Hand tools—Screwdrivers

Explain dangers

More than any other tool, the screwdriver is used for jobs it was never meant to do. People use them for chipping, chiselling, scraping, prying, digging, gouging, testing circuits, making holes, stirring paint, propping doors open, and taking the lids off cans.

When used improperly, workers have suffered eye injuries from flying fragments of screwdrivers struck with a hammer.

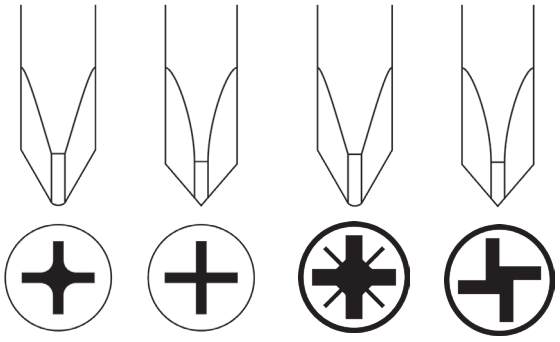
However, the most common abuse of the screwdriver is using one that doesn't fit or match the screw. That means using a screwdriver too big or small for the screw or not matched to the screw head.

The results are cuts and puncture wounds from slipping screwdrivers.

Identify controls

- Use the right screwdriver for the job. This means the right kind of tip—slot, Robertson, Phillips, whatever. It also means use the right size of screwdriver. One that is too big or small for the screw can only lead to trouble. You'll chew up the screw head, damage the screwdriver, gouge the material, or scrape your knuckles.

  NOTE: All crosspoint screws are not designed to be driven by a Phillips screwdriver. Phillips screws and drivers are only one type among several crosspoint systems. They are not interchangeable (see image below).



Phillips | Frearson (Reed) | Pozidriv | Torq-set

- As best practice, make a pilot hole before driving a screw into wood. Start with one or two "soft" turns, that is, with the fingers of your free hand on the screw. Engage one or two threads, make sure the screw is going in straight, then take your fingers away. You can put your fingers on the shank to help guide and hold the screwdriver. But the main action is on the handle, which should be large enough to allow enough grip and torque to drive the screw.
- Make sure that the screwdriver handle is intact, free of splits or cracks, and clean of grease and oil.
- You should only need enough force to keep the screwdriver in contact with the screw. With a properly sized and drilled hole, the screw will draw itself into the material with minimum pressure and guidance.
- Don't hold the material in one hand and use the screwdriver with the other. The screwdriver can slip and cut your hand.
- Discard screwdrivers with chipped handles, bent shanks, and twisted or excessively rounded tips.
- Don't use bench grinders to restore tips. The excessive heat can destroy temper and reduce the hardness of shank and tip. Filing should be done by hand.
- Use screwdrivers with large handles for better grip.
- Don't use pliers on the handle of a screwdriver for more power. To remove stubborn screws, use a screwdriver with a square shank designed for use with a wrench.

Demonstrate

Review the types of screwdrivers used by your crew.

Inspect a few for evidence of wear, damage, or misuse.