SERVICING AND SAFETY WITH TOOLS

Welcome to the first edition of the Milwaukee Tool Tips Column. In this issue we give you some handy hints on how to look after your tools and use them safely. It's basically common sense, but the scenario at the end demonstrates how very quickly it can all go horribly wrong.

- Tools should be serviced every three months - at a certified service agent.
- Electrical tools need to be tagged (electrical cord needs to be checked) and tested before they are allowed on a building site. This needs to be done every three months for builders and 12 months if it is a factory environment.
- Cordless — only the charger needs to be tagged (same periods as above).
- If it has external brush access, periodically check for wear and tear.
- It is Important to change brushes as a pair — each brush can wear differently, and this will affect the tool's operation.
- Make sure switches are working correctly.
- All safety guards supplied with machines should remain fitted — no matter how annoying they are.
- Check guards on all machines are in working order.
- Ensure blades are sharp and aren't missing teeth — this can affect the performance of the tool.
- Sanders and grinders should be blown down regularly to eliminate dust build-up on armatures, etc., which can cause shorting in the tool.
- ALWAYS wear PPE (Personal Protection Equipment) — Safety glasses, ear protection and appropriate dust or fume masks if required. Your sight and hearing are irreplaceable. Steel-capped boots are also essential.
- Don't wear loose clothing.
- If you are doing a specific task, such as welding, make sure you have the correct additional safety equipment.
- It is your responsibility to be aware of any hazards around your workplace. Make sure everyone else is aware of them too and that they are recorded on the site hazard register.
- Select the right tool for the job and make sure you know how to use it.
- Always use an RCD (Residual Current Device, or safety switch) to protect you and provide overload protection for the tool.
- Keep leads short. Long extension cords can reduce the efficiency of the tool. These should be kept to a max of 20meters because of voltage drop
- Before plugging the tool in, check that the switch is not turned on.
- Use the tool at the rate for which it was intended — you shouldn't have to apply a great deal of pressure. Having sharp blades and bits will ensure safer operation and greater efficiency.

HOW ABOUT THIS FOR A CHILLING SCENARIO

If you are using a 184 mm (7 ¼") Circular Saw with a no-load speed of 5400 RPM fitted with a blade that has 20 Tungsten Carbide teeth, the following is true:

- In one minute (20 teeth x 5400 RPM) 108,000 teeth spin past your leg.
- In one second 1800 teeth spin past your leg (108,000 TPM / 60 sec).
- The average human reaction time is 1/3 of a second.
- Therefore if we divide 1800 (teeth per second) by 3.
- There are 600 teeth that will cut through you before you have time to react.

Thanks for reading our first column. Hopefully you have gained some useful information. Feel free to contact us if you have any ideas for future Milwaukee Tool Tips.

Meanwhile, work safely.

Cheers,
Dave Brown.