

SAFE OPERATING PROCEDURE (SOP) & ACCREDITATION GUIDE	Makita Slide Compound Saw 10” with Laser	Accreditation Code	W2
<p><b>Safety Requirements whilst operating the Slide Compound Saw.</b></p>	<div data-bbox="475 286 619 430"></div> <p><b>Compulsory</b></p> <div data-bbox="475 488 619 631"></div> <p><b>When hazardous or significant dust likely</b></p> <p><small>Wear masks</small></p>	<div data-bbox="874 273 1008 416"></div> <p><b>If using the machine for extended periods or if high noise level</b></p> <div data-bbox="874 430 1008 573"></div> <p><b>Long and loose hair must be contained.</b></p> <div data-bbox="868 586 1002 730"></div> <p><b>Do not wear gloves unless handling blade during blade exchange</b></p>	<p><b>Use dust collector to which this machine is attached.</b></p>
<ul style="list-style-type: none"> <li>Knowledge of Key features of the Slide Compound Saw must be understood and clearly evident during competency assessment. Safe operation of the Slide Compound Saw must also be demonstrated.</li> <li>This document applies to the Makita Slide Compound Saw LS1017L and must be read in conjunction with the Manual <a href="http://www.makita.com.au/media/documents/manuals/LS1018L_manual.pdf">http://www.makita.com.au/media/documents/manuals/LS1018L_manual.pdf</a> (NB this manual for later model) and appropriate guides. Recognition of the main parts of the Slide Compound Saw is necessary in order to understand descriptions below. Reference to diagrams in the Slide Compound Saw Manual and observation of the actual machine may be useful information sources. Web tutorials are also an excellent informer eg <a href="http://www.youtube.com/watch?v=hTjtG5HsndQ">http://www.youtube.com/watch?v=hTjtG5HsndQ</a> (NB This tutorial is an excellent demonstration but it omits using the slide lock hand screw to prevent kickback or uplifting when cutting smaller section timber)</li> <li>A clear knowledge of our Shed's Safety Induction Package should also be evident and practised by aspiring Slide Compound Saw operators.</li> <li>Persons who have had a driver's licence renewal declined because of failure to pass their driver's competency test should not operate the Slide Saw unless special Accreditation approval has been given in negotiations with the Shed's management committee.</li> </ul>			
<p><b>Key Features of Slide Compound Saw</b></p> <ul style="list-style-type: none"> <li>Sliding Compound Saws are 'cut-off or 'docking' saws. This sliding compound saw acts as a drop down saw which travels on two sliding guide rails. For certain operations, it is quicker and safer than a circular saw. Timber sections can be crosscut, mitered, cross beveled, housed and dadoed (NB dado blades are not recommended for this saw – refer to Manual page 17).</li> <li>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).</li> <li>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 <u>slide lock should be used for this operation</u>. To use the slide lock, a hand screw on the right of the saw is tightened. (see page 14 of Manual for details of cutting procedures).</li> <li>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.</li> <li>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</li> </ul>			

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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 freely 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 entrapment system. Blades are tungsten carbide tipped combination crosscut saw blades for accuracy and long life.

## Safety & Procedural Issues

### Before the Cut

1. *If in doubt about the operation you are about to do, seek a Coordinator’s assistance.*
2. *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)*
3. Always ensure the machine is turned off at the wall outlet before making adjustments.
4. 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.
5. Timber to be cut must be free of loose knots, cracks and metal objects.
6. Long lengths of material should be held firmly against the fence with the adjustable clamp.
7. 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.
8. Bowed material should be cut with the bow against the table or fence to avoid jamming the blade.
9. 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.
10. Always return the “stopper arm” on left to full depth setting when finished trench type cuts.
11. 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”.
12. Timber which too small to hold firmly in place or could jam when cut should not be cut on this saw.
13. Never attempt to cut “freehand”.
14. 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. (*Important - see page 14 of Manual for more details*)
15. Only ever cut one piece of timber at a time unless multiple pieces are firmly fixed together and well clamped.
16. Do not attempt to cut round stock unless it is *very* securely clamped.

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17. Ensure the carriage movement is not obstructed by clamping devices before making a cut.
18. Never look directly at the laser light source as it can damage eyesight.
19. Wear PPE to protect the eyes such as safety spectacles.
20. Wear PPE such as a dust mask even though there is a dust entrapment system (*see point 33, page 5 of Manual for information on harmful dusts*)
21. Do not wear loose clothing, especially long sleeves and neck ties.
22. The operator should never stand directly in line with the saw blade. Hands should never be placed in line with the cut.
23. The saw should be operated with the hand that does not require the operator's body to be in line with the blade.
24. Keep fingers as far away from the saw mechanism as possible.
25. 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*)
26. 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*)
27. 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.
28. Ensure rotational locking devices, for setting angles, are firmly done up before turning machine on.
29. **Ensure the work is very securely held against the fence and down onto the work table 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.

## Making the Cut

30. The saw should be lowered slowly and steadily whilst maintaining firm control of the cutting action. A firm forward pressure should be maintained to guard against kick back. (*see page 14 of Manual for full details*)
31. The blade should never be forced into the material. Allow the blade to cut at its own speed.
32. Material being cut should be held firmly against the fence and down onto the table at all times.
33. Off-cuts and sawdust **MUST NOT BE** removed from the table with the hands when the blade is rotating.
34. Where accuracy is required, make a trial cut on scrap material. This is particularly important when using the laser guide which may not be accurately set.

## After the Cut

35. Material should never be left on the table away from the fence and in line with the saw blade.
36. Off cuts should be picked up from the floor immediately to prevent a trip hazard.
37. 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.
38. Turn off tool and make sure blade is completely stopped before removing work-piece or making adjustments.
39. 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.

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40. At the end of work, the saw area should be vacuumed and any remaining scrap material properly disposed of.

<b>COORDINATORS' OPTIONAL CHECK LIST AND NOTES</b> <i>(Timber sections 60 x 40 &amp; 140+ x 19 suitable for the following demonstrations by Applicant)</i>				<b>INITIAL</b>	<b>DATE</b>
1. Carry out appropriate checks of saw prior to using it (including checking accuracy of blade angles for straight cut)					
2. Set up for straight cuts for both pieces of timber and demonstrate action of sawing small piece from end of each piece of timber					
3. Rotate head of the saw to a horizontal angle of 45 degrees and demonstrate cutting action on both timber pieces					
4. Swivel head to 60 degree tilt angle to horizontal and straight cut across piece of 60 x 40 timber					
5. Accurately cut three pieces of timber 60mm long from a longer piece of timber					
6. Set depth stop to cut half way through a sample piece of timber and cut a 20mm wide trench at 90 degrees to edge of timber					
7.					
8.					
9. Carry out normal procedures at completion of work					
<b>Version Date:</b>	13/6/2013	<b>Version Prepared by:</b>	K Callinan	<b>Version Authorised by:</b>	M Bailey
Please tick ONLY ONE of the boxes:					
<b>New Accreditation to be added to records</b>			<input type="checkbox"/>	<b>Confirmation of existing accreditation</b>	
<b>Accreditation seekers signature:</b>		<b>Date:</b>	<b>Accred Code:</b>	<b>1<sup>st</sup> Assessor's signature:</b>	<b>2<sup>nd</sup> Assessor's signature:</b>
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<b>Print Name:</b> .....				<b>Print Name:</b> .....	<b>Print Name:</b> .....

**NB** A copy of this document is to be completed and filed in the member's personal file at the Shed. Additional copies are available through email or hard copy by if requested. The member's Shed computer records and name tag will be amended when Accreditation is finalised.