Screwdriver Best Practices

Learn to use the correct screwdriver type, size, and technique to avoid stripping screws.

Written By: Jeff Suovanen
INTRODUCTION

You probably know “righty-tighty, lefty-loosey,” but we’ve rounded up a few additional tips to help you perfect your screwdriver technique and avoid the wrath of the stripped screw.

If you found this page just a bit too late, twirl on over to our stripped screw removal guide.
Step 1 — Driver Selection

- Different screw heads call for different driver types. Whether it be Phillips, Japanese Industrial Standard (JIS), Pozidrive, Torx, Triwing, or plain old Flathead, use the correct driver for your application.

- Using a driver that’s “close enough”—such as by turning a Phillips screw with a Flathead driver—can sometimes get you out of a bind, but mostly it’s a recipe for trouble.

- What’s that, you say? That sounds like a lot of drivers to keep track of? Try using a set of interchangeable bits, like the 64 Bit Kit for electronics repair or the Universal Bit Kit for larger applications.
Step 2 — Size Selection

A correctly sized driver should “fill up” the screw head, utilizing both the full depth and width of the socket.

- Beginners commonly make the mistake of using a driver that’s too small. An undersized driver slips easily, damaging the screw head and making it difficult to turn afterward—even with a correctly-sized driver. This is known as a stripped screw.

- An oversized driver fits into the screw only shallowly, if at all.

- When you find a driver that fits about right, compare the next size up as well as the next size down before you proceed.

- In general, use the largest driver size that fits snugly into the screw.
Step 3 — Proper Use

- Keep your drivers in good working condition by using them only as designed.

⚠️ Avoid using screwdrivers as improvised pry tools or chisels.
  - Prying with a screwdriver can bend or break the tip, making it useless for turning screws.
  - Chiseling with a driver can deform the tip. A damaged driver like this one no longer fits snugly in the screw head, resulting in slippage (and stripped screws).

- To avoid stripping screws, only use drivers that are in good condition.

Step 4

- Use *continuous downward pressure* to keep the driver tip in contact with the screw.
  - A limp grip or a lack of pressure will cause the driver to simply slip out of the screw head instead of turning the screw.
Step 5

- Keep the driver directly in line with the screw, with the shaft directly over the screw head. The driver and screw should be “on-axis,” forming a straight line.

⚠️ Holding the driver at an angle creates a poor fit between the driver and the screw head. Result: slippage and probable damage to the screw.

ℹ️ Sometimes the screw itself needs to go into the surface at an angle. Keep the driver positioned correctly relative to the screw, rather than the surface it’s going into.
Step 6

- Whenever you install a screw, first turn the screw counter-clockwise (in the “loosey” direction) to “seat” the screw.
  - Turn slowly until you feel the screw level off and sink slightly, then stop.
  - Now it's safe to tighten the screw.

![Image of screw installation]

A properly installed screw will turn easily until it's fully tight.

⚠️ An improperly threaded screw gets increasingly difficult to tighten—because the misaligned threads are cutting across the threads in the screw hole, causing permanent damage. This is known as "cross-threading."
  - If your screw doesn't tighten easily, back off and carefully re-seat it, and try again.
Step 7

- Finally, use appropriate torque when tightening screws down. A properly fastened screw will be snug, but not so tight that your driver starts to slip.
  
  - This is largely a matter of feel, so your technique will improve with practice.
  
  - Smaller screws generally require less torque; over tightening them can damage their threads.
  
  - Very small screws—such as those used in phones and tablets—require very little tightening force. As soon as you feel resistance, give it another quarter turn or less and then stop.