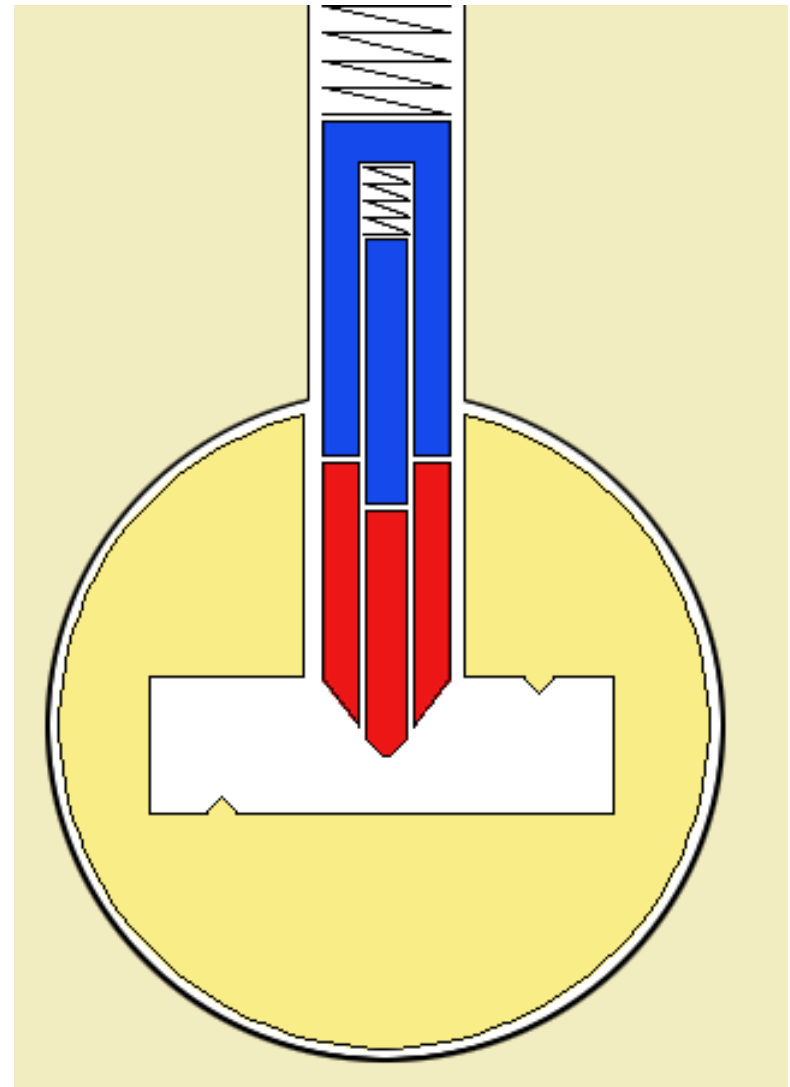
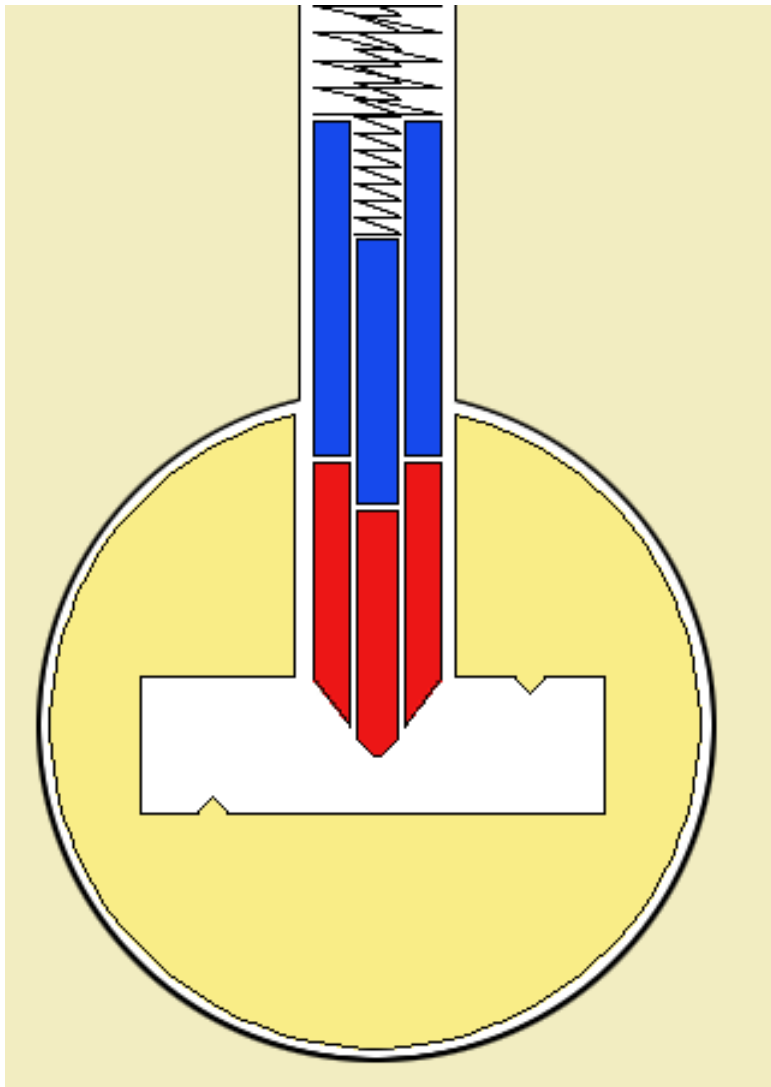
Mul-T-Lock



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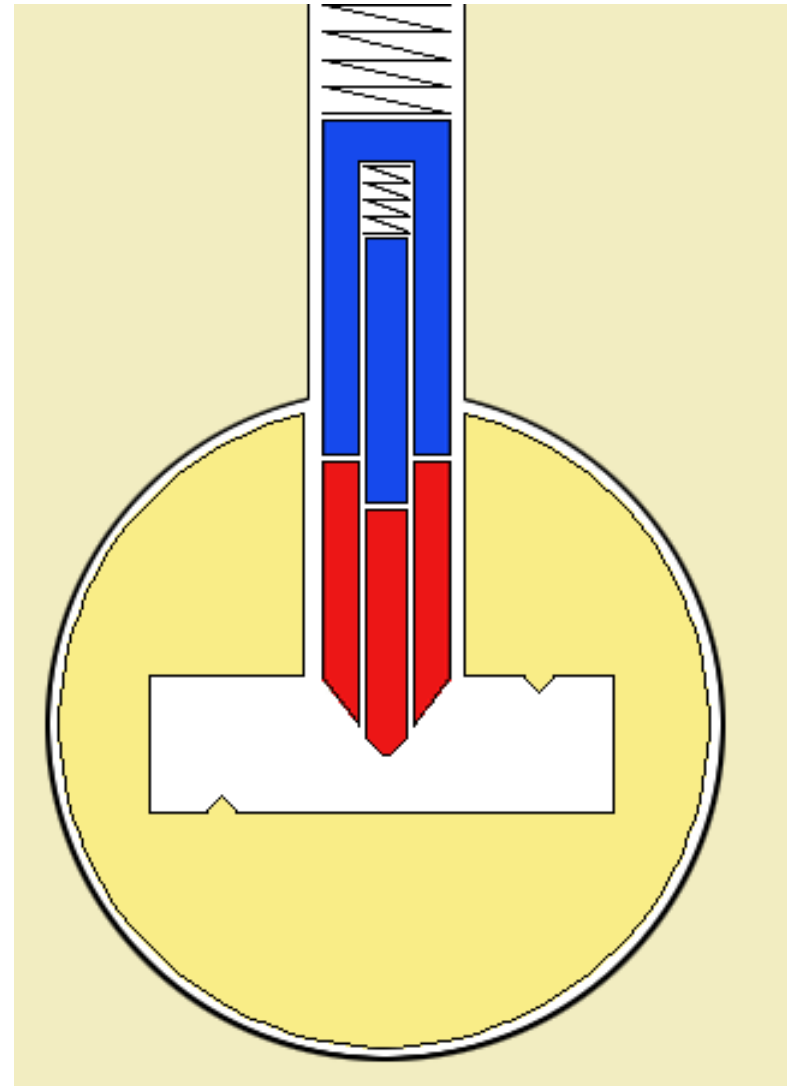


Mul-T-Lock



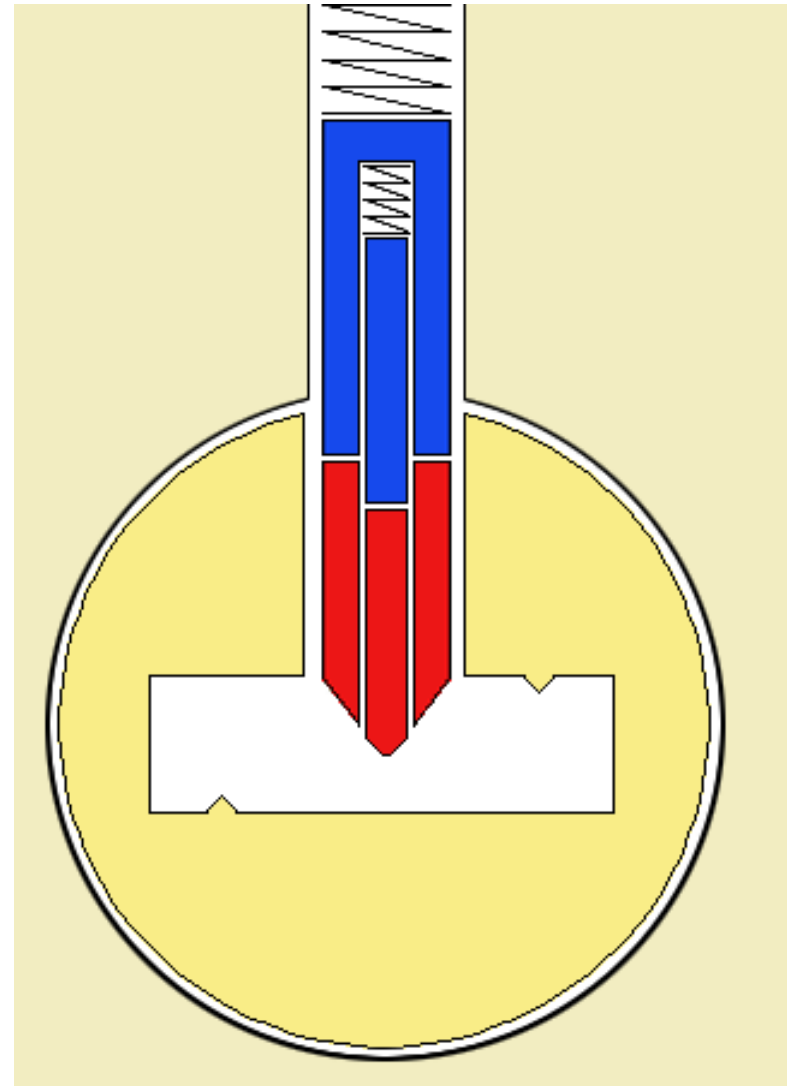
Mul-T-Lock

photo by Matt Blaze

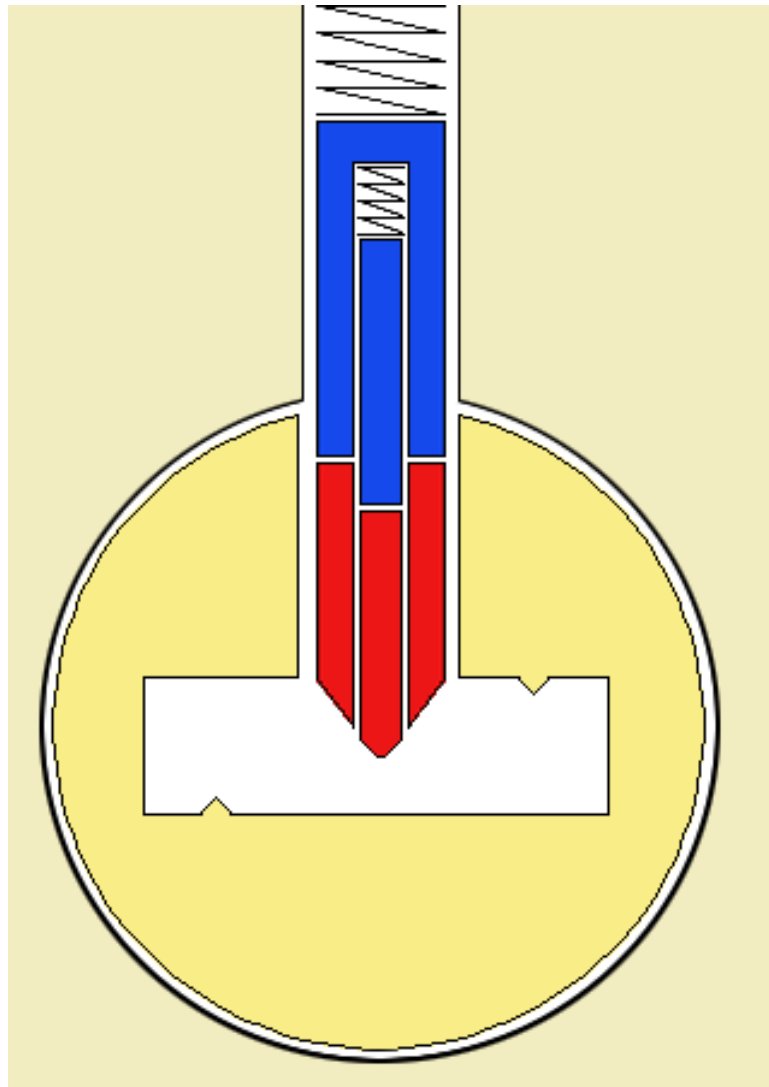


Mul-T-Lock

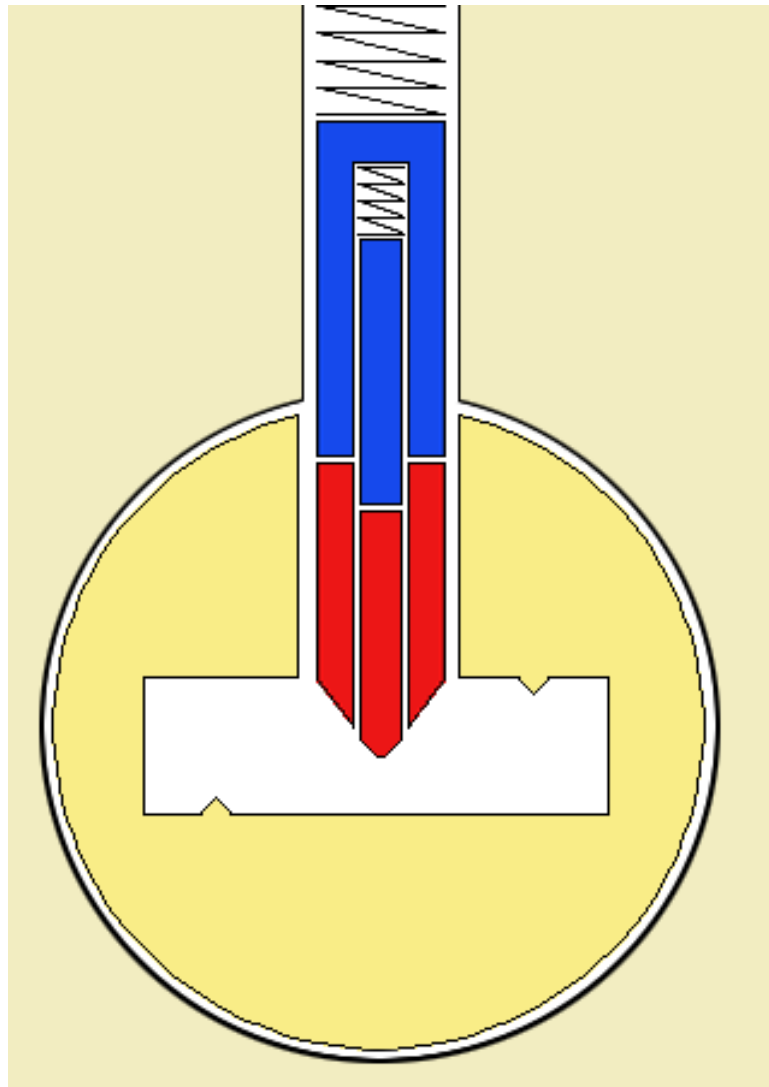
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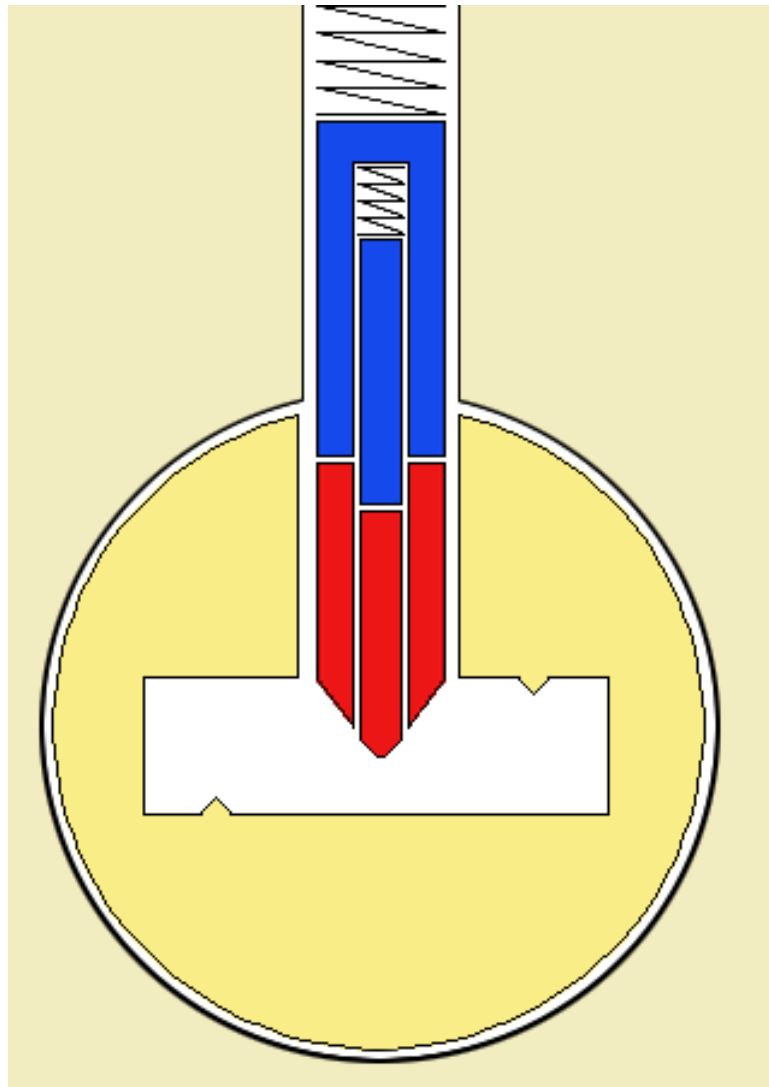
Mul-T-Lock



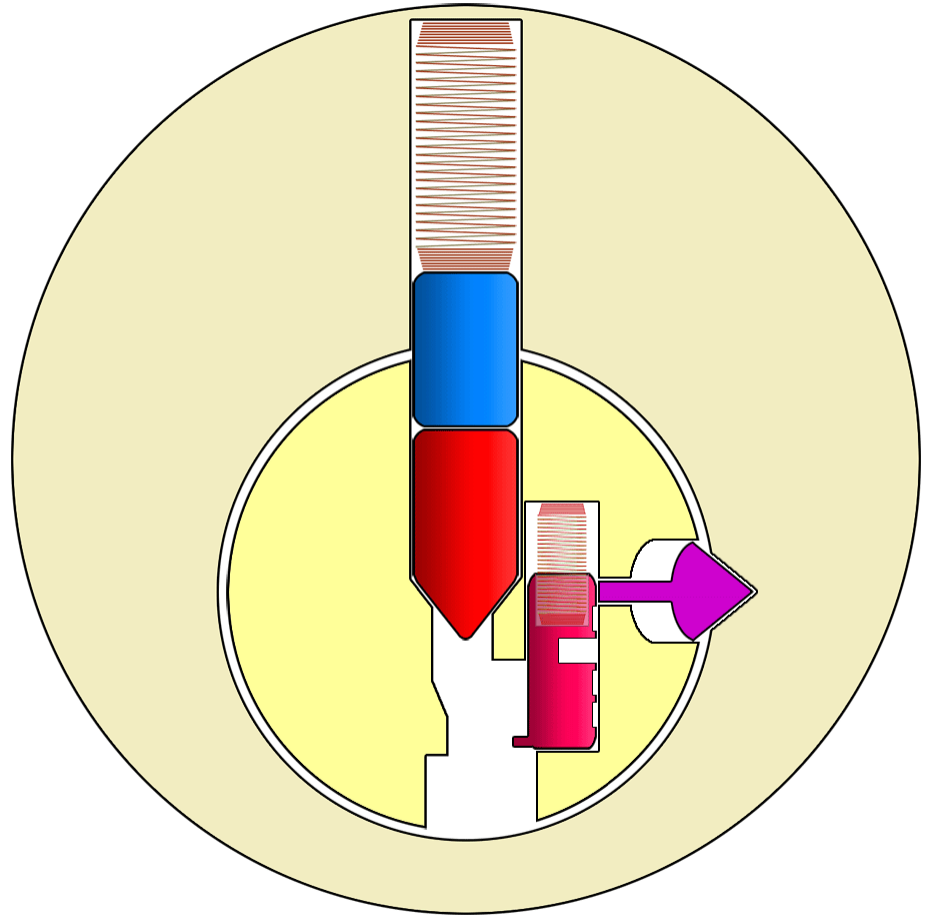
Mul-T-Lock



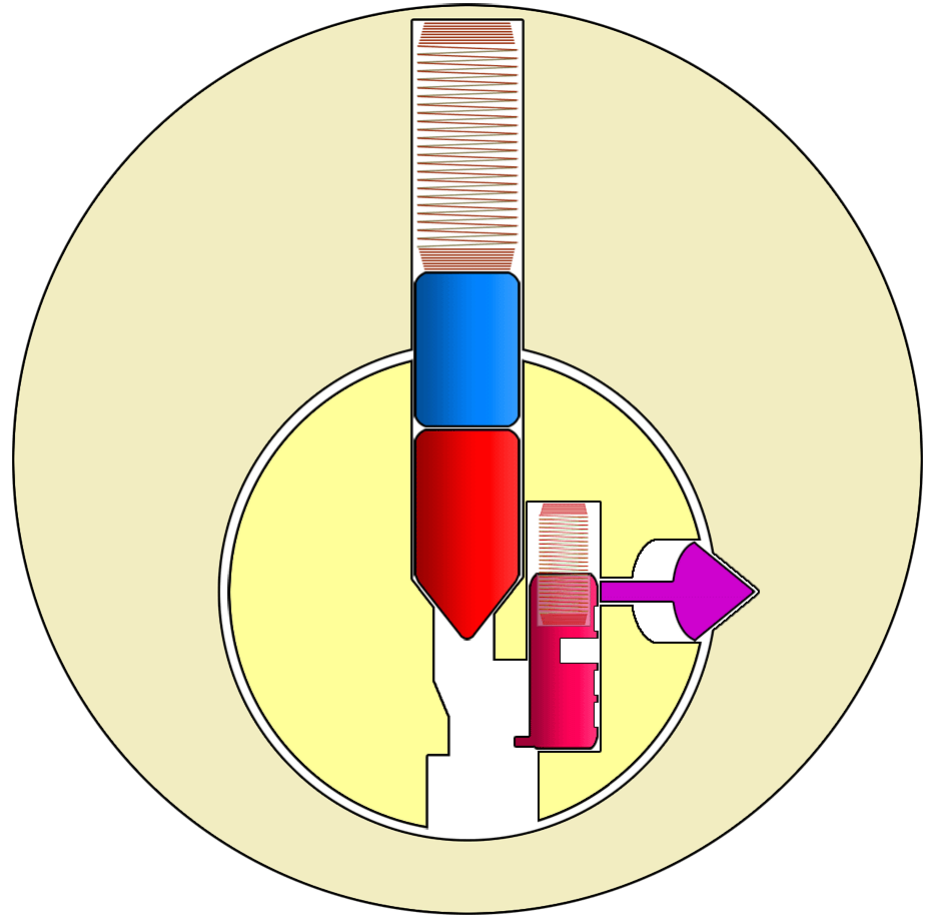
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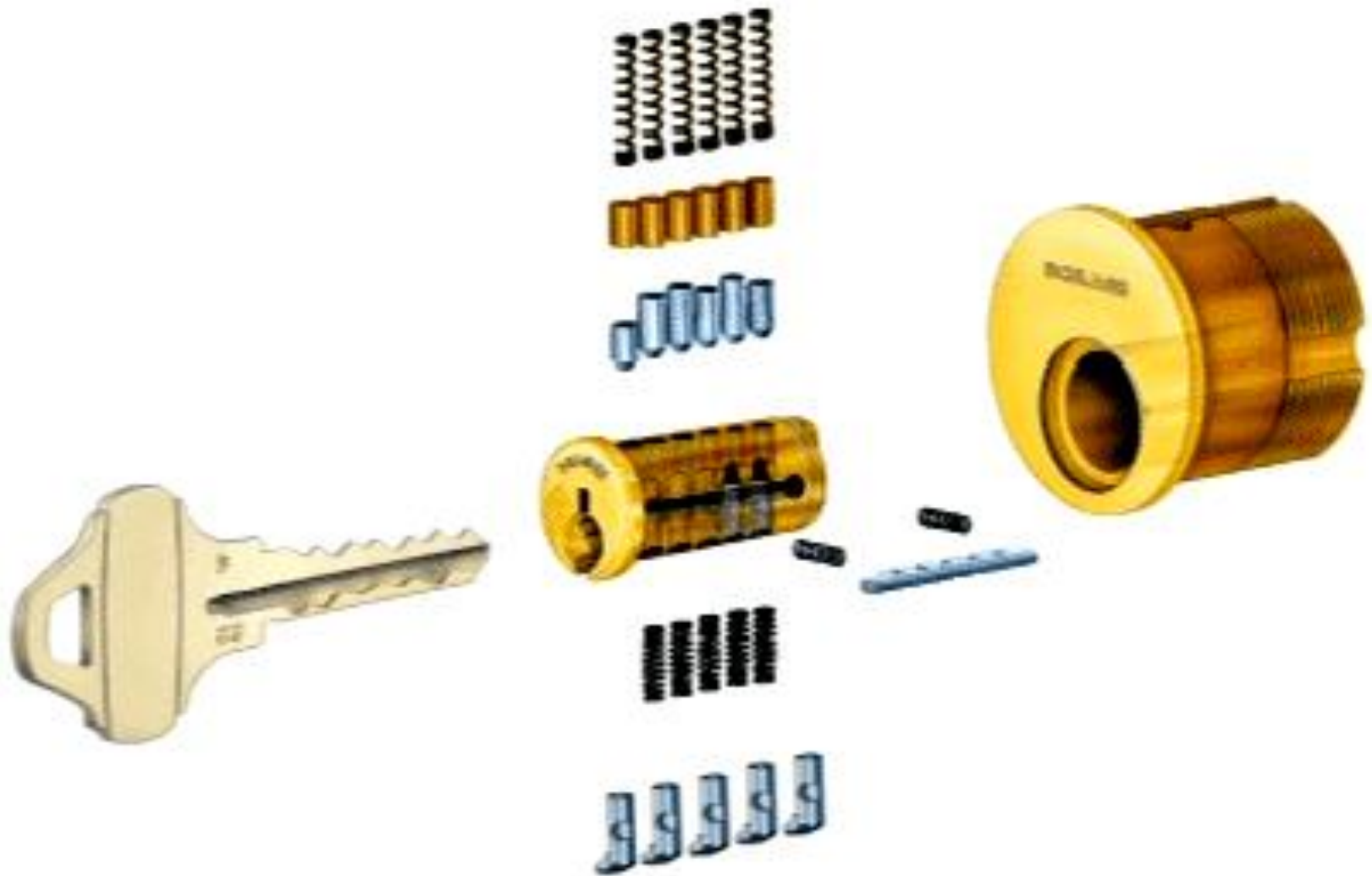
Side Bars



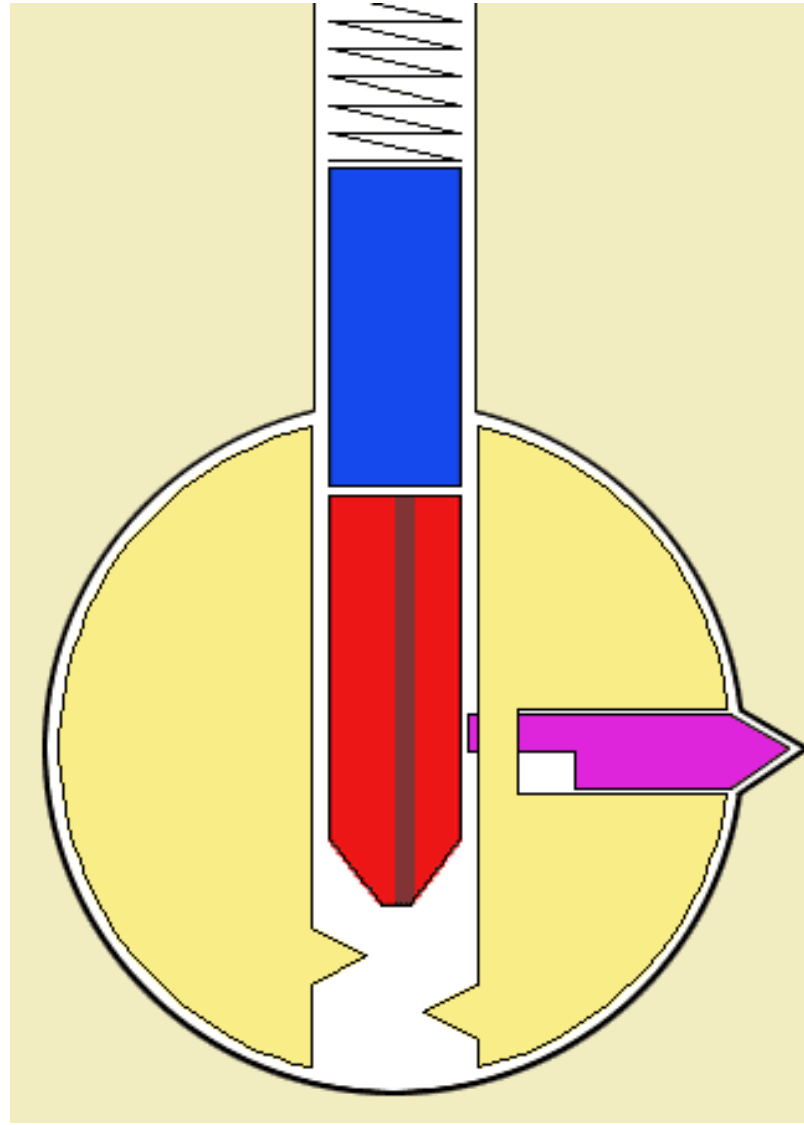
Side Bars



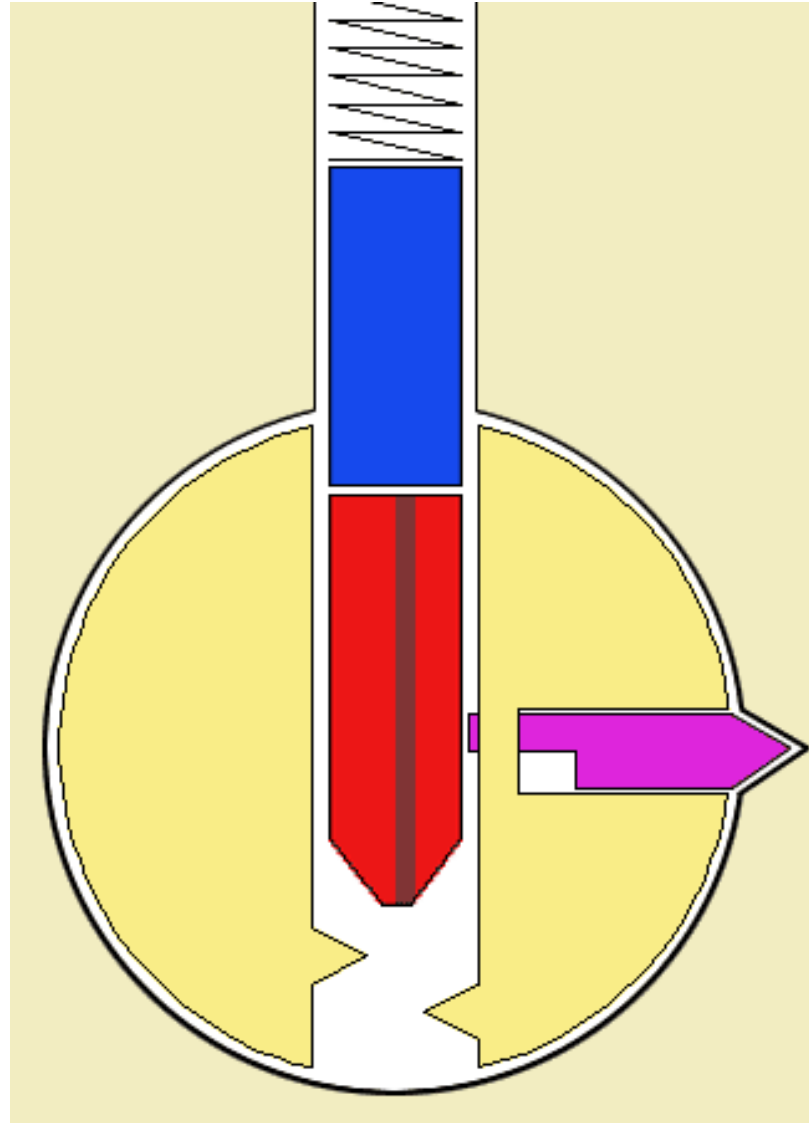
Schlage Primus

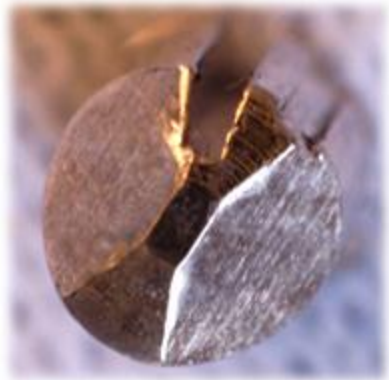


Medeco



Medeco





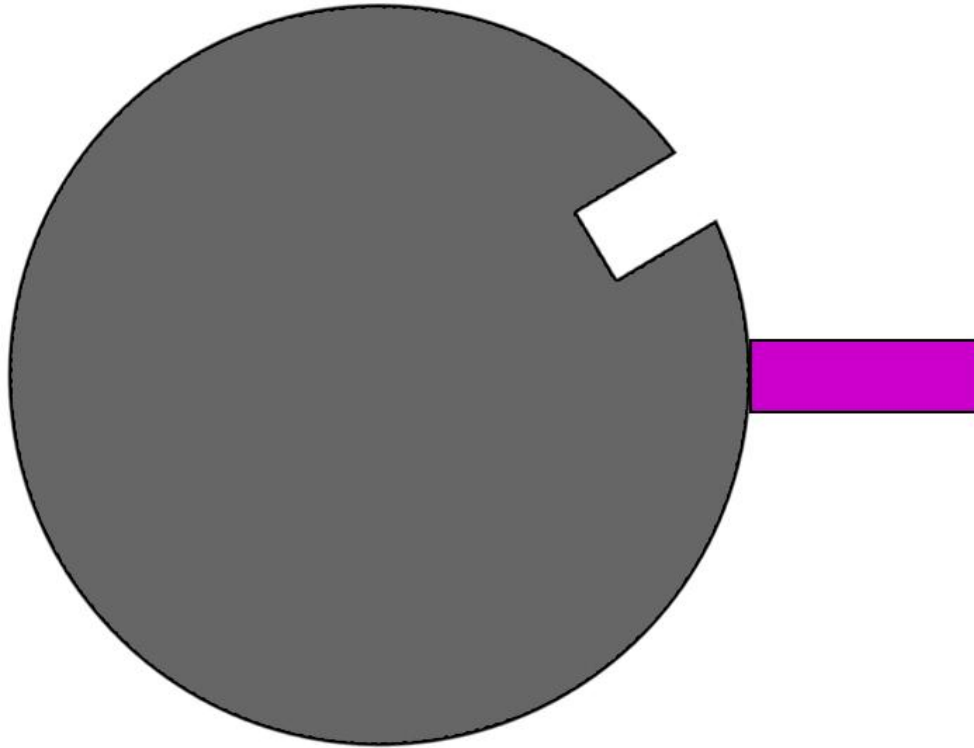
Medeco plug exposed, key pins rotating to align sidebar cuts



Top View



Side View

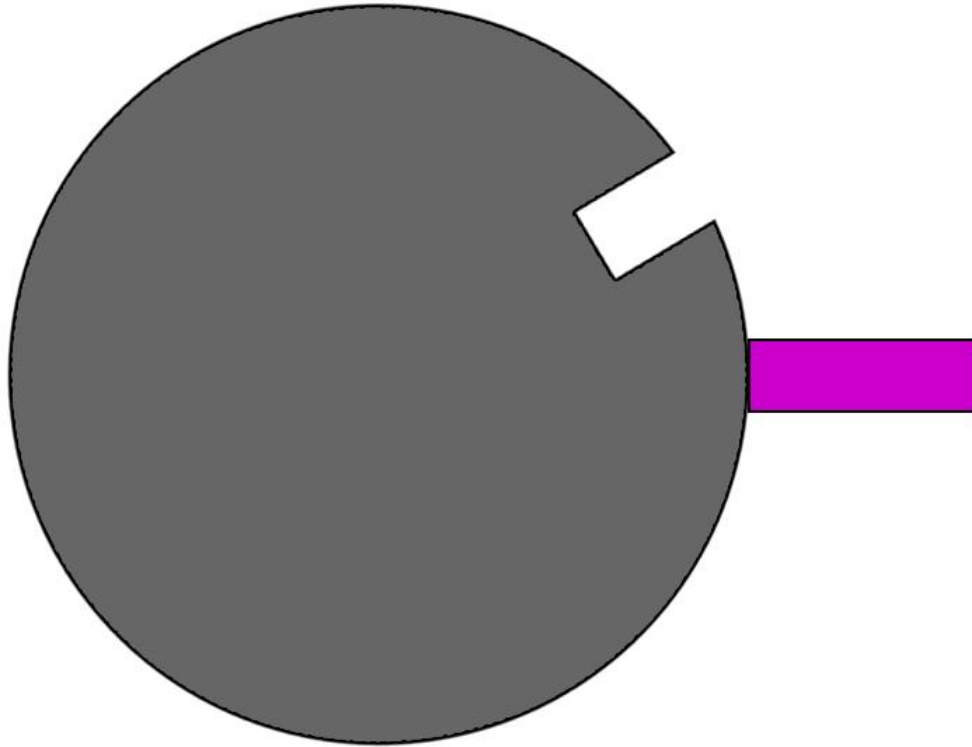


OPEN IN THIRTY SECONDS:

Cracking One of the Most Secure
Locks in America



Marc Weber Tobias
Tobias Bluzmanis

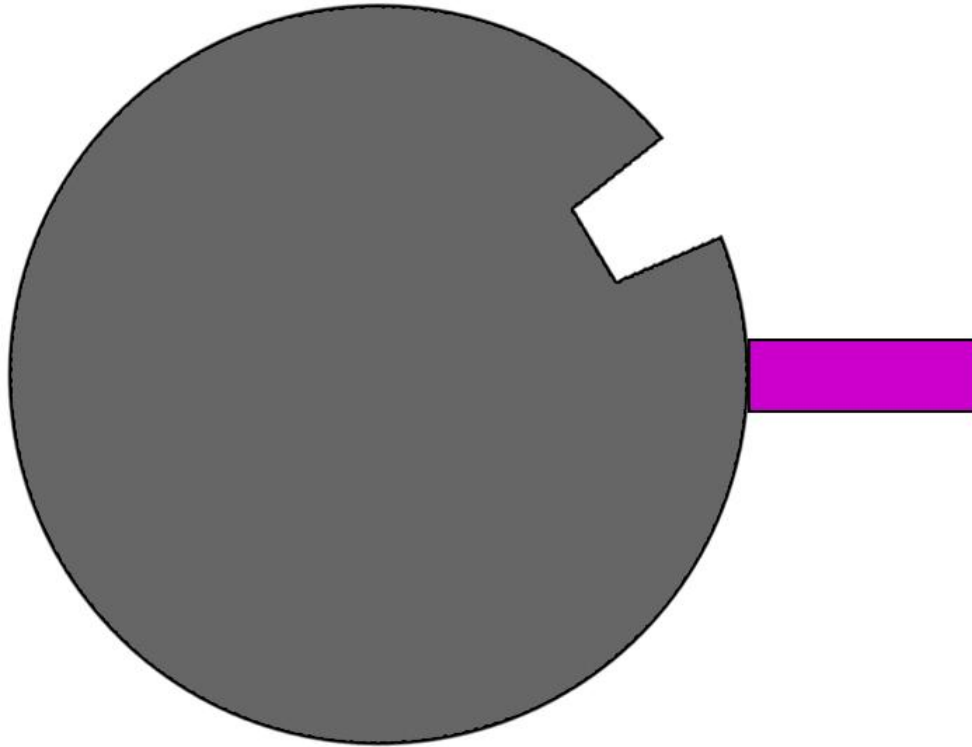


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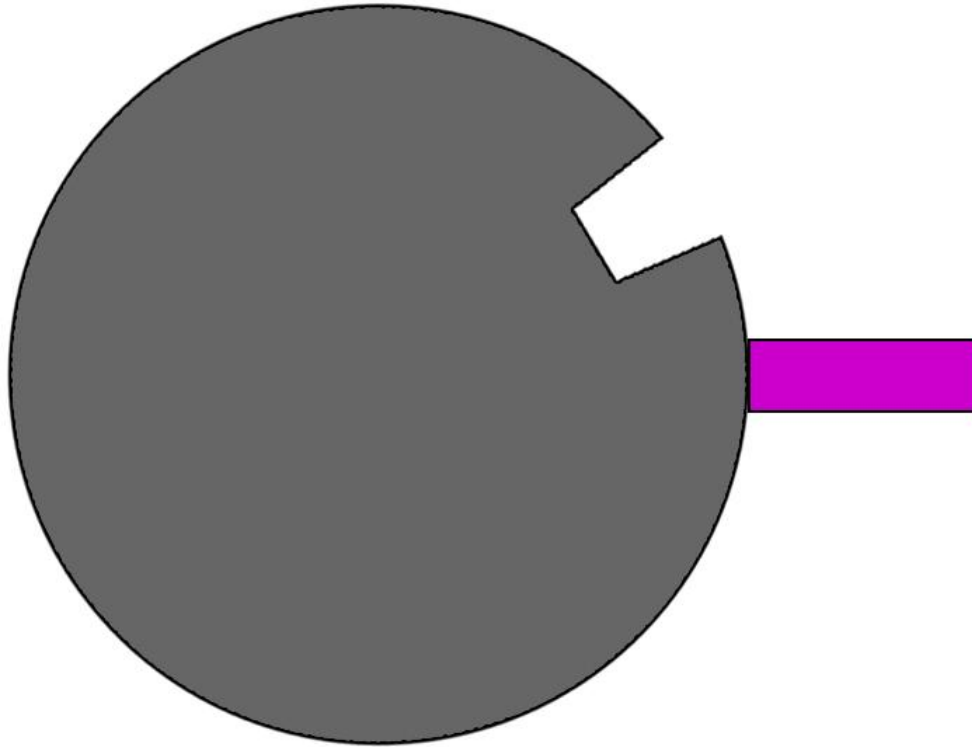


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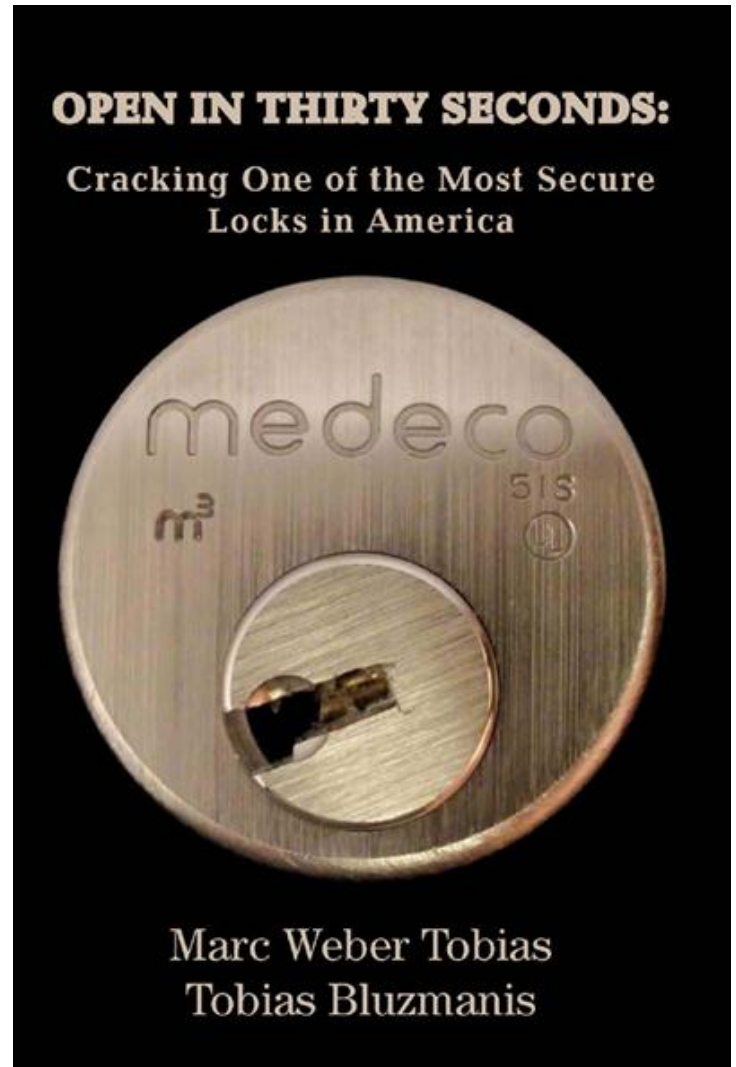
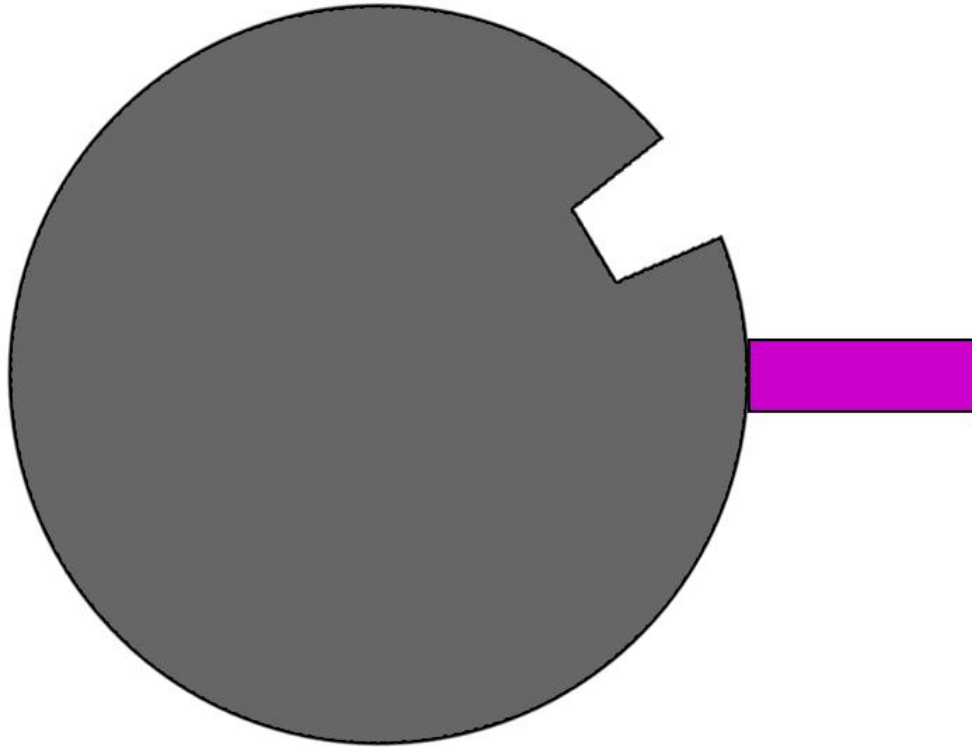


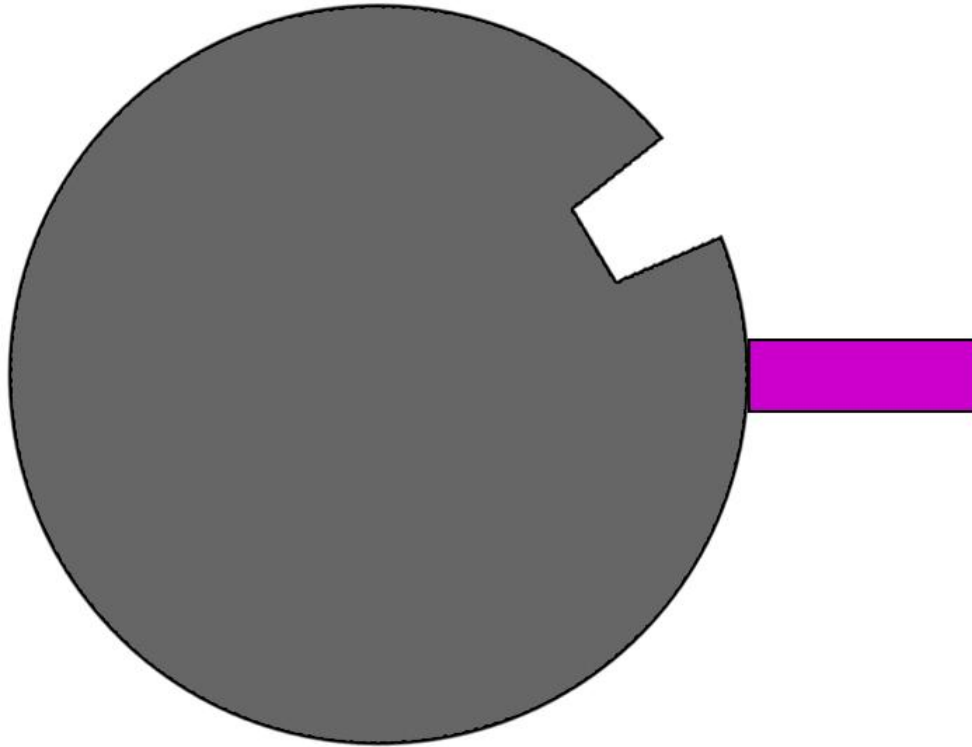
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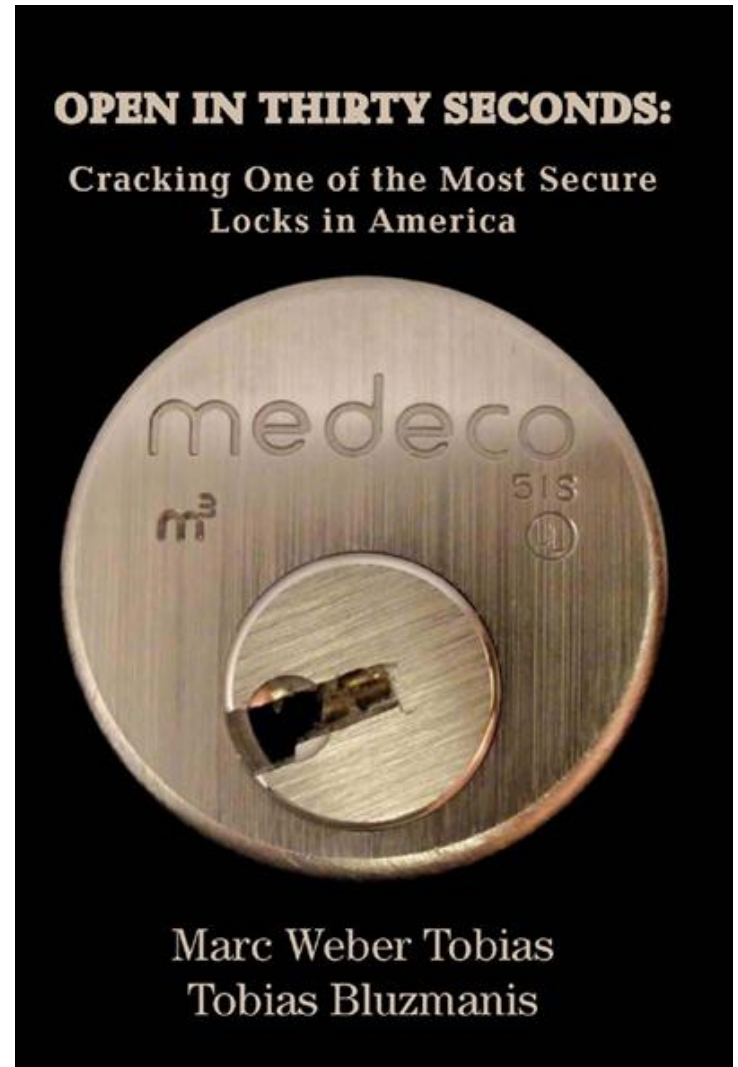
Successful Medeco Attacks



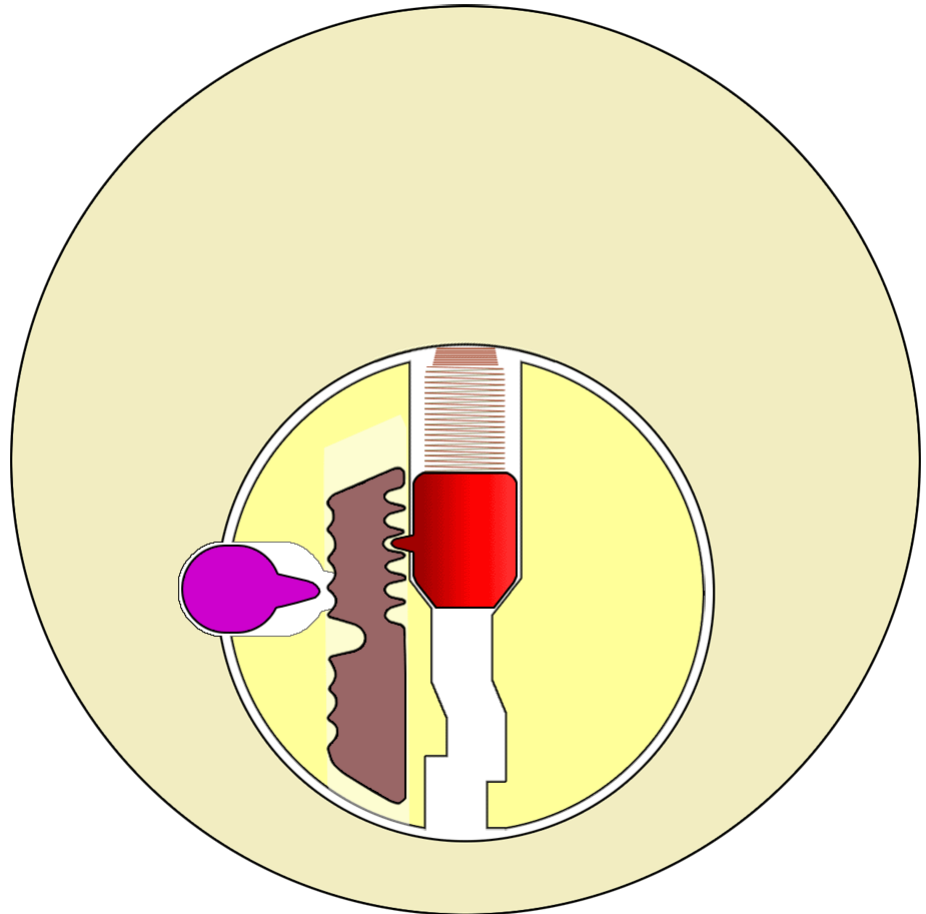
Marc Tobias



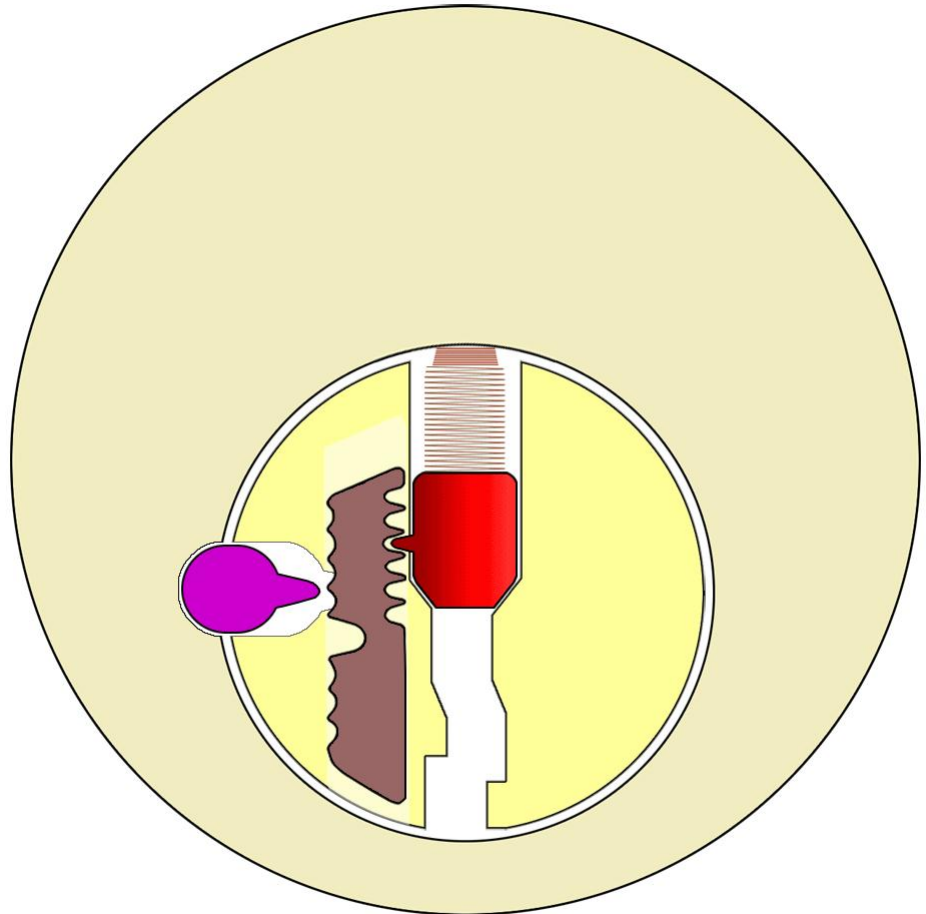
LockCon



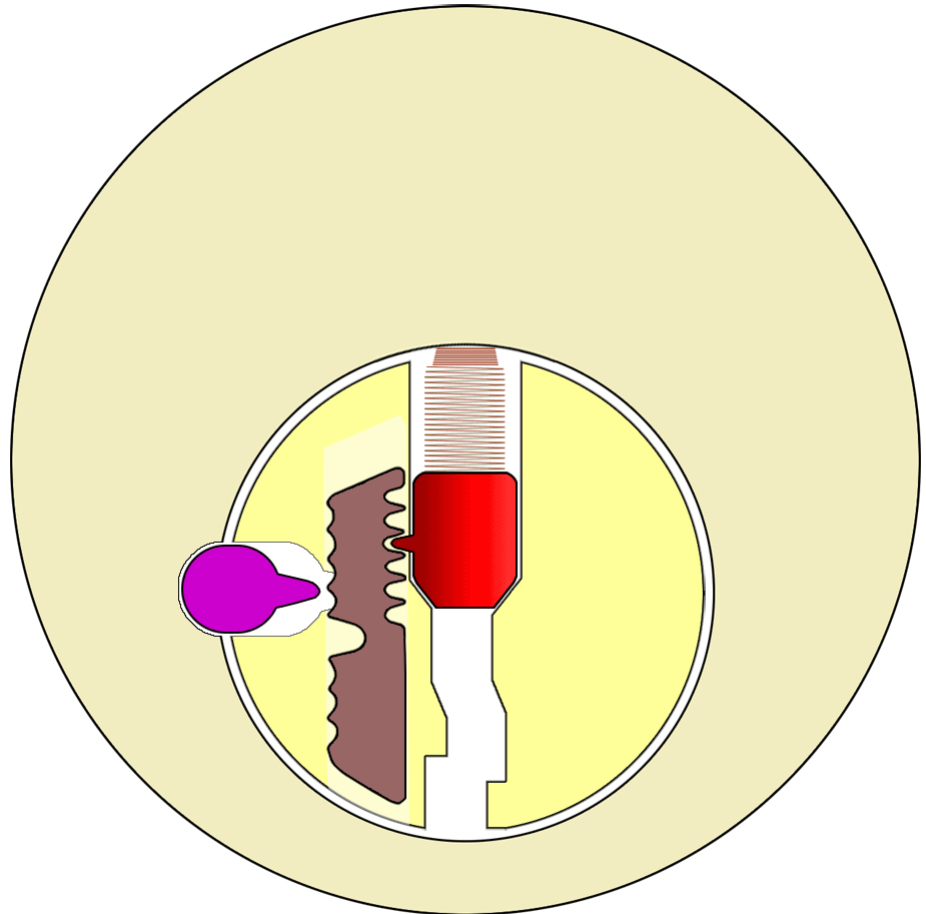
Kwikset Smart Series



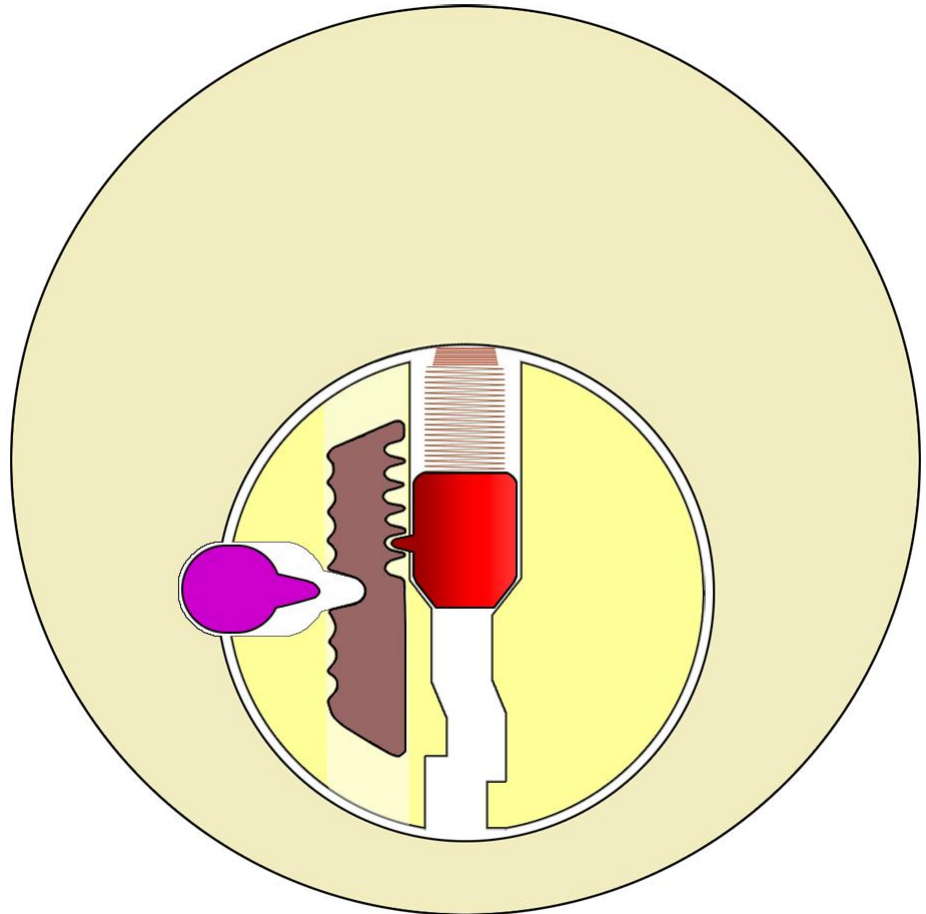
Kwikset Smart Series



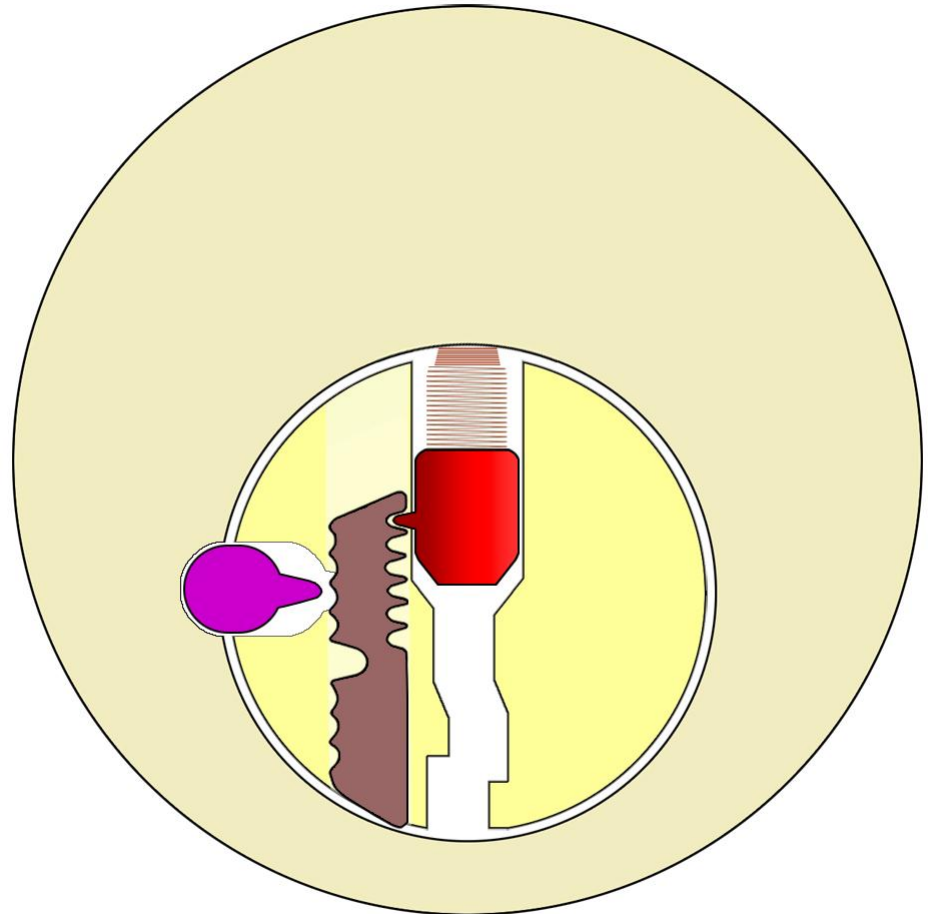
Kwikset Smart Series



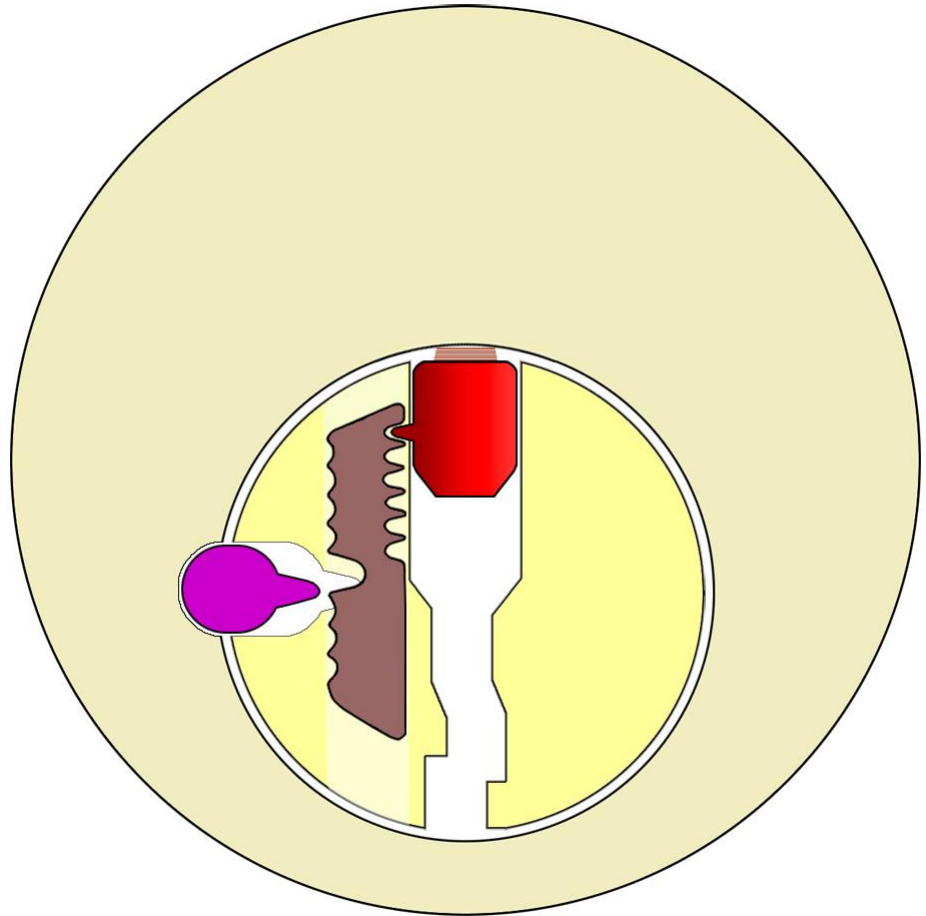
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research and photo by Shane Lawson



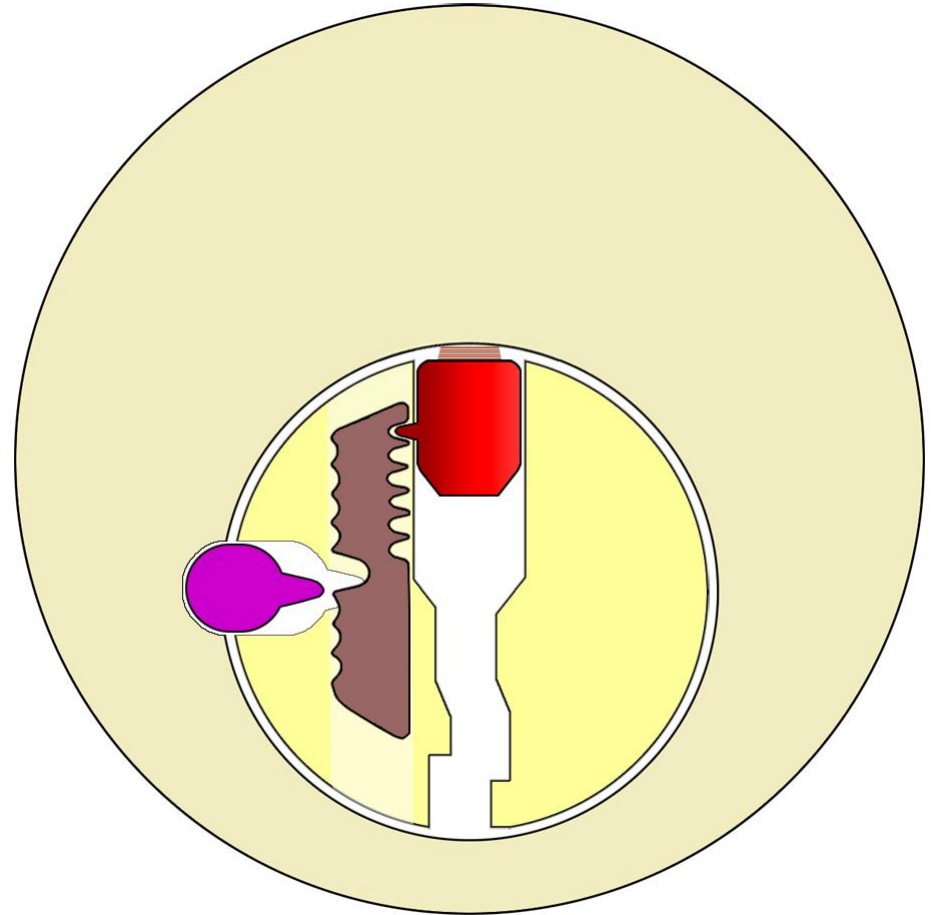
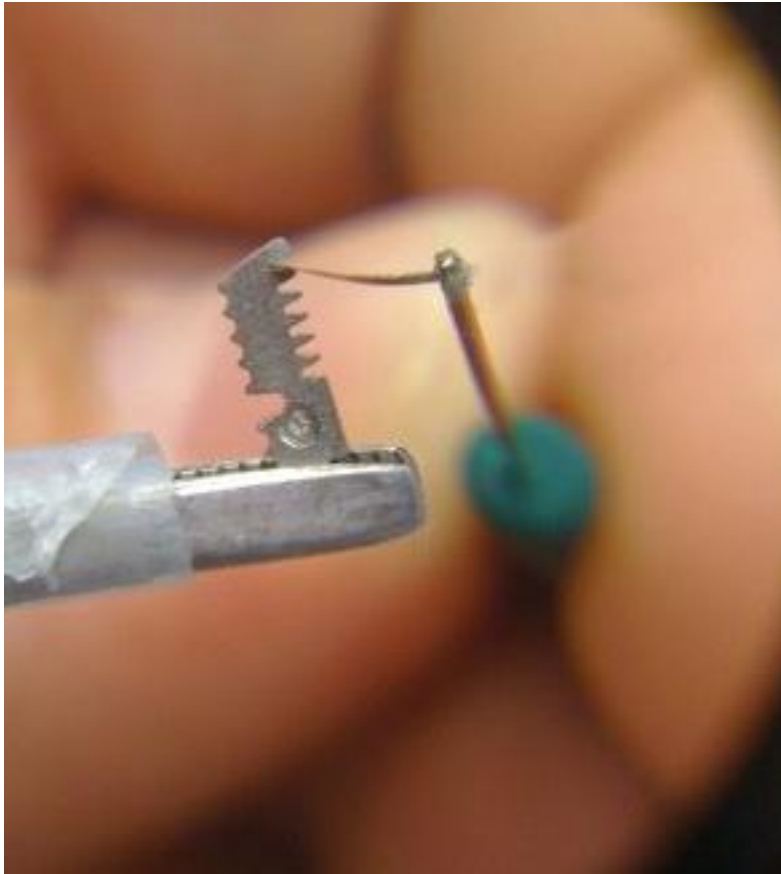
Kwikset Smart Series

research and photo by Shane Lawson



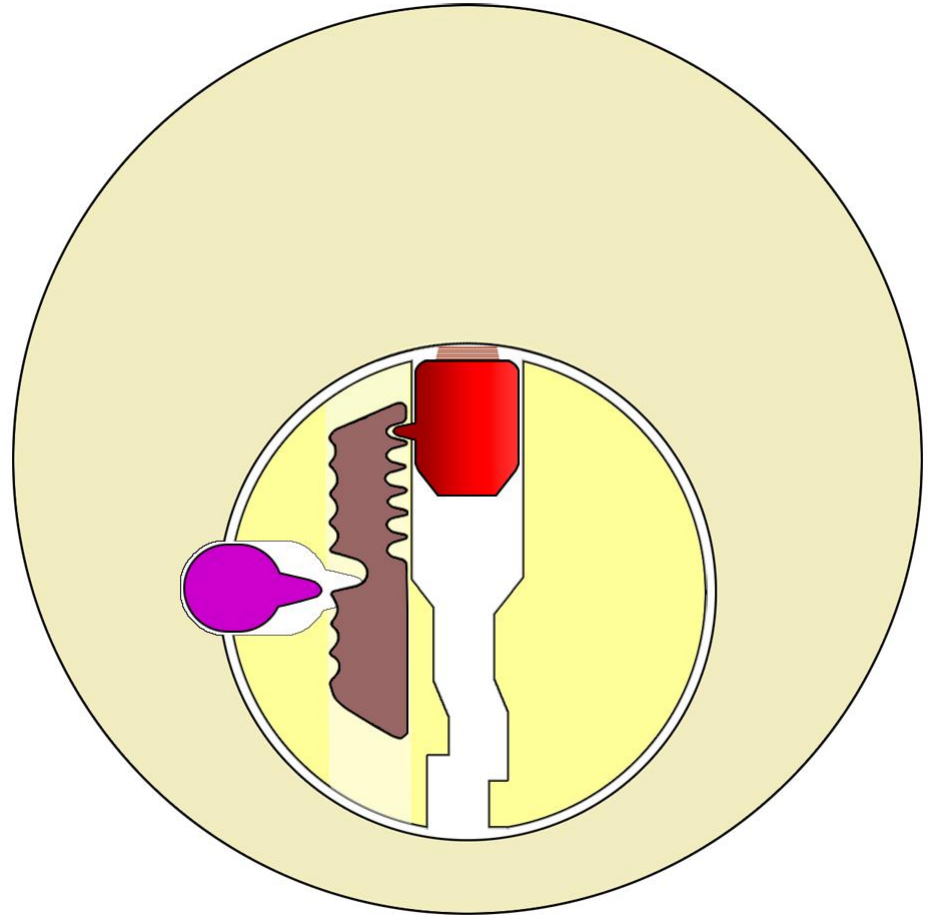
Kwikset Smart Series

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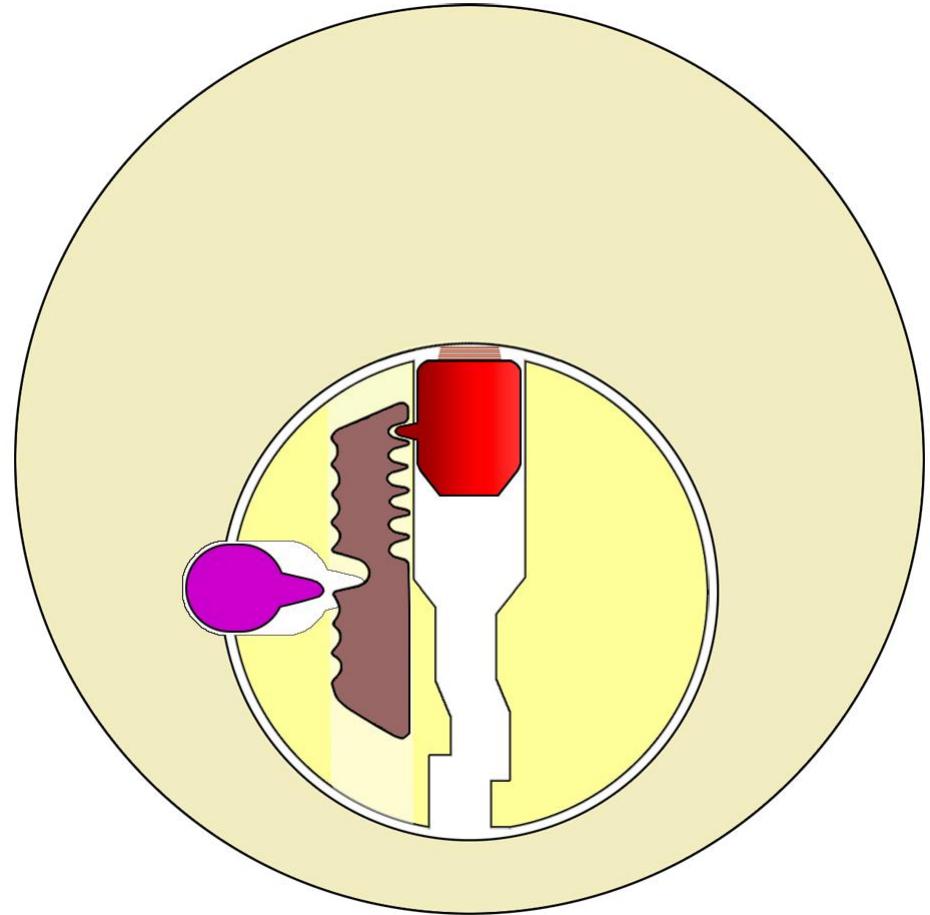
Kwikset Smart Series

research and photo by Shane Lawson



Kwikset Smart Series

research and photo by Shane Lawson



 Informing Kwikset

Kwikset Smart Series



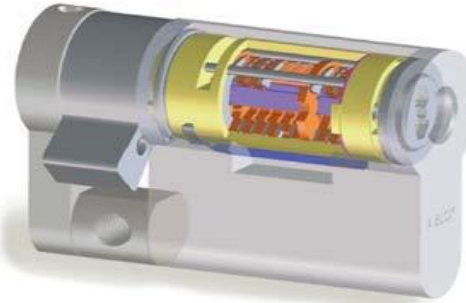
There's also this little problem...

 Kwikset Smasher Tool

The Main Concept: Divide & Conquer...

Isolate Discrete Components

No Known Attack or Bypass



 **ABLOY**
Protec




MCS



 **MIS**
MULT-LOCK

Thank you very much.



<http://deviating.net>

<http://enterthecore.net>

<http://toool.us>