



Circular Saw Safety Video Lesson Plan

Presented by the
manufacturer members
of the Power Tool Institute

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CIRCULAR SAW SAFETY VIDEO LESSON PLAN

1. Introduce the video by instructing the class that it covers seven areas for the safe use of circular saws.
 - Workplace and attire considerations.
 - Saw in good working order and properly set up.
 - Blade considerations.
 - Securing work piece and making the cut.
 - Making common cuts.
 - Controlling kickback.
 - Finishing your work.
2. Encourage the students to note the main points in each section.
3. Show the video.
4. Have the class recount as many of the main points as they can.
5. Use the outline provided here to fill in any of the points they missed.

Completely read the operator's manual before using the saw.

Workplace and Attire Considerations

Create a work area free of hazards.

- Clean and neat and free of clutter.
- Well lit.
- Away from explosive atmospheres.
- Dry.
- Free of children, pets and other visitors.
- Pay attention to attire.
- No loose hair - tie it back.
- No loose or baggy clothing.
- No loose jewelry.
- Always wear safety glasses. Look for the ANSI Z87.1 mark. Regular glasses are not adequate as safety glasses.

Saw in Good Working Order and Properly Set-up

- Cord in good condition
- Lower guard operates freely.
- Switch operating properly.
- No broken or misaligned parts on the saw.
- Cord free and clear throughout the entire run of the cut.
- Make sure the switch is off before plugging in the saw.
- Only use blade washers and bolts supplied with the saw.
- Never run the cord through water.
- Do not alter the plug in any way.
- Unplug the saw or remove the battery pack before changing the blade or making any adjustments.
- Adjust the depth of the cut so no more than the height of a blade tooth protrudes through the wood being cut.
- Make sure all adjustments are tight before plugging in the saw and starting the cut.

Blade Considerations

- Use correct blade for application.
- Use right size blade.
- Use sharp and clean blades.
- Use a blade with a speed (RPM) rating equal to or greater than the RPM rating on the saw.
- When changing a blade always unplug the saw or remove battery.
- Use the blade wrench that is provided with the saw and make sure it is removed from the saw before restarting the saw.
- Recheck the lower guard for free operation after changing the blade and before plugging in the saw.

NEVER CLAMP A SAW IN A VISE OR MOUNT IT IN ANYWAY TO MAKE IT OPERATE LIKE A TABLE SAW.

Securing Work Piece and Making the Cut

- Stable surface.
- Use clamps.
- Avoid body contact with grounded surfaces.
- Plan cuts to avoid knots.
- Do not overreach when using the saw.
- Stand beside the saw not behind the line of cut.
- Keep both hands on the saw. "If both hands are on the saw, they cannot get cut."
- Support the largest part of the saw shoe on piece of work that is not being cut off.
- Wait until the blade is up to full speed before advancing it into the work.
- Pay attention to what the saw is telling you. If it starts to slow down and bind, back off the pressure to avoid a kickback.
- Allow the saw to come to a complete stop before removing it from the work piece or removing either hand from the saw.

Making Common Cuts

Cross Cut

- Support the largest part of the saw shoe on the part of the wood that is not being cut off.
- Hold the saw down on the work.
- Make sure the blade has come to a complete stop before removing it from the work.

Rip Cut

- Maintain a steady pace without straining the motor. Listen to what the saw tells you.
- Use a straight edge guide or rip fence if possible.

Pocket Cut

- A cut that does not begin at the edge of the material.
- Raise the lower blade guard, support the saw on the front edge of the shoe and slowly engage the running blade into the work.
- As soon as the saw is into the work, release the lower guard lift lever and continue to control the saw with both hands.
- When making pocket cuts into walls be sure to avoid cutting plumbing or electrical wiring.

Controlling the Kickback

Single Biggest Problem

A kickback occurs when the saw blade binds up in the work and the power in the saw throws the saw up out of the work and back along the line of cut.

Many things can cause a kickback:

- Piece being cut off deflects and binds blade.
- Knots.
- Nails.
- Green, wet or resinous wood.

If a kickback occurs:

- Release the trigger.
- Hold the saw motionless.
- Hold onto the saw with both hands until the blade comes to a complete stop in the work.

When restarting the saw, make sure the blade is in the center of the kerf and the teeth are not in contact with the wood to be cut.

Finishing Your Work

- Unplug the saw or remove battery.
- Perform cleaning and maintenance described in operator manual.
- Store in safe, dry place away from children.
- When saws need service have it done at an authorized service center.



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