Hand Tools – Screwdrivers – Fact Sheet



WHAT ARE SOME GENERAL SAFETY TIPS TO KNOW WHEN USING SCREWDRIVERS?

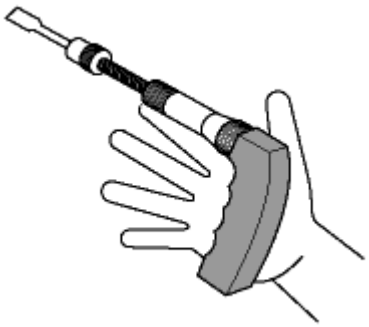
Screwdrivers are made in various shapes and sizes and for many uses. Use the correct screwdriver for the job.

- Always match the screwdriver to the screw head, both in terms of size and type.
- Choose contoured handles that fit the shank tightly, with a flange to keep the hand from slipping off the tool.
- Use a slot screwdriver with a blade tip width that is the same as the width of slotted screw head.
- For cross head screws, use the correct size and type of screwdriver: a Phillips screwdriver may slip out of a screw head designed for use with the slightly, flatter-tipped Pozidriv screwdriver.
- Use a vise or clamp to hold the stock if the piece is small or moves easily.
- Wear safety glasses or a face shield (with safety glasses or goggles) that is appropriate for the hazards of the work you are doing.
- Keep the screwdriver handle clean. A greasy handle could cause an injury or damage from unexpected slippage.
- Shut off electricity before beginning work on electrical equipment (lock out, de-energize and tag out).
- If work must be carried out on “live” equipment, use screwdrivers that have insulated handles designed for electrical work and a non-conducting shaft. Remember, most plastic handles are designed for grip and comfort.
- Use non-magnetic tools when working near strong magnets (e.g., in some laboratories).
- Use a screw-holding screwdriver (with screw-holding clips or magnetic blades) to get screws started in awkward, hard-to-reach areas. Square-tipped screwdrivers (e.g., Robertson) that hold screws with recessed square holes are also useful in such situations.
- Use an offset screwdriver in close quarters where a conventional screwdriver cannot be used.



Offset Screwdriver

- Use a screwdriver that incorporates the following features when continuous work is needed:
  - A pistol grip to provide for a straighter wrist and better leverage.
  - A “Yankee drill” mechanism (spiral ratchet screwdriver or push screwdriver) which rotates the blade when the tool is pushed forward.
  - A ratchet device to drive hard-to-move screws efficiently.
- Or use a powered screwdriver.



Yankee Drill Mechanism with a Pistol Grip

- File a rounded tip square making sure the edges are straight. A dull or rounded tip can slip out of the slot and cause hand injury or damage to materials.
- Store screwdrivers in a rack or partitioned pouch so that the proper screwdriver can be selected quickly.

What should I avoid doing?

- Do not lean or push on a screwdriver with any more force than necessary to keep contact with the screw. A screw properly piloted and fitted will draw itself into the right position when turned. Keep the shank directly over the screw being driven.
- Do not hold the stock in one hand while using the screwdriver with the other. If the screwdriver slips out of the slot, you may cut your hand.
- Do not hammer screws which cannot be turned.
- Do not grind the tip to fit all sizes of screw heads.
- Do not try to use screwdrivers on screw heads for which they are not designed (e.g., straight blade screwdrivers on Phillips, clutch head, Torx or multi-flutted spline screw heads).
- Do not use defective screwdrivers (i.e., ones with rounded or damaged edges or tips; split or broken handle; or bent shaft).
- Do not use a screwdriver for prying, punching, chiseling, scoring, scraping or stirring paint.
- Do not use pliers on the handle of a screwdriver for extra turning power. A wrench should only be used on the square screwdriver shank designed for

that purpose.
- Do not expose a screwdriver blade to excessive heat. Heat can affect the temper of the metal and weaken the tool.
- Do not use a screwdriver to check if an electrical circuit is live. Use a suitable meter or other circuit testing device.
- Do not carry screwdrivers in your pockets.

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