

How To Rekey A Lock

Introduction: Why Learn How To Rekey A Lock?

Imagine moving into a new home or losing a set of keys. Your first thought might be to call a locksmith to have all the locks replaced. But there is a more cost-effective, simpler solution that gives you the same peace of mind: rekeying. Knowing **how to rekey a lock** allows you to change the internal pin configuration so that an old key no longer works, while a new key does. This skill saves money, time, and the hassle of replacing entire locking mechanisms. Whether you are a DIY homeowner or a curious renter, rekeying is a practical ability that puts security control back in your hands.

This guide will take you through every step of the process, from gathering tools to testing your newly rekeyed lock. We'll cover common pin tumbler locks found in most residential doors. By the end, you'll understand not only **how to rekey a lock** but also why it works, when to do it yourself, and when to call a professional.

What Does Rekeying a Lock Mean?

Rekeying a lock involves changing the internal pins inside the lock cylinder so that a different key operates it. The lock hardware stays the same; only the "secret" – the combination of pin heights – is altered. This is different from replacing a lock, where you remove the entire assembly and install a new one. Rekeying is cheaper, faster, and allows you to use a single key for multiple locks throughout your home.

The magic happens inside the cylinder. A typical pin tumbler lock has a series of driver pins and key pins (also called bottom pins) of varying lengths. When you insert the correct key, the key pins align perfectly with the shear line, allowing the cylinder to turn. By swapping these pins with a new set that matches a different key, you effectively **rekey the lock** without replacing any exterior parts.

Tools and Materials You Will Need

Before you start, gather the following items. Having everything ready makes the process smooth and prevents frustration.

- **New rekeying kit** – usually includes a set of new pins and a new key that matches your lock brand (e.g., Schlage, Kwikset, Yale).
- **Screwdrivers** – Phillips head and flathead, depending on your lock.
- **Plug follower** – a tool used to remove the cylinder plug without pins falling out. Alternatively, you can use a piece of hollow metal tubing or a specially shaped tool.
- **Pin tweezers** – fine tweezers to handle tiny pins.
- **Small flashlight or headlamp** – to see inside the cylinder.
- **Workbench or table** – a clean, well-lit area to avoid losing pins.
- **New keys** – the kit provides a couple of keys that match the new pin configuration.
- **Graphite lubricant (optional)** – for smooth operation after reassembly.

Make sure you buy a rekeying kit that is compatible with your lock brand. Kits are inexpensive (often under \$15) and come

with color-coded or numbered pins.

Understanding Your Lock Cylinder

To rekey a lock correctly, you need to know the parts inside. Most residential deadbolts and knob locks use a standard pin tumbler design. The main components are:

- **Cylinder housing** – the outer metal shell fixed in the door.
- **Plug** – the rotating part where you insert the key.
- **Driver pins** – spring-loaded pins that sit above the plug.
- **Key pins** – shorter pins that sit inside the plug, touching the key.
- **Springs** – push the driver pins down against the key pins.
- **Shear line** – the gap between the plug and the housing where the driver and key pins must meet to allow rotation.

When you insert the correct key, the key pins align perfectly with the shear line, pushing the driver pins out of the plug, and the plug rotates freely. When you **rekey a lock**, you remove the old key pins and driver pins, then insert new ones that match a different key.

Step-by-Step Guide: How To Rekey A Lock

Step 1: Remove the Lock from the Door

Start by taking the lock off the door. For a deadbolt, unscrew the interior thumb-turn or knob and the two long screws holding the latch assembly. For a knob lock, remove the screws on the interior handle, slide off the knob, and detach the exterior half. Set aside the screws and exterior parts carefully. You only need the cylinder assembly for the rekeying process.

Step 2: Remove the Cylinder Retaining Clip or Screw

Look at the back of the lock cylinder. Most residential locks have a small metal clip (c-clip) or a setscrew that holds the plug in the housing. Use a flathead screwdriver or a pair of pliers to gently remove the clip. Some Kwikset models use a screw instead. Take note of the orientation – you may need to reassemble it the same way.

Step 3: Insert the Key and Turn It Slightly

Insert the old key (or the new key if you are following a specific method) into the plug. Turn the key about 10-15 degrees clockwise (or counterclockwise, depending on the brand) from the locked position. This aligns the plug with the housing so that you can push it out smoothly.

Step 4: Use the Plug Follower to Remove the Plug

Hold the cylinder housing firmly. Place the plug follower against the back face of the plug (where you removed the clip). Carefully push the plug out from the front while keeping the plug follower pressed against the housing to prevent the springs and driver pins from popping out. The plug will slide out of the front of the cylinder, and the plug follower will take its place, keeping the driver pins and springs contained inside the housing.

If you don't have a plug follower, a hollow metal tube of the

correct diameter (or even a rolled piece of stiff paper) can work, but be very careful not to let the springs jump out.

Step 5: Remove the Old Key Pins from the Plug

With the plug now separate, you'll see a row of tiny holes where the key pins sat. Use tweezers to pull out each key pin one by one. Keep them in order or discard them – you won't reuse them. Turn the plug over and dump any debris. Now your plug is empty and ready for the new key pins.

Step 6: Determine the New Pin Lengths

Take the new key from your rekeying kit. Insert it fully into the empty plug. Look at the slots inside each pin chamber. The top of the key should align with the shear line. The distance between the flat top of the key and the top of the plug at each chamber indicates the required key pin height. Most kits come with a pin gauge or a simple chart that tells you which color or number corresponds to each pin depth. For example, a number 1 pin might be very short, and a number 6 very tall.

Alternatively, many rekeying kits include pre-cut pins that are already matched to the new key. Simply place the appropriate pin in each chamber according to the kit's instructions.

Step 7: Install the New Key Pins into the Plug

Using tweezers, insert the correct new key pin into each chamber. The flat end of the pin should sit on the key, and the rounded end faces up. Double-check that no pin is missing or swapped. Once all pins are in place, slowly withdraw the key while holding the plug vertical to keep pins from falling out. Your plug is now re-pinned.

Step 8: Reassemble the Cylinder

Now you need to put the plug back into the cylinder housing. The housing still contains the driver pins and springs, held back by the plug follower. Position the plug at the front of the housing with the new key inserted (turned slightly as before). Slowly slide the plug follower out while pushing the plug in. The driver pins will drop onto the new key pins. Make sure the plug goes all the way in until it stops flush with the housing.

Once the plug is fully seated, turn the key to the neutral position (perpendicular to the plug) and remove it. Reinstall the retaining clip or screw.

Step 9: Test the New Key

Before reinstalling the lock on the door, test the new key and the old key. Insert the new key – it should turn smoothly and operate the locking mechanism. Insert the old key – it should not turn or only turn partially but not unlock the lock. If the old key works, you likely made an error in pin selection. Repeat the steps or consult your kit's troubleshooting guide.

Step 10: Reinstall the Lock on the Door

Attach the cylinder back into the door, reconnecting the tailpiece or spindle. Secure the interior trim and screws. Test the lock

several times from both sides to ensure smooth operation.

Tips for a Successful Rekey Job

- **Work on a clean surface** – pin tumbler pins are tiny and easily lost. A white towel or a magnetic tray helps.
- **Label your pins** if you are rekeying multiple locks. Store each lock's pins separately.
- **Use the correct key blank** – the new key must match the lock's keyway (the shape of the slot). Most kits include compatible blanks.
- **Lubricate sparingly** – graphite powder is best; avoid oil-based lubricants that attract dirt.
- **Double-check pin alignment** – if the new key sticks or feels gritty, you may have inserted a pin upside down or used wrong length.

When to Call a Professional Locksmith

Rekeying a standard pin tumbler lock is straightforward, but not all situations are DIY-friendly. Consider calling a locksmith if:

- Your lock is high-security (e.g., Medeco, Mul-T-Lock) with special side pins or magnetic elements.
- You have a smart lock or electronic lock – these often cannot be rekeyed traditionally.
- The lock cylinder is stuck or damaged – forcing it may ruin the lock.
- You need to rekey many locks at once and want master keying (a single key for all locks but with individual sub-keys).
- You are not comfortable with small parts or lack the proper tools.

A professional can rekey a lock in minutes and guarantee it works. The cost is usually \$15-\$25 per lock, which is still far cheaper than buying new locks.

Why Rekey Instead of Replace?

Choosing to rekey saves money and time. A new lock assembly can cost \$20-\$60 or more, plus installation hassle. A rekeying kit costs under \$15 and works on multiple locks (kits often contain enough pins for 6-12 locks). Also, rekeying allows you to keep the same aesthetic hardware, which is important if you have matching handlesets across your home.

Another advantage: you can rekey all your exterior locks to work with a single key. This “keyed alike” convenience is a major benefit that rekeying offers instantly, whereas buying new locks often requires ordering specific keying options.

Common Mistakes and How to Avoid Them

1. **Using the wrong pin sizes** – always match pins to the key using the gauge or kit instructions. A pin that is too tall will prevent the plug from turning; too short and the driver pin will fall into the plug, jamming it.
2. **Losing the**