# CIRCULAR SAW SAFETY WARNINGS

## **Cutting procedures**

1. DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.

2. Do not reach underneath the workpiece. The guard cannot protect you from the blade below the workpiece.

3. Adjust the cutting depth to the thickness of the workpiece. Less than a full tooth of the blade

teeth should be visible below the workpiece.

4. Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade

binding, or loss of control.

5. Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.

6. When ripping, always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.

7. Always use blades with correct size and shape (diamond versus round) of arbour holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

8. Never use damaged or incorrect blade washers or bolt. The blade washers and bolt were specially designed for the saw, for optimum performance and safety of operation.

#### Kickback Causes And Related Warnings

— kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator;

— when the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;

— if the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

1. Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.

2. When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.

3. When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.

4. Support large panels to minimise the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

5. Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.

6. Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.

7. Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

8. ALWAYS hold the tool firmly with both hands. NEVER place your hand, leg or any part of your body under the tool base or behind the saw, especially when making cross-cuts. If kickback occurs, the saw could easily jump backwards over your hand, leading to serious personal injury.

9. Never force the saw. Push the saw forward at a speed so that the blade cuts without slowing. Forcing the saw can cause uneven cuts, loss of accuracy, and possible kickback

#### How To Use A Circular Saw

For a basic cut:

- Measure and mark the cut line.
- Clamp the material firmly to a workstation.
- Attach the appropriate blade to the saw.
- Set the blade depth 1/4-inch below the material you are cutting.
- Confirm the bevel angle.
- Plug the saw's cord into a power source or attach its battery.
- Rest the saw shoe on the edge of the material and near the cutting line.
- Lift the blade guard.

- With the blade next to but not touching the workpiece, press the lock switch and pull the trigger to get the saw to full speed.
- Keep the shoe firmly on the surface and ease the saw forward to the cutting line while keeping the trigger engaged.
- Guide the saw along the scrap side of the cutting line, keeping the shoe flat
- Let the saw do its work. Pushing with too much force can strain the motor.
- Release the trigger to stop the blade when the cut is complete, then lift the saw and place it on the workbench.

### **Circular Saw Cutting Tips**

- When appearance matters, make cuts with the good side facing down, as circular saws can splinter the wood on the top side.
- Making your cut line on masking tape can reduce splintering.
- Start over if you see that you've veered off from the cut line instead of trying to curve your way back on track.
- Don't clamp both sides of a cut.
- For efficiency and safety, set the blade depth no more than 1/4-inch below the thickness of the board.