

Carpentry & Building Construction

Chapter 5 Power Saws

Section 5.1 Assessment Answers

1. Clamp it to a sturdy work surface.
2. It requires a special lubricant to protect the internal gears.
3. Only about 1/8" inch of the blade.
4. Loosen the wing nut or adjusting lever and tilt the saw to the desired angle; retighten the wing nut or lever; adjust the saw for the correct depth of cut; retract the blade guard until the blade engages the wood, then allow it to slide back into position; make the bevel cut freehand or guide it with a saw protractor.
5. Maintenance steps include: Inspect blade guards frequently. Never use a saw with a damaged or missing blade guard. Check that the baseplate is straight. Make sure the baseplate is perpendicular to the blade. Check the alignment of the plate to ensure that it is perpendicular to the blade and make adjustments as needed.

Section 5.2 Assessment Answers

1. Facing up.
2. A push stick.
3. Support the stuck using either a roller stand or a support table.
4. Unplug the saw. Remove the throat plate. Select a wrench to fit the arbor nut. Turn the nut clockwise to loosen it. Hold a piece of scrap wood against the blade to keep the arbor from turning. Remove the nut and the collar. Take off the old blade. Replace the throat blade.
5. A rip cut blade usually has as few as 24 teeth and is designed to move through hardwood with little effort and leave a clean cut with a minimum of scoring. A crosscut blade will usually have from 60 to 80 teeth and is designed to give you a smooth cut across the grain of the wood, without any splintering or tearing of the material.

Section 5.3 Assessment Answers

1. Conventional miter saws are the simplest and lightest and are suitable for crosscuts and miter cuts; a compound-miter saw has a head that be tilted at an angle to make a bevel cut; a sliding compound-miter saw is similar to a compound-miter saw but can cut wider stock.
2. A saw that can make compound cuts in one pass. It is often used when cutting crown moldings, handrails, and other trims that require complex fitting.
3. It allows the blade to be stopped quickly and reduces the chances of hand injuries caused when the blade spins freely.
4. Its ability to cross-cut unusually wide or thick stock.
5. 27°

Section 5.4 Assessment Answers

1. A saber saw or a bayonet saw. It is the best power saw for making curved or irregular cuts.
2. Only enough to keep the saw cutting at all times.

3. An electric drill to make a starting point for the saw.
4. Turn off the power switch and allow the saw to come to a stop before pulling the blade from the cut and putting the saw down.
5. Answers will vary.