

Bosch GCM12SD Miter Saw

Instructor Training Guide

Quick Overview

The Bosch GCM12SD is a 12-inch dual-bevel sliding compound miter saw with the Axial-Glide system. This guide covers essential safety and operation points to review with members before they use the saw.

CRITICAL SAFETY REMINDER

This saw does not differentiate between wood and flesh. It will cut anything in its path. Users must understand the severity of this tool before operating it.

Pre-Operation Safety Checklist

During checkouts, Volunteers should review these items with the member before they operate the saw:

- ☐ Safety glasses are on and properly fitted
- ☐ No loose clothing, jewelry, or long hair that could catch
- ☐ Members know the location of the power and safety switches
- ☐ Dust collection system is connected and functional
- ☐ Blade guard moves freely and returns to position
- ☐ Work area is clear of obstructions

Key Controls to Demonstrate

Members must understand these controls BEFORE making any cuts. Volunteers should demonstrate these items in every checkout:

Control	What to point out and demonstrate
Head Assembly Lock Pin	Locks saw head in down position. Must be released before use. Show how to unlock and re-lock for transport.
Miter Lock Knob	Secures miter angle. Must be tightened before cutting. Show how to loosen, adjust angle, and re-tighten.
Miter Detent Override	Push-button control for angles between detents. Demonstrate how to press and hold for fine adjustments.

Bevel Lock Lever	MUST be in locked (down) position before cutting. Show proper locking technique.
Bevel Range Selector	Controls available bevel angles. Explain the difference between left and right bevel positions.
Trigger with Safety	Thumb safety switches must be pressed before trigger will activate. Demonstrate proper grip and activation.

Dust Collection System

The saw and vacuum connect to a special outlet(yellow) on the wall (right side of saw).

- Set outlet to automatic mode if not already in that setting
- vacuum turns on when saw starts
- There is a 1-second delay when vacuum starts (feels longer)
- Best practice: Pull trigger, wait for vacuum, then begin cut
- Rubber deflector should remain attached for maximum dust collection
- Check that vacuum hose is clear of cutting path before starting

Proper Cutting Technique

Teach this sequence for slide cuts:

1. Position the workpiece

- Secure against fence with clamp if needed
- Support long pieces on both sides

2. Pull blade forward (while raised)

- Blade should be all the way forward before starting

3. Start the saw

- Press safety button and pull trigger
- Wait 1 second for vacuum to start

4. Make the cut

- Lower blade through workpiece
- Push slowly to back of cut

5. Release and return

- Release trigger while blade is still down
- Wait for blade to stop before raising head

Critical Safety Rules - Zero Tolerance

Students must follow these rules without exception:

Volunteers should review the following and members should acknowledge that they understand them.

NEVER NEVER NEVER clamp or hold workpiece on BOTH sides of the blade

One side **MUST** be free to move or the blade can bind and kick back violently.

NO cross-handed cuts

Cross-handed cutting puts hands in the blade path.

Hands must be clear of blade path before starting

Verify before each cut that the blade will not contact hands, fence, clamps, or anything except the workpiece.

Wait for blade to stop completely before raising head

The electric brake stops the blade quickly, but users must still wait for complete stop.

Bevel lock lever **MUST be locked before cutting**

An unlocked bevel can shift during the cut, causing kickback or blade damage.

Common operator Mistakes to Watch For

- Starting cut with blade at back of travel (should be forward)
- Not waiting for vacuum to start (creates excessive dust)
- Forgetting to lock bevel or miter before cutting
- Raising blade before it stops spinning
- Not supporting long workpieces properly
- Attempting to cut small pieces without proper hold-downs
- Standing directly behind the blade (stand to the side)

Cutting Small Parts Safely

Small parts require special attention:

- Consider if the piece is too small to cut safely on this saw
- Always use clamps or hold-downs - never hold by hand
- Keep hands minimum 6 inches from blade

Daily Maintenance Checks

- ☐ Blade is sharp and free of damage
- ☐ Guard returns freely to closed position
- ☐ All locks and levers function properly
- ☐ Dust collection ports are clear
- ☐ Power cord is in good condition
- ☐ Table and fence are clean and square
- ☐ Vacuum system is emptied and functioning

Quick Specifications Reference

Motor	15 Amp, 4,000 RPM
Blade Size	12 inch diameter
Miter Range	52° left, 60° right
Bevel Range	47° left, 47° right
Detent Positions	Miter: 0°, 15°, 22.5°, 31.6°, 45°, 60°
Bevel Detents	0°, 33.9°, 45° (both directions)

Additional Resources

- [Bosch product page](#)
- [Miter saw Manual](#)

Remember: Safety is everyone's responsibility. When in doubt, stop and ask for help.