

OPERATION

⚠ WARNING To reduce the risk of injury, wear safety goggles or glasses with side shields. Always wait for the blade to stop completely and unplug the tool before changing accessories or making adjustments. Do not defeat the guards.

Using Face Boards (Zero Clearance Sub Fences)

There are face board mounting holes in the fences for attaching face boards. Face boards place distance between the fence and the workpiece, providing improved support for some workpieces. Workpiece splintering can be reduced by using face boards. As the width of the face board increases, the height of the workpiece which can be cut increases slightly (but the width capacity decreases slightly). Similarly, if you place a face board on the saw table and place a workpiece on top of the face board, you can cut a workpiece with greater width (but with less height).

Guards

The tool is shipped with both the upper and lower guard installed. The lower guard should cover the blade when the saw head is up and it should move freely and open automatically as the saw head is lowered into the workpiece. If the lower guard appears loose, sticks, or if it does not move to cover the blade when the saw head is up, tighten the guard bracket screws. If it still does not move freely, take the saw to an authorized service center for repairs. Do not attempt to open the guard further than the automatic action permits.

Select the Workpiece Carefully

Be cautious of pithy, knotty, wet or warped workpieces. These materials are likely to create pinching conditions. Workpieces that bow and pinch may result in kick back. Inspect for and remove nails before cutting. Always keep blades clean and sharp; otherwise the blade produces a narrow kerf and is likely to be pinched by the workpiece. This tool is not recommended for cutting ferrous metals such as iron and steel. See Applications for a more complete list of materials.

Support the Workpiece Properly

Always support the workpiece during operation. Otherwise, the workpiece may pull up and into the saw.

1. **Use the Fence:** Align the workpiece flush against the fence to provide a straight path for the saw blade. This will help eliminate the tendency for the blade teeth to bind. The fence can be used as a support for miter, bevel and compound cuts.
2. **Use a clamp:** Clamp the workpiece to the fence or base with a C-clamp.

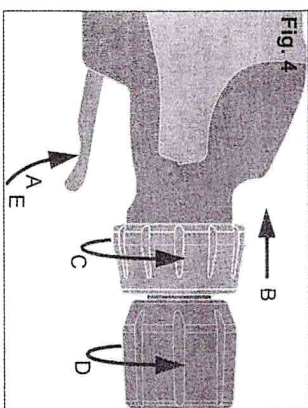
Support of Longer Workpieces

Longer workpieces need support along their full length. If you are using the saw on a level work bench, prop up the workpiece to a height of 4-3/4" from the bottom of the saw feet. There are also many alternative work tables specifically designed for miter saws that provide supports for all types of workpieces.

Adjusting the Miter Angle

The miter angle can be set using detents for commonly cut angles, as well as finely adjusted to any angle. Use the miter angle pointer to adjust the turntable to any whole degree across the miter range. The digital miter angle readout shows the selected angle.

1. Loosen the miter angle lock knob.
2. To set the miter angle, pull up on the detent lever and rotate the turntable to the detent angle closest to the desired angle. The saw cuts miter angles from 55° on the left to 60° on the right. Detents are available at 0°, 15°, 22.5°, 32.62°, 45°, and 60°.
3. Tighten the miter angle lock knob to use the miter angle set at the detent before making a cut.
4. To make a fine adjustment to the miter angle:
 - A. Pull up and hold the detent lever.
 - B. Push the fine adjustment ring forward until it locks to engage override.
 - C. Rotate the fine adjustment ring left or right until the desired angle is displayed on the digital miter angle readout. 1/4 turn = 1° change in miter angle.
 - D. Tighten the miter angle lock knob to secure the table before making a cut.
 - E. Pull up on the detent lever to release the fine adjustment ring.

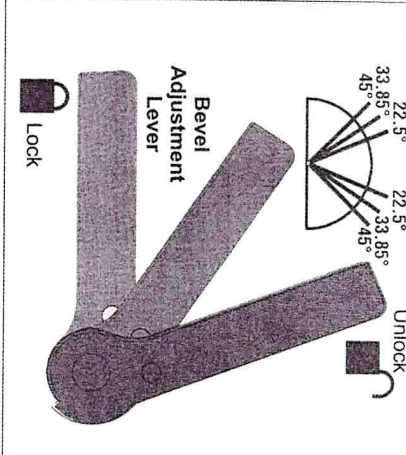


Adjusting the Bevel Angle

The bevel angle can be set using detents for commonly cut angles, as well as adjusted to any angle in between by using the bevel angle scale. The bevel mechanism also has several degrees of overtravel on both the left and right.

1. Unplug the tool.
2. To adjust the bevel angle, place one hand on the front handle for better control.
3. Using the other hand, lift the bevel adjustment lever:
 - A. To use pre-set detents, lift the bevel adjustment lever half-way up (until it "clicks") to move the saw head left or right, with stops at pre-set detents.
 - B. To freely move the head, lift the bevel adjustment lever all the way up to freely move the saw head across the bevel range.
 4. Pull or push the saw head to the desired angle using the bevel angle scale.
 5. Lock the bevel angle by pressing down the bevel adjustment lever before making a cut.

Fig. 5 Detent Angles

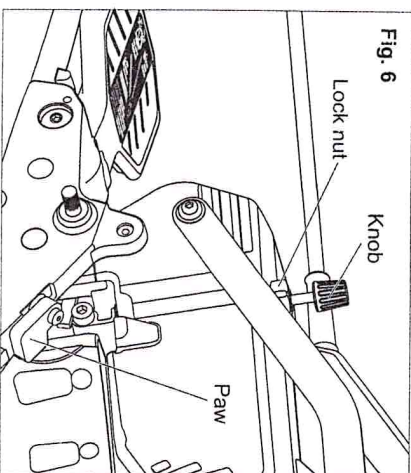


Adjusting the Depth of Cut

The depth of the cut can be adjusted for groove or rabbet cuts.

1. Unplug the tool.
2. To set the depth of cut, swivel the depth stop paw toward the front of the saw.
3. Lower the saw head to the desired depth of cut.
4. Rotate the depth stop adjustment knob until it contacts the paw. Lock in the depth using the lock nut.
5. Plug in the tool and make a test cut to verify the depth of cut is correct.
6. To remove the depth of cut limit, loosen the lock nut by turning counterclockwise and swivel the paw away from the front of the saw.

Fig. 6



Adjusting the Fences

1. Loosen the fence lock knobs.
2. The left side fence can slide side-to-side to the desired position to allow for a left bevel or left compound miter cuts.
3. The right side fence can be removed for a right bevel or right compound miter cuts by pulling the fence up.
4. Always position the fences properly for maximum work support.

5. Tighten the fence lock knobs securely before making a cut.

NOTE: If either fence has any movement forward to backward, tighten the fence set screw, located on the back of each fence slot.

Lights

Use the on/off switch to turn on the turntable lights before making a cut. Turn off the lights when cutting is complete.

⚠ WARNING To reduce the risk of injury, do not rely on the brake as a safety feature. Always wait until the blade stops completely before allowing anything near the blade.

⚠ WARNING To reduce the risk of injury, make sure all adjustments are securely locked before making a cut.

Starting and Stopping the Tool

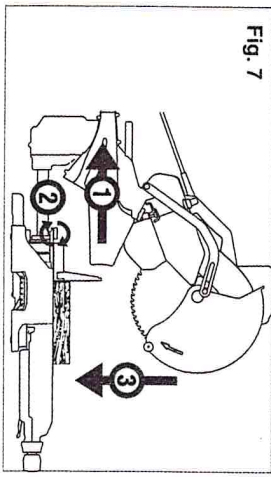
Always hold the trigger handle firmly because the starting and stopping action of the motor may cause the handle to move up or down slightly. Always secure the turntable by tightening the miter angle lock knob.

1. To start the motor, pull the trigger.
2. To stop the motor, release the trigger.

Making a Chop Cut

The sliding mechanism can be locked to use the saw for chop cuts (cuts not requiring the use of the slide mechanism). Cut workpieces with chop cuts whenever possible. A chop cut is always faster and easier to make than a sliding cut.

Fig. 7



1. Slide the saw head all the way back (1).
2. Tighten the slide rail lock (2).
3. Plug in the tool. Raise the saw head completely.
4. Select the desired angles following the steps in "Adjusting the Miter Angle" and "Adjusting the Bevel Angle".
5. Place the workpiece on the turntable and line up the cut.
6. Support the workpiece using any of the methods described in "Support the Workpiece Properly".
7. Start the motor. Wait a few seconds for the blade to reach full speed. Then gently lower the saw head into the workpiece all the way through the cut (3).
8. Always allow the saw to do the work. Forcing the tool may stall or overheat the motor.
9. After the cut is complete, release the trigger and

wait for the blade to stop completely. Then gently raise the saw head and remove the workpiece. Always unplug the tool before retrieving loose cut-off pieces from inside the guard area.

Making a Sliding Cut
Wider workpieces can be cut using the sliding mechanism.

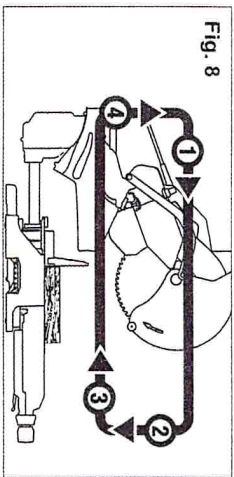


Fig. 8

WARNING

Do not cut stone, brick, concrete, or ferrous metals (iron, steel, stainless steel, or alloys of these metals) with this saw. Do not use abrasive wheels with this saw. Dust created by cutting these materials and/or using abrasive cut-off wheels can injure the blade guard and possibly cause personal injury.

Recommended Materials and Applications

The following materials can be cut with the slide compound miter saw. There are many types of saw blades available. Always use the proper blade for the particular material and application.

- **Wood** - solid wood, plywood, particle board, MDF (medium density fiberboard), HDF (high density fiberboard), melamine laminated particle board, formica laminates, hardboard (massonite).
- **Plastics** - PVC, CPVC, ABS, solid surfacing materials (such as Corian®), and other plastic materials.
- **Nonferrous Metals** - aluminum, brass, copper, and other non-ferrous materials.

Cutting Non-Square Materials

Cutting Round (Cylindrical) Materials
"V" shaped blocks can be used to support round materials like closet rod and plastic pipe.

Aluminum Sash and Other Channel Type and Materials

Aluminum sash material can be supported with blocks to prevent it from deforming while it is being cut.

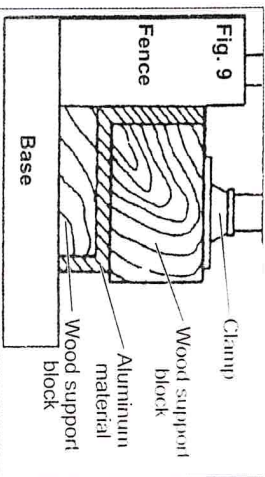


Fig. 9

APPLICATIONS

1. Make sure that the slide rail lock is loose and that the saw head moves freely back and forth.
2. Select the desired angle following the steps in "Adjusting the Miter Angle" and "Adjusting the Bevel Angle".
3. Place the workpiece on the turntable and line up the cut.
4. Raise saw head and pull it out OVER the workpiece WITHOUT cutting (1).
5. Start the motor. Wait a few seconds for the blade to reach full speed.
6. Press down on saw head (2).
7. Push saw through the cut (3).
8. After the cut is complete, release the trigger and wait for the blade to stop completely. Then gently raise the saw head (4) and remove the workpiece. Always unplug the tool before retrieving loose cut-off pieces from inside the guard area.

Miter Range	Miter Detents (Stops)
0° to 55° Left	0°, 15°, 22.5°, 31.62°, 45° Left
0° to 60° Right	0°, 15°, 22.5°, 31.62°, 45° Right
Bevel Range	Bevel Detents (Stops)
0° to 45° Left	0°, 22.5°, 33.85°, 45°, 48° Left
0° to 48° Right	0°, 22.5°, 33.85°, 45°, 48° Right
Base Molding Capacity	Nested Crown Capacity
6" at 0°	6-5/8"
6" at 45° Left and Right	

Two Methods for Cutting Crown Molding

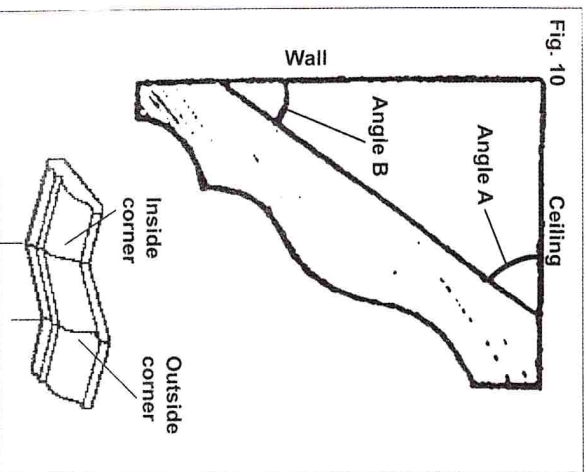


Fig. 10

The angles created on a piece of crown molding that fits flat against the ceiling and wall will, when added together, equal 90° (A + B = 90°). The most common crown molding angles are:

- 52°/38°: A 52° angle against the ceiling (A) and a 38° angle against the wall (B). The miter saw has special miter settings at 31.6° left and right and a bevel setting at 33.9° to use when cutting 52°/38° crown molding flat on the miter saw table. These settings are identified with a diamond mark.
- 45°/45°: A 45° angle against the ceiling (A) and a 45° angle against the wall (B). The miter saw has special miter settings at 35.3° left and right and a bevel setting at 30° to use when cutting 45°/45° crown flat on the miter saw table. These settings are identified with a black circle.

NOTE: Even though all of these angles are standard, rooms are very rarely constructed so the corners are exactly 90°. You will need to "fine tune" these settings and make necessary adjustments to the cutting angles.

Cutting Crown Molding Flat on the Miter Saw Table
The advantage of cutting crown molding flat on the table is that it is easier to secure the molding at the correct cutting position. Also larger pieces of crown molding may be cut laying flat on the miter saw table.

1. Set the bevel and miter angles using the Crown Molding Miter Angles chart. Tighten the miter lock knob and the bevel lock knob.
2. Using the Positioning section below, correctly positions the molding.

NOTE: Always make a test cut on scrap material to confirm all angles are correct.

3. Make the cut according to "Making a Chop Cut".

Cutting Crown Molding Angled Against the Fence (Nested - in position)

Always use a crown molding fence when cutting crown molding angled against the fence. When cutting crown molding angled against the fence does not require bevel settings. Small changes in the miter angle can be made without affecting the bevel angle. When using this method the saw can be quickly and easily adjusted for corners that are not 90° (square).

Positioning Standard (U.S.) crown molding with 52° and 38° angles (set bevel angle to 33.85°)

Left side, inside corner

1. Top edge of molding against fence
2. Miter table set right 31.62°
3. Save left end of cut

Right side, inside corner

1. Bottom edge of molding against fence
2. Miter table set left 31.62°
3. Save left end of cut

Left side, outside corner

1. Bottom edge of molding against fence
2. Miter table set left 31.62°
3. Save right end of cut

Right side, outside corner

1. Top edge of molding against fence
2. Miter table set right 31.62°
3. Save right end of cut

Standard (U.S.) crown molding with 45° angles (set bevel angle to 0°)

Left side, inside corner

1. Top edge of molding against fence
2. Miter table set right 45°
3. Save left end of cut

Right side, inside corner

1. Bottom edge of molding against fence
2. Miter table set left 45°
3. Save left end of cut

Left side, outside corner

1. Bottom edge of molding against fence
2. Miter table set left 45°
3. Save right end of cut

Right side, outside corner

1. Top edge of molding against fence
2. Miter table set right 45°
3. Save right end of cut