

Toolbox Talks 2

056: Unsafe Acts: Hand Tools

Discussion leader duties for this session:

Ask two members of your crew if you can inspect their tools for wear. If you find a worn tool, ask that it be replaced and if you can have the old one for the upcoming safety talk.

What this Safety Talk covers:

Most injuries occur not due to unsafe conditions, but due to unsafe acts. This Safety Talk addresses unsafe acts related to hand tools.

Discussion notes:

Unsafe acts with hand tools

- Using consumer-grade tools. Nearly all electricians use top brand tools made specifically for industrial use. But some will try to get by on the cheap. The many design differences between the two types of tools mean the industrial-grade or professional level tools are more precise, last longer, produce less strain on the joints, and have less slippage hazard. They also have superior finishes, last longer, and cost less in the long run.
- Using worn tools. If you buy the right tools and use them correctly, you won't notice wear for many years. But if a tool is worn, it's unsafe to use. It takes only one slip to skin your knuckles or, worse, contact a nearby energized part. Look for chips, peeling, and rounded edges.
- Treating tools casually. You make your living with your hand tools.
- Using uninsulated tools around energized equipment. Nobody likes to walk all the way back to the gangbox just for a screwdriver. But it's better to be able to do so than to be electrocuted.
- Using a ratcheting wrench as a hammer. This damages the tool, increasing the likelihood of slippage later. With a hard enough strike, this kind of misuse also presents a flying particle hazard.
- Using adjustable wrenches routinely. Even when used correctly, adjustable wrenches present more of a slipping hazard than a box-end or open-end wrench.
- Using adjustable pliers as wrenches. This misuse damages the nut or bolt, making slippage more likely for the next person. It's also a slipping hazard for the person doing it.
- Shimming metric wrenches for SAE fasteners, or vice-versa. These wrenches are close in size, so it may seem like a smart idea to use the next size up and just wedge in a piece of scrap metal to make up for the size difference. But this spreads force unevenly across the faster face. The result will likely be slippage and a damaged fastener. The real danger is your hand could slip into an energized part.
- Using a screwdriver as a prybar. It's not made for this, and may break. The breakage isn't likely to be the shank. It's likely to be the handle, which may shatter under force it wasn't designed for.
- Using the wrong screwdriver. The common screw head types are flat slot, Phillips head, and Torx head. Each of these requires a particular blade style. Wedging the wrong one at an angle is a good way to skin your knuckles and destroy the screw. Screws also come in various sizes. Using a screwdriver that is too large or too small is dangerous to you and will probably ruin the screw.

Review and discussion

1. What are some brands of tools that are industrial grade or professional quality? What are some brands of tools that are consumer grade? What brands are you using now?

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