Safe Handling of Portable Power Drills Meeting Kit



WHAT'S AT STAKE

Portable power drills are one of our most useful tools and, with care, they can be among the safest. But electric drills can be dangerous if not handled carefully.

WHAT'S THE DANGER

IDENTIFY POTENTIAL HAZARDS OF POWER DRILLS

- **The Drill.** Is it clean? If it's dirty or rusty, tag it and return it to supply for maintenance. Make sure the drill speed is proper for the job.
- The Drill Bit. Be sure it's set straight in the jaws. Hold up the drill and turn it on for a moment. The bit should run perfectly true without any wobble. If it wobbles, either the bit isn't straight or it's in the jaws crooked. A sharp bit will take hold without much pressure.
- **The Cord.** Look for breaks, exposed wires, and looseness at the plug or housing connections. Unless the drill is double insulated, be sure there is a ground wire, and the third prong has not been cut off. Use only grounding extension cords placed so they won't cause tripping hazards.
- **Tripping Hazards.** Check the floor for loose or fixed objects. When you're concentrating on a drilling job, it's easy to trip over something unexpected.
- **The Job.** Starting the drill hole at just the right angle and keeping it straight, takes steadiness and care. If a drill isn't held just right, the bit may bend or break, sending metal flying.
- **The Material.** When drilling into metal, much depends on the material's hardness. Very soft metals like copper or aluminum will cut with little pressure. Hard steel needs a different bit. More pressure must be applied, but care is necessary because too much will make the drill overheat and bind.

HOW TO PROTECT YOURSELF

BEST PRACTICES TO STAY SAFE USING POWER TOOLS

1. **Use Personal Protective Equipment.** If you can't engineer out the threat, then using personal protective equipment (PPE) should be your first precaution. If you haven't already, purchase a pair of safety glasses. These will protect your eyes from debris, dust, fiberglass, and shavings. In the same manner, a pair of

earplugs will protect your hearing.

2. **Use The Right Tool for The Job.** If you don't have one, buy one – or borrow one from your neighbour, which they'll never see again after you break it or 'lose it' when stored, resulting in you having to invite the whole family round for tea one night.
3. **Keep Observers at A Safe Distance from Your Work Area.** Try, where possible, to work uninterrupted or stop work until you are given the necessary space to complete a job properly. It's hard enough looking out for your own well-being whilst using tools, let alone having to constantly ensure the safety of others.
4. **Dress Right.** Avoid wearing loose-fitting clothing, jewelry, and neckties. Remove dangling objects of any kind before you start working. If you have long hair, tie it behind your head so that it doesn't get in your way. When it comes to footwear, non-slip boots are recommended.
5. **Educate Yourself.** All hand and power tools come with instruction manuals. Reading the manual thoroughly is non-negotiable. Demonstrating how to use a tool isn't the manual's only value. Get to know your tool to help reduce the risk of an injury.
6. **Regularly Inspect Your Tools.** Constant use causes wear and tear. Don't take any chances, even if your tools are brand new. Routine inspections are the key to staying safe. Check your devices for loose cracks, breakage, damaged plugs, and exposed wires. Ask the boss to replace the damaged tool with a proper one.
7. **Keep Your Work Area Clean.** Your environment itself can pose a major risk to your safety. Keeping the workspace clean is vital to staying out of harm's way. Clean up the clutter – a floor with tangled cords can be extremely dangerous. Keep your power tools away from flammable liquids.
8. **Be Extra Cautious with Power Tools.** Unlike hand tools, power tools use electricity and are much more powerful. Due to their power, however, these tools are also much more dangerous. Corded tools should never be carried by their cords. These wires need to be kept away from sharp edges and heat sources. Accidental starting is another hazard. When carrying a plugged-in tool, avoid holding your finger on the trigger.
9. **Turn Off Tools After Use.** Leaving your tools plugged in and in "stand by" mode should be avoided at all costs. To prevent future injuries and accidents, always turn them off after each use. Make sure that your device is shut down, unplugged, and properly stored. Once unplugged, store the tool into its original casing.
10. **Use Proper Lighting.** People often overlook the importance of having a properly lit working environment. When used in dimly lit conditions, power tools can be deadly. If your work area's light isn't bright enough, make sure to use or bring in additional lights. You'll need lots of bright, shadow-free light.
11. **Ground All Tools.** Is your tool equipped with a three-prong, grounding-type plug or an approved three-conductor cord? If it is, you'll have to plug it into a three-hole electrical receptacle. If you're using an adapter to connect to a two-hole receptacle, you'll have to attach the wire to a known ground. Be extra careful when you have to work in wet or damp locations. Keep your feet and hands dry.
12. **Maintain a Firm Grip and Balance.** Power tools are powerful. For that matter, it is of paramount importance to stay in control of them at all times. Besides using non-slip footwear, you also need to plant your feet and maintain a good balance. Keeping a firm grip is just as important, especially with handheld tools.
13. **Stay Calm and Confident.** Keeping your cool while handling these devices is the key to staying safe. Take a break, calm down, and only then resume working on the project. Stay away from power tools if you're under the influence of alcohol or drugs, feeling unwell, in pain, distracted, or tired.

FINAL WORD

For your safety, and the safety of others around you, you need to be cautious when using a power tool. Prepare yourself for the usage, read and learn about possible injuries, problems, and how to avoid them.