

TEACHING SAWS I

Saws account for a large share of power tool accidents. The very nature of high-speed, super sharp blades can produce severe injuries. Base your safety training on two central points: the potential hazards and how to avoid injury.

A well-proven fact in the use of saws and other cutting tools is that guards are critical to safety. Modern guards provide essential protection without hindering the tool's capacity to do its job in any way. If your students have been told otherwise, they've been dangerously misinformed. It's vital that you correct them.

Properly functioning guards respond to emergencies by providing an immediate barrier between the operator and high-speed cutting edges. They also serve to contain sawdust, chips and other debris that can be thrown toward the operator. They simply must be used for each and every operation. Yet, the use of guards alone is not enough. Guards must still be combined with proper setup and tool operation to assure the operator's safety.

One of the most serious issues in learning to use power saws is averting kickback. That's the subject of this first saw lesson.

Refer To...

Safety is Specific, Sections on:

- ▶ [Circular Saws](#)
- ▶ [Miter Saws](#)
- ▶ [Table Saws](#)
- ▶ [Kickback in Table Saws](#)
- ▶ [Portable Circular Saws](#)
- ▶ [Kickback in Portable Circular Saws](#)
- ▶ [Radial Arm Saws](#)
- ▶ [Kickback in Radial Arm Saws](#)
- ▶ [Reciprocating Saws](#)
- ▶ [Jig/Saber Saws](#)
- ▶ [Stationary Band Saws](#)

Refer to...

Safety DVD's on:

- ▶ [Circular Saws](#)
- ▶ [Miter Saws](#)
- ▶ [Table Saws](#)

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Refer to...

- ▶ **Safety is Specific**, Section on Circular Saws.

Lesson Suggestion . . . Attack Kickback

Objective: To teach students the causes of kickback and the measures to take to avoid it.

Materials/Requirements: **Safety Is Specific**, the **Circular Saw Safety DVD**, the **Miter Saw Safety DVD**, the **Table Saw Safety DVD** and access to a shop equipped with a variety of power saws and stock.

What To Do: Have your students read the paragraphs on kickback that appear in **Safety Is Specific**. (Copy these pages for your students if they do not have their own booklets). Also review the

- ▶ **Circular Saw Safety DVD**, the **Miter Saw Safety DVD**, and the **Table Saw Safety DVD**.

As a class, compile lists of the various causes of kickback. Organize your lists into three categories: problems with stock, problems with the saw, problems with the set-up and the operator's procedure.

Ask your students to suggest what precautions they can take to prevent kickback. What factors, if any, are beyond their control?

Finally, take a tour of your shop to inspect the equipment and stock on hand. Examine all saw blades - are any warped, cracked, dull or dirty? Are all properly aligned? Is any of the stock pitchy, knotty or warped? Discuss guards around the shop. Point out what effect each part or portion of the guards has on the causes of kickback. Are any conditions or materials present that might invite kickback? Ask your students if they would be comfortable using any of the stock or equipment on hand. If not, ask the students to note what conditions should be addressed.