LMCS – Safe Work Procedure
HAMMER K3 PANEL SAW

DO NOT use this equipment unless you have been instructed in its safe use and operation and have passed the safety accreditation

PERSONAL PROTECTIVE EQUIPMENT


Safety glasses must be worn at all times in work areas.


Long and loose hair must be contained.


Hearing protection must be worn.


Sturdy footwear must be worn at all times in work areas.


Close fitting/protective clothing must be worn.


Rings and jewellery must not be worn.

PRE-OPERATIONAL SAFETY CHECKS

- ✓ Locate and ensure you are familiar with all machine operations and controls.
- ✓ Ensure the machine, power cords etc. are in safe working condition.
- ✓ Check workspaces and walkways to ensure no slip/trip hazards are present and that no one will be harmed by you operating the machine.
- ✓ Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty.
- ✓ Ensure table and work area is clear of all tools, off-cut timber and sawdust.
- ✓ Check the blade is free to rotate.
- ✓ Start the dust extraction unit before using the machine.

OPERATIONAL SAFETY CHECKS

- ✓ Allow the saw blade to obtain maximum speed before making a cut.
- ✓ When using the table slide, make sure the rip fence is at lease 200mm clear of offcuts or removed entirely
- ✓ Do not rip or crosscut boards shorter than 400mm.
- ✓ Only rip boards that have a flat edge to run along the fence, maintain a constant pressure against the fence and down on the table
- ✓ If ripping a board less than 200mm wide, use a push stick to guide timber past the saw blade.
- ✓ Always stand to one side of the line of cut.
- ✓ Keep your fingers a minimum of 100 mm away from the guard and use a push stick
- ✓ Before making adjustments, or clearing off cuts from the table, switch off the machine and wait until the blade comes to a complete standstill.
- ✓ Make sure someone “tails out” when ripping long material.

ENDING OPERATIONS AND CLEANING UP

- ✓ Switch off the machine when work completed.
- ✓ Leave the machine in a safe, clean and tidy state.

POTENTIAL HAZARDS AND INJURIES

- ⓘ Wood may catch or jam and be flung back violently.
- ⓘ Airborne dust.
- ⓘ Eye and hearing injuries.
- ⓘ Contact with blade at point of operation, potentially severe injuries.

DON’Ts

- ✘ Do not use operate equipment without wearing appropriate PPE.
- ✘ Do not use faulty equipment. Immediately report suspect equipment.
- ✘ Do not cut irregular stock, branches or wood with embedded nails or screws.
- ✘ Do not cut freehand.
- ✘ Do not cut pieces with shattered ends.
- ✘ Never remove off cuts or sawdust from the saw table while the saw is running.
- ✘ Never leave the machine running unattended.
- ✘ Do not use heavy pressure to a point the machine slows down audibly at a starkly reduced pitch.
- ✘ Do not use Dado blades. Instead cut multiple adjacent grooves.
- ✘ Do not cross cut against the Rip fence and use the cross cut fence instead. Ensure the clearance to the Rip fence is at least 100 mm more than the offcut from that cross cut.
- ✘ Do not adjust the stops of 90 and 45 degrees, that is considered maintenance, liaise with Shed Supervisor.
- ✘ Do not cut “free hand”. As a minimum the trimming shoe (fig 5.5) and the clamp must be used.
- ✘ Do not change blades that i9s considered maintenance, liaise with Shed Supervisor.

This SWP does not necessarily cover all possible hazards associated with this equipment and should be used in conjunction with other references. It is designed as a guide to be used to compliment training and as a reminder to users prior to equipment use.

This information is modified from Frontline Safety www.frontline.edu.au

Issued	Issued For	Prepared	Checked	Approved	Rev.
08.5.2022	Endorsement by Safety Com	A Oldham/C de Groot	Safety Com pending	Approved	0.3

LAKE MONGER COMMUNITY SHED

Safe Operating Procedures - Hammer K3 panel Saw

BACKGROUND INFORMATION & READING

This video will assist you in following safe work practices and is available from the Lake Monger Community shed.
https://s3.tidyhq.com/orgs/de5719c66911/storage/b0e97e8137678288e691c86946865ee1c21b01f2/original/PANEL-SAW-K3-COMPRESSED.mp4?1634439803

The video needs to be viewed prior to arranging an assessment.

FITNESS TO OPERATE THE PANEL SAW

Members are expected to refrain from working on these power tools and machines if they acknowledge their own level of physical ability inhibits them from doing so safely.
However, if assessors determine that a member has some level of physical impairment that makes it unsafe to use machines, they will have no option other than to assess the member as not having the capacity to do so safely.

You can still do your projects, just mark the timber and ask another shed member to cut/machine the timber for you. You are not compelled to cut the timber yourself and in this environment, you will easily find others that are more than able and willing to do the cutting for you.

GENERAL RULES & TIPS

- Generally, the minimum length of timber is 0.4m; the maximum length is 3.0m. Outside these boundaries, consult with the Shed Supervisor.
- If recycled material is used, all timber MUST be visually checked for nails and screws. After that the timber MUST also be checked with the metal detector. Processing CCA treated timber is not permitted.
- The tabletop (cast iron) surfaces need to be lubricated from time to time with Silver Glide.
- Rebating with DADO blades is **not** permitted at LMCS.
- No crossing of hands when using saw.
- The machine on the Eastern side has a large sliding table and has been set up for cross cutting (cutting under right angles with the grain of the wood) and sheet material. This machine should not be used for ripping as the blade installed is specifically for cross cutting.
- The machine on the Western side is set up for ripping (cutting along the grain) only and must not be used for cross cutting.
- The cutting width of the blades is typically around 3.0 mm and in some cases the operator needs to consider the width.
- Rebating (working without guard) MUST have 2 people to set up saw and one person to assist and watch. Consult with the supervisor before turning on the machine to ensure set up correctly.
- When timber is overhanging the feedout area by more than 500 mm a person needs to assist to arrange an adequate feedout.
- When commencing operation ensure dust extraction system is switched on either manually or automatically.

COMMON OPERATIONS ON THE K3 PANEL SAW

Refer also Sections 8 and 9 of the Hammer Manual

RIPPING (MACHINE ON WESTERN SIDE)

If the aim of the ripping is also to straighten and square the timber then the following should be observed:

- Eye the timber and place the concave side to the fence.
- If the timber is more than 2 mm concave and longer than 600 mm then take a straight length of timber and use that to extend the ripping fence. You should then slide the concave piece of timber in relation to the "dummy" fence.
- If the timber is rocking cease cutting and flatten the timber with the planer or jointer before re-attempting to rip the timber.

Tips:

a) If the timber is to be cut parallel after creating the straight edge turn it around and cut the opposite side. You would not need to use the dummy fence again. It is quicker than using the thicknesser and has a better prospect to keep the edges square.
b) If this cutting forms part of preparation of gluing boards together then do not run the sawn edges through the thicknesser. The finish of the saw cut is rougher than the finish of the thicknesser and that increased roughness improves the gluing strength.

The ripping blade should have 60 teeth or less, if you do not require maximum cutting depth then opt for the 250 mm blade as the machine will be stronger at a smaller diameter.

CUTTING SPEEDS

The speed of the arbour is fixed but using a 300 mm blade will increase the cutting speed and generally will improve the finish when cutting sheet materials. When cutting ply and MDF etc., a blade with 80 teeth or more will generally provide a better finish than a courser blade would.

Generally the saw blade should be set no higher than needed to cut the thickness you need. As a rule of thumb; set the blade higher only by approximately 12-15 mm than the thickness of the material you are cutting.

REBATING / GROOVING / NON-THROUGH CUTS

Remove the guard and set the height of the riving knife a hair less than the height of the blade. Use a push stick and do not put your hands near the blade.

Rebating can be handy to produce a groove or cutting out a part of a cross section. It is important to still use the riving knife. If the section of the piece of timber is rectangular then it is important to first cut the groove in the narrow section, thus reducing the risk of tilting the section as you cut out the timber to form the rebate. Otherwise a loss of stability can occur as the timber on the rebated side loses its attachment. If the wider section instead is on the flatbed and therefore is cut last, the effect of losing the support becomes much less noticeable.
Immediately after you finish rebating, raise the riving knife (that supports the guard) and re-install the guard.

CUTTING TIMBER OF THICKNESS GREATER THAN THE MAXIMUM DEPTH

This activity should be avoided and may require the cut to be made in conjunction with the use of the bandsaw. Please liaise with the Shed Supervisor before commencing with this activity.

SQUARING AND CUTTING OF SHEET MATERIAL (MACHINE ON EASTERN SIDE)

The panel saw is ideally suited to cut sheet material. Generally the crosscut fence is used and set up as per figure 9.13 (figure not shown) on the far side of the outrigger. The sheet is then cut square to the right side of the sheet in relation to the side that is set against the cross cut fence. Please ensure the ripping fence is well clear from the off cut by at least 100 mm. The next move is to set the ripping fence to the desired width and position the side of the sheet (that was against the

cross-cut fence) against the ripping fence. At the completion of the ripping cut, the sheet is now parallel and the side facing the operator is also square to the two long sides.

CROSS CUTTING (DOCKING) TIMBER (MACHINE ON EASTERN SIDE)

The panel saw is ideally suited to repetitively cut timber to length. Generally the crosscut fence is used and set up as per figure 9.13 (figure not shown) on the outrigger. Some people would find it easier to set the fence up on the near side on the outrigger table. It reduces the amount of gripping effort to keep the timber on the fence whilst cutting. The ripping fence is either moved away or removed completely during this operation.

CROSS CUTTING (DOCKING) TIMBER LENGTHS SHORTER THAN 250 MM

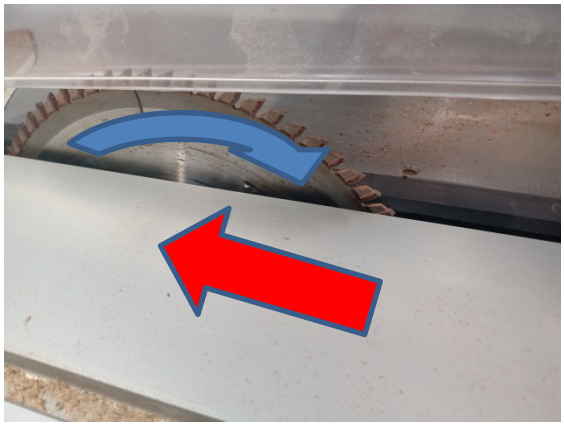
The panel saw is ideally suited to repetitively cut timber to short lengths, but extreme care is required. You are not allowed to hold pieces of timber, or any material, that are shorter than 250 mm when cross cutting. There are two recognised methods to cut shorter lengths:

1) Set up the cross cutting fence to the near side of the outrigger. Set up the ripping fence to the desired length say 100 mm. Then slide back the ripping fence back as shown on figure 9.8. The tailing edge of the fence must be in front of the blade so that the 100 mm is not in contact with the ripping fence at any time the crosscutting is taking place. The 100 mm long pieces would tend to clear the spinning blade and you can use the push stick to get them away far enough to retrieve them safely.
2) Set the crosscutting fence to the far side of the outrigger. Slide the ripping fence well away from the blade. Use a piece of timber of identical section say 500 mm long and set the dimension on the cross cut fence to 600 mm, keep this dummy piece in place. Use pieces of 350 mm long, or so, as stock. Ensure they already have one square edge. Then place that square edge of that stock piece against the dummy and then with another longer piece of timber keep the stock piece in place. Slide the table and perform the cross cut. Slide the table back and retrieve the 100 mm long piece safely. You can repeat this action and in this example cut three pieces out of your stock piece.

CHANGING SAW BLADE/SCORING BLADE.

At LMCS there are two panel saws. One is set up for ripping the other for cross cutting.

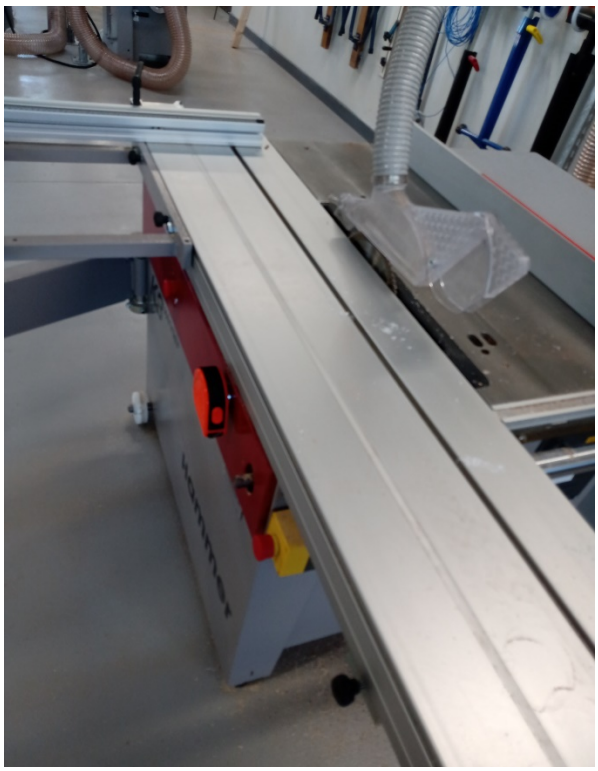
This arrangement alleviates the need to regularly change blades. Changing blades or adding scoring blades are considered maintenance activities and you must liaise with the Shed Supervisor



Note direction of feed (red arrow) and direction of rotation and teeth in blue.

Typical activities, refer also Sections 8 and 9 of the Hammer Manual

- The table and fence surfaces need to be lubricated from time to time.
- If you are found to cut material without the guard installed and/or the guard to be fully operational, you will be requested to immediately cease this activity and install the guard. If you fail to comply your competency will be revoked and you are no longer permitted to use the table saw.
- Generally the minimum length of timber is 0.4m; the maximum length is 3.0m. Outside these boundaries, consult with the Shed Supervisor.
- **Turn off power and remove plug at completion of work/cutting session.**



At a future stage the guards will be upgraded to incorporate flaps on both sides of the guards. In any case the guard must always be used and the height of the blade must be set no higher than material thickness plus 12-15 mm.	Both fences have been painted with a red stripe generally your hands/fingers must not be between the fence and blade in this area unless a distance of 150 mm of the blade can be maintained.