Extension cord safety toolbox talk

29 CFR 1926.405, 1926.416, 1910.334, 1926.404, 1910.304

Date _____ Trainer _____ Location _____

Opening question

Who here has seen a cord run over, pinched in a door or patched with tape on this job?

Why it matters

Extension cords take a beating on the job. They get run over, dragged across sharp edges, pinched in doors and left lying in water. A damaged cord can shock you or start a fire, and a cord across a walkway can trip someone. Many of these problems can be spotted with a quick look before you plug in.

Key points

1 Use the right cord for the job

In construction, extension cords used with portable electric tools and appliances must be three-wire type and designed for hard or extra-hard usage. Look for the cord type printed on the jacket, such as SJO or STO. Make sure the cord is rated for the tool you plug into it, and for outdoor use if you work outside.

29 CFR 1926.405(a)(2)(ii)(J)

2 Inspect every cord before you use it

Check the whole length for cuts, crushed spots and exposed wires, and make sure the plug is tight and no prong is bent or missing. On construction sites, worn or frayed cords must not be used. In general industry, cords must be visually inspected before use on any shift, and a damaged cord that might expose an employee to injury must be removed from service until it is repaired and tested (29 CFR 1910.334(a)(2)(i) and (ii)).

29 CFR 1926.416(e)(1)

3 Keep the ground path whole

Never cut off or bend back the grounding prong, and never use an adapter that breaks the ground path. In general industry, plugs and receptacles may not be connected or altered in a way that breaks the continuity of the equipment grounding conductor, and adapters that interrupt the grounding connection may not be used (29 CFR 1910.334(a)(3)(ii) and (iii)). If a plug does not fit the outlet, find the right outlet or cord instead of forcing it.

29 CFR 1910.334(a)(3)(ii)

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4 Plug into GFCI protection and keep connections dry

On construction sites, the employer must protect workers with either ground-fault circuit interrupters (GFCIs) or an assured equipment grounding conductor program. Plug into GFCI protection, and if a GFCI keeps tripping, stop and report it instead of moving to another outlet. In general industry, your hands may not be wet when you plug or unplug cords if energized equipment is involved (29 CFR 1910.334(a)(5)(i)). Keep connections out of water, mud and snow.

29 CFR 1926.404(b)(1)(i)

5 Keep cords out of walkways and away from damage

On construction sites, walkways and work spaces must be kept clear of cords (29 CFR 1926.416(b)(2)), cords that pass through doorways or other pinch points must be protected from damage (29 CFR 1926.405(a)(2)(ii)(I)), and extension cords must not be fastened with staples, hung from nails or suspended by wire. Route cords along the edges of the work area, and use cord covers or ramps where a cord must cross a path.

29 CFR 1926.416(e)(2)

6 Do not splice, overload or misuse a cord

On construction sites, flexible cords may be used only in continuous lengths without a splice or tap, and hard service cords No. 12 or larger may be repaired only with a splice that keeps the cord's insulation, outer sheath properties and usage characteristics. Wrapping tape around a cut does not restore the outer sheath, so tag the cord and take it out of service. Do not lift or lower a tool by its cord, and unplug any cord that feels hot.

29 CFR 1926.405(g)(2)(iii)

Scenario

Picture this: A carpenter needs power at the far end of a building. He plugs two light-duty cords together; one has tape over a cut and the other is missing its grounding prong. He runs them through a doorway where a forklift travels, and the connection ends up in a puddle. What went wrong, and what should he have done instead?

Crew discussion

1. Where do cords cross walkways or doorways on our job, and how do we protect them?
2. What do you check on a cord before you plug it in?
3. Where are our GFCIs, and what do we do if one keeps tripping?
4. Where do damaged cords go so nobody picks one up by mistake?

Bottom line **Check every cord before you plug it in, use GFCI protection, keep cords out of harm's way and take damaged cords out of service.**

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Sign-in sheet / Hoja de asistencia

Topic / Tema: Extension cord safety / Seguridad con extensiones eléctricas

Date / Fecha: _____

Trainer / Instructor: _____ Location / Lugar: _____ Company / Empresa: _____

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