

SANDERS (STATIONARY & PORTABLE)

Power tools require operator respect in specific ways. They must be used carefully and kept in safe operating condition, whether they are in the hands of a professional tradesman, an amateur do-it-yourselfer, or a vocational student. *The demands of safety apply to all.* The material presented here is a compilation of carefully selected safe use precautions as they relate to specific electric power tool CAUTIONS, WARNINGS and DANGERS. The purpose is to highlight the safe use of specific tools that have a potential of causing injury if ignored. The warnings and instructions on the power tool and in its operator's manual provide the best source of safety information for the tool. Read and understand the contents and follow the advisements of operator's manuals on each specific power tool and all related accessories. This is considered essential to the safe operation of any power tool. Review PTI's *Safety is Specific* publication for general power tool safety.



Sanders come in wide variety of designs, such as belt sanders, drum sanders, disc sanders, random orbit sanders or pad sanders. Sanding is often a long job. For this reason, it is very important that you do not lose concentration and that your working environment is set up correctly. If you use the sander unsafely or incorrectly, you could be injured.

Good Personal Safety is a Must

Following good safety practices when using a sander is a must. Make a habit of including safety in all your activities.

- Use the appropriate mask or respirator in dusty work conditions. Sanding dust may affect your breathing and overcome you if you are not protected against it – particularly when working with many of the exotic (tropical) hardwoods or products containing hazardous substances.
- Wear proper hearing protection, as needed.

Choose the Right Tool and Accessory

Choosing the correct tool and the proper accessory for your application can help to reduce the risk of serious injury. When used according to the manufacturer's instructions, the proper tool and accessory will make the job safer and faster.

- Always unplug or remove the battery from the sander before changing any accessories.
- Stationary sanders may have multiple features, such as belt and disc sanding. Portable sanders are normally single feature sanders (disc, pad, or belt). Exercise caution and alertness to avoid injuries, such as skin abrasions or pinching, that can result from contacting the sanding medium or other moving parts – belts, pulleys, and arbors.
- Don't use small sanders for big jobs or large sanders for small jobs.
- Abrasive belts should be the width recommended by the manufacturer.
- Do not use excessively oversized sanding disc paper. Follow tool manufacturer's recommendations when selecting sanding paper.

Know your Workpiece

Take time to review your workpiece and make sure that all necessary precautions have been taken before sanding.

- Always support your workpiece on a stationary sander with the table or backstop.
- Use jigs or fixtures to hold your workpiece in position whenever possible.
- Never hold the workpiece by hand, as this is unstable and may lead to loss of control.
- Avoid working on small pieces of material which can't be properly secured. Injury could result from small pieces being thrown by the spinning sanding pad.
- Remove material or debris from the area that might be ignited by sparks from sanding metal.
- On stationary sanders, maintain a 1/16 inch maximum clearance between the table and the sanding disc or belt.

Before Sanding...

Before working with a sander, make sure the tool and its accessories are in proper working order. Failure to do so may increase your risk of injury.

- Adequate ventilation of your work area is very important when using any type of sander. The use of exhaust type systems or bag collection is also recommended. Dust can explode if the concentration becomes too great. Wood dust and the finishes from woodwork are very combustible.

- Do not use the dust collection bag when sanding metal. Using the dust collection bag when sanding metal creates a fire hazard, which could damage the tool and lead to serious personal injury.
- Be sure that there are no cracks or breakage on the sanding pad before use.
- Before connecting the sander to the power supply or installing the battery, be sure the switch and switch lock (if provided) are in the “OFF” position. If not, the sander will start immediately and could result in injury.
- Keep power supply and cords from entanglement with the moving parts of the sander. Damaged cords can result in an electrical shock.
- Do not work with a faulty tracking belt sander. Stop using it until the problem is fixed.
- When adjusting the tracking of a portable belt sander, be sure that the sander is supported and positioned properly to avoid accidental contact with yourself or nearby objects.

While Sanding...

- Always keep your body well clear of moving parts such as belts, pads and pulleys.
- Hold portable sanders firmly with both hands. Never lock a portable sander in the “ON” position when the job may require stopping the sander quickly, such as using a sanding disc on a car fender. The rotating disc could get jammed and cause injury.
- It should never be necessary to force a portable sander. The weight of the tool applies adequate pressure. Forcing too much pressure can cause stalling, overheating of the tool, burning of the workpiece, and possible kickback of the tool or workpiece.
- If sander is equipped with a dust bag, empty it frequently and when you are done sanding. Spontaneous combustion may result from a mixture of some wood finishing chemicals with dust particles. Be extremely careful of dust disposal, as materials in fine dust may be explosive.

When Done...

- When you are done sanding, switch the tool to the “OFF” position and hold the tool motionless until the sanding disc comes to a complete stop. Never try to remove sandpaper while the sanding pad is still rotating.
- Never lay down the portable tool until the sanding pad or belt has come to a complete stop. The spinning pad or belt may grab a work surface and pull the tool out of your control.
- Unplug or remove the battery, clean and store the tool in a safe, dry place after use.

Always Remember...

With portable sanders, be careful not to expose the tool to liquids, or to use in damp, wet locations.

NOTICE

The contents are not meant to be, nor should they be considered, an absolute or complete presentation of the safety measures and procedures that relate to using the power tools covered. Obviously every possible application cannot be foreseen. This brochure's purpose is to highlight only some important safety and safety related information compiled from the experience of Institute members and other reliable safety oriented sources. Individual manufacturers' tool operator's manuals, shipped with tools and accessories, are recommended as a final source for proper procedures for specific tool usage.