



Air powered tools present many of the same hazards as their electrically powered counterparts, plus hazards you may not have considered. Here are things to remember when using air tools:

**Air pressure:** Electrical tools are powered from a source that provides a well-regulated standard current. However, with air powered tools, air may be delivered at varying pressures and flows. If the pressure/flow exceeds the manufacturer's rating, the tool itself could over-speed, delivering too much torque or other excessive force. This is hazardous due to the increased possibility of tool or workpiece breakage. Inadequate pressure or flow could also result in an under performing tool. This may prompt you to apply excessive force in your work, possibly causing tool breakage and injury. Adjust your air pressure to the manufacturer's rating. Make sure hoses are of the correct inside diameter and are not kinked or crushed. Your compressor and receiver must have enough capacity to deliver air in an amount sufficient to properly operate all attached tools.

**Noise Levels:** Pneumatic tools discharge exhaust air at the tool itself or nearby. Frequently, this air is not muffled and therefore pneumatic tools can be much noisier than electric tools. As prolonged exposure to loud noise can damage your hearing, precautions should be taken. Either effective mufflers can be installed on the exhaust, or hearing protection should be worn.

**Oil & Air Quality:** The discharge of air can cause other concerns too. The air feeding the tool may contain oil or antifreeze, discharging contaminated air into the environment around you. Special precautions may be needed in confined or poorly ventilated spaces. If oil-contaminated air discharges near where you grip the tool, your hands may become oily, resulting in a dangerous loss of grip. It helps to frequently wipe both your hands and the tool and to be sure you are not over oiling the tool. To eliminate the hazard, find a replacement tool with a better design.

**Air Temperature:** If the air discharges on your hand, you can feel that it is cold. Under certain conditions, the temperature could be low enough to cause frostbite, tiffen your fingers, or even make you more susceptible to certain types of cumulative trauma injuries. Again, this may indicate poor tool design. Gloves may help if they can be worn without creating the additional hazard of becoming caught up in any rotating or reciprocating parts.

**Shock Potential:** Air powered tools are not grounded or double insulated so if you contact a live wire while working with a pneumatic tool, you can be shocked. Make certain all electric power in the immediate work area is isolated.

**Whipping Hose Danger:** If an electric cord were to break, there is generally not much danger unless you come in contact with the conductors. However, a severed air hose can whip around violently until the air is shut off. You may be injured by the whipping hose or while scrambling to get out of its way. Protect the hose from physical damage. When using quick disconnect type fittings, install the male end on the tool.

**Eye Protection:** Finally, don't forget to protect your eyes. Compressed air or particles may fly from equipment such as chipping hammers, rock drills, rotary drills or sanders, and cause pain or injury. Don't take chances with your precious eyesight!

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