

LMCS – Safe Work Procedure

HAMMER PLANER THICKNESSER AND JOINTERS



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 and emergency stops.
- ✓ 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 with a piece of wood that the cutter can rotate.
- ✓ Start the dust extraction unit before using the machine.
- ✓ Check that you are feeding in from the correct side.
- ✓ Do not place your hands in the "Red Zones".

OPERATIONAL SAFETY CHECKS

- ✓ Plug in the machine.
- ✓ Allow the cutters to obtain maximum speed before making a cut.
- ✓ Place cupped boards with the concave side against the table.
- ✓ Plane with the grain. Hold the workpiece firmly and apply even feed rate.
- ✓ Stand to one side of the infeed table to avoid possible kickbacks.
- ✓ Set depth of cut and lock table. Never make a single cut greater than 2mm.
- ✓ Keep your fingers a minimum of 100 mm away from the guard and use a push stick or pad
- ✓ Make sure someone "tails out" when planning or thickening long material.

ENDING OPERATIONS AND CLEANING UP

- ✓ Switch off the machine when work completed.
- ✓ Reset all guards to a fully closed position after use.

- ✓ Leave the machine in a safe, clean and tidy state.

POTENTIAL HAZARDS AND INJURIES

- ⓘ Kickback: 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 surface irregular stock, branches or wood with embedded nails or screws.
- ✗ Do not put your hands any closer than 150 mm from the cutter head when it is rotating.
- ✗ Do not surface stock less than 300mm long by 20mm wide or 6 mm thick
- ✗ Do not plane stock with structural defects.
- ✗ Do not cut pieces with shattered ends.
- ✗ 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 change cutters, that is 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

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08.05.2022	Endorsement by Safety Com	A Oldham C de Groot	Safety Com pending	Approved	0.2

Safe Operating Procedures - Hammer Planer-thicknesser

BACKGROUND INFORMATION & READING

This video will assist you in following safe work practices:

<https://www.youtube.com/watch?v=st1Y8Pjngv8>

<https://www.youtube.com/watch?v=gMkZqrT8XfU>

<https://www.youtube.com/watch?v=epapUVDIDf4>

Videos need to be viewed prior to arranging an assessment.

FITNESS TO OPERATE THE PLANERS, JOINTERS AND THICKNESSERS

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

- 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.
- When commencing operation ensure dust extraction system is switched on either manually or automatically.
- After operation of the machines is completed ensure the feed-in has been disengaged.

COMMON OPERATIONS ON THE PLANER THICKNESSER



Hammer combination planer/thicknesser in planing mode. Note red zone on fence for location of fingers and green arrow for feed-in direction.



Hammer combination planer/thicknesser in thicknessing mode. Note green arrow for feed-in direction.

Refer also Sections 8 and 9 of the Hammer Manual

Adjustments of feed-in and feed out tables

If a change of adjustment of these tables is required you should contact the workshop coordinator as changing the feed-in and feed-out tables require a more advanced level of knowledge of the jointers. (This does not apply to adjusting the depth of cut on either of the machines. You have to observe a limit maximum of 2 mm.)

Jointing/Planing

As shown in the video the timber should be positioned with the flat or concave side facing down onto the table. You must keep your hands outside the “Red Zones” (these will be painted on the fences). The allowable maximum cutter depth is 2 mm, although 1 mm is strongly recommended. As soon as a surface is achieved, that has sufficient planed areas that can support the thicknessing process; cease jointing/planing. Use the freshly machined side of the timber and place it facing down on the table of the thicknesser. Keep running it through 1 mm at the time till a good finish is achieved. Then flip over the timber and thickness the side that was only planed. Continue that process till the required thickness and finish is achieved. Although it is good practice to machine with the grain, the larger machine at BCMS has a spiral cutter head. This type of cutter is less likely to damage the timber if not machined with the grain. As already mentioned above, squaring of boards is not permitted with the jointer. This action on this type of machine is more dangerous than using the table saw in ripping mode. This even goes further: **if the board has already a flat surface on one side, then do not use the jointer and proceed with thicknessing immediately with the flat side facing down!**

To get an optimal wear of the cutters, move the timber around by feeding it from different positions on the feed end.

Thicknessing

Before commencing operation of the thicknesser ensure that the feed-in has been engaged.

As shown in the video the timber should be positioned with the flat side facing down onto the table. You must not get your hands under the entire assembly. The maximum cutting depth is 2 mm. Although it is good practice to machine with the grain, the machinery at LMCS has spiral cutter heads and they are less likely to damage the timber if not machined with the grain. Flat sides must only be fed through one at the time.

If you have identical boards that need machining on the edge (already at least one of them squared with the saw), then you may feed through two or three at the same time but only clamping them with the grip of your hands. UNDER NO CIRCUMSTANCE must a clamp be used under the cutter head.

To get an optimal wear of the cutters, move the timber around by feeding it from different positions on the feed end.

As alternative to setting the cutting depth on the first cut, you can position the thickest piece of timber on the table with the cutter table wound down sufficiently so there is no contact with the feeders or cutter head. Then steadily wind the table up. The moment you hear the slightest engagement of the cutter, cease winding the table up. Let the material come through, once cleared, turn the wheel so that the table rises by 1 mm. Then commence thicknessing the boards.

- ✓ Make sure the guard is fitted and the flexible ducting does not obstruct feeding out of timber
- ✓ Unplug the machine and check for free rotation with a piece of timber.
- ✓ Do not exceed maximum 2mm depth of cut.
- ✓ Ensure in-feed table is clear of debris and free from gum or resin residue.
- ✓ Place cupped boards with the concave side against the table.
- ✓ Start the dust extraction unit before using the machine
- ✓ Machine with the grain. Hold the workpiece firmly and allow the automatic feeder to take the timber through.
- ✓ Stand to one side of the infeed side of the table to avoid possible kickbacks.

LAKE MONGER COMMUNITY SHED



- ✓ Before making any adjustments, switch off and wait for the cutter head to completely stop.
- ✓ Feed only one piece of timber at a time.
- ✓ Do not place your hands anywhere on the table.
- ✓ Make sure you are familiar with the disengagement mechanism of the power feed.



Planer-thicknesser in thicknessing mode. Note the feed-in engagement lever held by the operator's left hand.

Depth adjustment about 3 mm per turn, the machine in Lake Monger is fitted with a more accurate dial indicator. Generally avoid cutting more than 1 mm at the time.

Older style jointer:



Guard pivots away and must spring back.

Also note: the feed in direction in the green arrow, and the "Red Zone" painted on the fence by the manufacturer