

Kushed Procedures

Slide Compound Mitre Saw

W2



Eye and ear protection is vital

The sliding mitre saw features rails that allow the blade to move forward and backward. This means that the sliding mitre saw can handle much wider materials than your basic mitre saw or compound mitre saw. This is the big advantage that you get with the sliding mitre saw, that it can handle much larger materials.

These saws have a high risk profile with potential for kickback. Safe operation must be fully understood and all precautions exercised.



The Shed provides items such as welding masks and gloves.

Members are required to provide their own footwear, eyewear, hearing protection and masks.

Safety

This is a very high priority for our Shed members. There are some aspects that are mandatory under our insurance policies and some which the The Shed requires members to adhere to for everyone's benefit.

The Shed Safety Induction

It is a requirement of attendance at The Shed that members have reviewed the Safety Induction Presentation

Personal Protective Equipment

This is required in various forms depending upon the equipment being used or the activity being undertaken.

Protective eyewear is always mandatory when using machinery.

The Shed schedules a Coordinator and a First Aid Safety Officer for each day of attendance and their safety directions are final and must be adhered to.



Makita LS1017

Key Features of Slide Compound Saw

- Sliding Compound Saws are 'cut-off or 'docking' saws. This sliding compound saw acts as a drop down saw which travels on sliding guide rails. For certain operations, it is quicker and safer than a circular saw. Timber sections can be crosscut, mitred or cross bevelled and housed
- Wider work (up to 90mm high x 300mm wide) is held firmly against the fence and onto the table, and the saw carriage pulled towards the operator. The saw is then started and brought up to full speed, lowered and the blade pushed through the timber (slide or push cutting).
- Narrower work (up to 90mm high and 70mm wide) should be cut using a drop saw action without sliding the saw carriage out from its fully retracted position (press cutting).
- The slide lock can be used to assist this operation. To use the slide lock, a hand screw on the right of the saw is tightened.
- Check with a coordinator when cutting lengths shorter than 70mm



Makita LS1013

- The 10" size of the saw is determined by the diameter of the blade. The saw is fitted with a battery powered laser guide to indicate the line of cut.
- The head of the saw can be rotated on the plane of the table (bevel angle) for mitre cuts or rotated on the axis of the slide mechanism (tilt angle) for angle cuts. These settings may be used in conjunction with each other to achieve a compound angle cut. The saw also has the option of using an adjustable depth stop on the left side of the saw for trenching-type cuts.
- The saw table is extended on each side with wooden supports long enough to support long lengths of timber. The fence runs the full length of the table and is firmly fixed.
- The blade guard must move upwards as the blade is lowered and should drop down feely when the cut is finished. It should only be raised by the mechanical linkages and never by hand. The guard also directs the sawdust to the entrainment system. Blades are tungsten carbide tipped combination crosscut saw blades for accuracy and long life.



Safety First

1. Eye and ear protection are required when operating a mitre saw.
2. Don't wear gloves, loose clothing, jewellery, or any dangling objects when operating a mitre saw.
3. All guards must be in place and operating. If a guard seems slow to return to its normal position or hangs up, adjust it or repair it immediately.
4. Unplug or lockout power to the mitre saw when making repairs or adjusting blades and guards
5. Hands and fingers must be kept clear of the blade by at least 15 cm.

Safety & Procedural Issues

Before the Cut

- If in doubt about the operation you are about to do, seek a Coordinator's assistance. Blade changes and major maintenance (including laser cleaning and battery replacement) should only be carried out by an experienced Coordinator (NB the spindle thread is a left-hand thread). Always ensure the machine is turned off at the wall outlet before making adjustments.
- The machine and work area should be clean and free of wood chips and other obstacles. This especially applies to the slot in the kerf board.
- Timber to be cut must be free of loose knots, cracks and metal objects.
- Long lengths of material should be held firmly against the fence with the adjustable clamp.
- Never rely on the accuracy of the saw angles without testing them with a try square or sliding bevel which is set to the desired angle.
- Bowed material should be cut with the bow against the table or fence to avoid jamming the blade. Seek coordinator advice if you are not completely certain.



We have just one set of eyes and ears

- If making trench cuts where the depth-stop is used, it may be necessary to use a clamped packing strip to bring the timber forward so that the back edge is aligned with the axis of the blade when the saw is pushed fully forward (retracted). This ensures the cut has full depth all the way across rather than being upswept at the back near the fence. The width of a trenched work-piece is limited by the forward alignment of the blade when the saw is fully extended.
- Always return the “stopper arm” on left to full depth setting when finished trench type cuts.
- When duplicate lengths, or repetitive cuts are to be made, a “stop” can be fixed to the fence with the measuring done from a tooth on the saw blade which is set in the direction of the stop. It is preferable to have the stop on the left of the blade so that the waste is free to move away to the right. This also prevents having the clamping device foul the carriage movement of the saw. The measured length to be cut should be clamped to prevent it wedging between the blade and “stop”.
- Timber which too small to hold firmly in place or could jam when cut should not be cut on this saw.



Safety First

- Wear PPE to protect the eyes such as safety spectacles.
- Wear PPE such as a dust mask even though there is a dust entrapment system
- Do not wear loose clothing, especially long sleeves and neck ties.
- Never attempt to cut “freehand”.
- If cutting narrow pieces of timber, a drop saw action is preferable to pulling the saw out before lowering it, otherwise the upward moving teeth on the front of the blade can catch the front edge of the timber and throw it upwards rather than pushing it back towards the fence. If the saw guide rails have not been locked, a firm inward pressure is required on the saw-handle to prevent kick back.
- Only ever cut one piece of timber at a time unless multiple pieces are firmly fixed together and well clamped.
- Do not attempt to cut round stock unless it is very securely clamped.
- Ensure the carriage movement is not obstructed by clamping devices before making a cut.
- Never look directly at the laser light source as it can damage eyesight.



Safety First

- Ensure rotational locking devices, for setting angles, are firmly done up before turning the machine on.
- Ensure the work is very securely held against the fence and down onto the worktable prior to and during the cut.
- The use of the adjustable clamp for this task may be assisted by the use of additional clamps or timber strips.

The operator should never stand directly in line with the saw blade. Hands should never be placed in line with the cut.

The saw should be operated with the hand that does not require the operator's body to be in line with the blade.

Keep fingers as far away from the saw mechanism as possible.

Never use the “lock-down” pin when cutting timber. It is only for transporting and storage of the machine.
(Beware, the lock down pin locks the carriage down but does not prevent slide action)

Ensure the shaft lock is not accidentally depressed when starting saw. (point 17, page 5 of Manual- the shaft is locked so that the blade retention left-hand threaded nut can be undone or tightened)

Observe that the slotted kerf board is undamaged, and that the blade is running true and on centre before making a cut. Never start the cut before the saw reaches its full speed otherwise the tungsten carbide teeth can be damaged and the cut cannot be controlled properly.



Safe operation

- Work is clamped
- Hands are clear

After the Cut

Material should never be left on the table away from the fence and in line with the saw blade.

- Off cuts should be picked up from the floor immediately to prevent a trip hazard.
- The saw should always be returned to a non-cutting position (retracted) after each cut is made. The saw should never be left unattended with the power switched on.
- Turn off tool and make sure blade is completely stopped before removing work-piece or making adjustments.
- When the sawing operation is finished, switch the saw, laser and the dust collector off and ensure that the saw blade is stationary before leaving the work area.
- At the end of work, the saw area should be vacuumed and any remaining scrap material properly disposed of.
- Ensure there is no debris in the slot.
- Return the machine to the standard state if you have modified angles of cut or you have set the cut depth.