

TOOLBOX TALK: EXTENSION CORDS AND GFCI

Job or site _____

Date _____

Led by _____

Open with this

Hold up the cord you are about to plug in. We are going to look at every one of them, end to end, before anything gets energized today.

The talk

Electrocution is one of the four hazards that kill the most construction workers, and on a residential job it is almost never the panel. It is a cord with a nicked jacket lying in a puddle, or a tool with a ground pin somebody snapped off six months ago.

GFCI is the thing that actually saves you. It is watching for current leaving on a path it should not take, which is what happens when that path is you. It trips in a fraction of a second at a current small enough not to stop your heart.

On a construction site, every 125 volt, single phase, 15, 20 and 30 amp receptacle outlet that is not part of the permanent wiring of the building has to be GFCI protected. The alternative is a written assured equipment grounding conductor program, with somebody actually inspecting and tagging tools and cords on a schedule. Almost nobody runs that program properly, so in practice the answer is GFCI everything.

Test it. The test button on the GFCI is not decoration, and a GFCI that does not trip when you press it is a box that is lying to you. Test at the start of every shift and after anything gets wet.

Now the cords themselves. Three wire, hard service or extra hard service rating, sized for the load and the length. A long thin cord on a table saw is a voltage drop that overheats the motor and the cord at the same time. No splices, no tape repairs, no exposed conductors, no missing ground pin.

And keep them out of the way and out of the water. Not across a doorway, not under a door, not through a puddle, not run through standing water where a nick you cannot see becomes a path to ground through anybody who touches the tool.

Point at these before anybody starts

- Every cord end on site: three prongs, ground pin present, no cracked housing
- The jacket along its whole length, looking for nicks, cuts and tape repairs

- Where cords are lying: puddles, doorways, traffic routes, across sharp edges
- The GFCI, and one of us pressing the test button in front of everybody
- The cord gauge against the tool it is feeding and the distance it is running
- Any tool with a ground pin missing, which comes off the job right now

The rules that apply

- All 125 volt, 15, 20 and 30 amp receptacles not part of the permanent wiring need GFCI protection, or a documented assured equipment grounding conductor program.
- Test GFCI devices with the test button at the start of each shift and after any exposure to water.
- Extension cords on site are three wire, rated hard service or extra hard service, and never spliced or taped.
- A cord with a damaged jacket, a bent or missing ground pin or a cracked end is removed from service, not wrapped in tape.
- Do not run cords through doorways, windows, standing water or across walking routes where they will be crushed.
- Never carry a tool by its cord or yank the cord to unplug it.

Ask the crew

- Has anybody pressed the test button on a GFCI on this job this week?
- Which cord on this site is the one we all know about and keep using anyway?
- What is the longest cord run here, and is it heavy enough for the tool on the end of it?

Close with this

Every cord inspected end to end, every GFCI tested, and anything damaged goes in the truck, not back in the pile.

Attendance

Everybody who was present signs, including subcontractors and anybody visiting the site.

	Print name and signature
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This talk is general safety information for a crew briefing, not legal advice and not a substitute for the training your employees are required to have. Standards are quoted for orientation only. Check the current text of the standard and your own state plan, which may be stricter than the federal rule.