WORKING WITH PVC CONDUIT, AND BENDING IT WITH A SPRING

WHY GLUE EVERY PVC JOINT?

WORKING WITH PVC CONDUIT

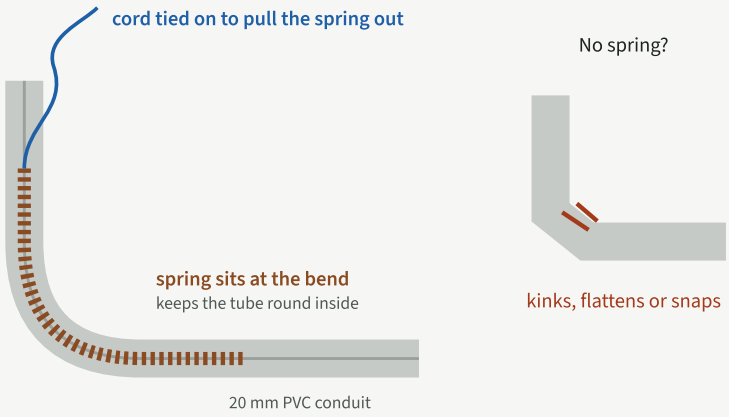
- **Cutting**: you can buy special **PVC conduit cutters** (like scissors), or just use a **hacksaw**.
- **Edges**: there's less of an issue with sharp edges than with steel, but plastic **can still be sharp** and damage a conductor, so run a file in there if needed.
- **No threads**: fittings are **push-fit**. Boxes simply slide on, though sometimes they're very stubborn.
- **Fixing**: drill through the box to fix it to the wall, and use **saddles** on walls, ceilings or floors, just like steel.
- **Glue the joints** with **PVC conduit solvent cement**. The tin has a brush built into its lid. It's quite gloopy: put a bit around the end of the conduit, slide the box on, and wipe the excess away. After a few minutes it's fixed and won't come loose.

> **Why glue matters**PVC **moves with temperature** (it expands, contracts and can warp). If a run isn't glued and isn't well fixed, the conduit **pulls out of the boxes**. You often see this on old PVC installations where the electrician didn't use glue.

BENDING PVC WITH A SPRING

You **don't use the bender** for PVC. Instead you use a **bending spring** that matches the conduit size (**20 mm spring** for 20 mm conduit; 25 mm springs are available too).

1. **Tie a piece of cable or cord** to the end of the spring. You'll push the spring down inside the conduit and need the cord to **pull it back out**. This is Sparky's best tip.
2. Slide the spring in so it sits **where the bend will be**. Tap the conduit and you can hear where it is.
3. Bend the conduit using your body. Most people use their **knee**, **rolling** the conduit round it to get a nicely **rounded** bend rather than a tight one.
4. Pull the spring out with the cord. **Watch your eyes**, and anyone near you, as it comes out.
5. Once the plastic has **cooled** after being stretched, the bend **stays in place** and you can fix it.



The spring supports the wall of the tube so it bends smoothly. Without it, the PVC kinks or snaps. Roll the bend round your knee for a smoother radius.

No earthing neededPVC is an insulator, so PVC conduit is **not** an exposed-conductive-part and **doesn't** need connecting to the MET. (Any metal boxes or accessories on the run are still earthed through the CPC, which you must draw in because there's no metal conduit to use.)

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