



Bribie and District Woodcrafters Association Incorporated

Accreditation Policy and Safe Operating Procedures

**Members are required to review this document and be conversant with its contents
before accreditation can be undertaken.**

July 2024 Edition

This document provides general information only on the safe operating procedures associated with the use of Bribie and District Woodcrafters Association Incorporated's machinery and power tools.

All the general information in this document is provided in good faith, however, Bribie and District Woodcrafters (Woodcrafters) make no representation of any kind regarding the completeness of the information contained herein.

The information in this document should only be viewed as the learning starting point to becoming competent in the use of the machinery and power tools members choose to become accredited to use whilst attending Woodcrafters' workshops. Members must be accredited for a power tool or machine before they can use it unsupervised.

NOTE: The safe use of hand tools is not addressed in this handbook. Nevertheless, many of the safe operating procedures contained in this handbook can be applied to the safe use of hand tools. In that regard, members should familiarise themselves with the general safe operating procedures content of this handbook.

It is recommended that members inexperienced in the use and maintenance of hand tools seek assistance and/or instruction from qualified members before using these tools.



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RESPONSIBILITIES

Bribe and Districts Woodcrafters Association Inc. is responsible for providing an environment that warrants the safety and wellbeing of its members, and visitors to its facilities, by:

- ensuring trafficable areas and workshops are maintained in as tidy a condition as possible and free of trip and other hazards
- requiring members to keep the facilities tidy and clear by removing all waste materials and offcuts from machinery and power tools (collectively herein after referred to as equipment) and surrounds that are a result from their activities
- members having access to supplied personal protection equipment (PPE)
- ensuring supplies of Club PPE are maintained at an appropriate level and condition
- maintaining its facilities and equipment to ensure they are safe for purpose
- providing all members seeking accreditation with these *Accreditation Policy and Safe Operating Procedures* prior to the accreditation process taking place
- requiring that all operators of equipment are accredited and registered

Bribe and Districts Woodcrafters' Members are responsible for:

- being conversant with, and following, the policies and procedures contained in this document
- accepting responsibility for their actions whilst at the Club's facilities, or on any Club approved activity outside the Club environs
- assisting in maintaining a safe work environment
- providing and using their personal PPE, such as dust masks, safety glasses and face shields
- using only equipment that they have been accredited to use
- seeking the assistance of experienced members, even when accredited:
 - to gain experience on the particular item of equipment they have been accredited on
 - when they wish to use a technique with which they are not familiar
 - when they have not used equipment recently and might have lost some proficiency
- signing the attendance sheet and paying workshop fees on arrival at the Club's facilities, as well as wearing their name badge whilst on the premises
- reimbursing the Club for the cost of repairs to damaged equipment caused by that member's incorrect use of that equipment and by not complying with the "Accreditation Policy and Safe Operating Procedures" manual. Reimbursement to be determined by the management committee

FOR INSURANCE AND OCCUPATIONAL HEALTH AND SAFETY PURPOSES, IT IS ESSENTIAL THAT MEMBERS SIGN IN ON ARRIVAL AT THE CLUB'S FACILITIES AND BEFORE COMMENCING ACTIVITIES INVOLVING THE USE OF THE CLUB'S EQUIPMENT.



ACCREDITATION POLICY

Bribe and District Woodcrafters' (Woodcrafters) facilities contain woodworking equipment which, if not used correctly, could cause serious injury to the operator and/or bystanders, as well as damaging the equipment being used.

Woodcrafters have a duty of care to protect members and visitors to the workshop from harm. It does this by ensuring all equipment is safe for purpose and that all operators have been trained and accredited in their correct use.

Woodcrafters achieves the foregoing by requiring all members to comply with the safe operating procedures detailed below and associated accreditation policy.

No member is to operate equipment, unless they have been accredited to use that piece of equipment and have completed a supervised familiarisation period as deemed necessary.

A member is deemed to be formally accredited on equipment when the member has received instruction and passed hands-on practical training by an authorised Accreditation Officer and that Officer has signed the appropriate sections of the member's completed **Equipment Accreditation Assessment Form** specific to the equipment concerned, as well as the **Member's Accreditation Record** form.

IT IS HIGHLY RECOMMENDED THAT MEMBERS TAKE NOTES DURING THE ACCREDITATION PROCESS FOR USE WHEN COMPLETING THEIR ACCREDITATION FORMS AND FOR FUTURE REFERENCE.

Appointment of Accreditation Officers

Accreditation Officers are appointed by the Management Committee. They can be appointed in two ways:

- Trade/Occupational Appointment
The Committee appoints selected members to be Accreditation Officers in recognition of extensive trade/occupational experience.
- Woodcrafters' Mentor System
The Committee can appoint a member to be an Accreditation Officer after a period of guidance and assessment by a Mentor.

A Mentor is an Accreditation Officer with considerable experience with Woodcrafters' equipment who has been appointed by the Committee to assist in the development and assessment of Accreditation Officers.

GENERAL SAFE OPERATING PROCEDURES

General Safety and Workshop Housekeeping

- Working with wood is dusty. You must provide your own dust mask. If you have dust allergies or asthma, please consider using a quality dust mask that provides high level of protection. It is recommended that members visit the Club's website and read the article "**KNOW YOUR TIMBER'S TOXICITY**", which is in the **RESOURCES** page listed in the dropdown menu on the website Home Page.



- Every workshop is fitted with strategically positioned **EMERGENCY STOP BUTTONS (ESB)** - usually mounted on columns beside the doors (roller and swing). The purpose of these buttons is to turn off the power to all floor mounted equipment and power points in the workshop in which the activated ESB is located. The lights remain on.
- Reasons for activation of an ESB include, but are not limited to: a wood/sawdust fire; clothing or body part caught in equipment; significant equipment malfunction; electrocution; or an electric fire. In most cases it is faster, and safer, to activate an ESB than trying to turn off the piece of equipment involved, especially in the case of suspected electrocution or electrical fire.
- **Members should familiarise themselves with the location of the ESB[s] in each workshop.**
- In the event of: (1) an ESB being activated; (2) a general power outage to whole facility; or (3) a tripped circuit breaker, make sure portable power tools in use at the time, **including the table routers**, are turned off at the power point and the equipment unplugged. Most floor mounted equipment will not automatically restart when the power is restored, but hand tools, including the table routers will, if the foregoing procedure is not followed. Failure to follow the foregoing could possibly result in injury to the operator or persons within close proximity to the equipment when the power is restored.
- Appropriate attire must be worn. No jewellery or baggy clothes may be worn when working with equipment. Long hair must be tied back or put in a hair net. Open toed shoes, sandals, or thongs are not permitted.
- Use full finger gloves to protect hands from splinters when handling timber, but **do not** wear them near rotating blades and other rotating equipment parts where the gloves can catch. Fingerless gloves are permitted.
- No one is permitted to remove safety guards from equipment.
- With the exception of operational adjustments such as adjusting the height of the table saw blade, or band saw guard to accommodate job size, **NO** other adjustments, such as tighten a band saw blade are to be attempted by members. Maintenance adjustments can only be carried out by the Club's Maintenance Crew or the session's Duty Officer.
- Make sure that you are familiar with the position and accessibility of on/off buttons/switches on all equipment.
- Before starting any equipment and during the operation make sure no person including the operator will be endangered by the operation of the equipment.
- Do not stand directly behind or in front of timber that is being cut, planed, or jointed to avoid injury from kick-back.
- Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool or blade.
- Do not distract or startle an operator while they are using woodworking equipment. Wait until they are either finished the task at hand or have noticed you and turned off the equipment they are using.
- If you find any equipment in need of repair, do not use it, report it to the Duty Officer.



- If equipment you are using becomes faulty during use, turn it off immediately and report it to the Duty Officer. Under no circumstances make repairs to the equipment yourself.
- Do not try to free a stalled blade before turning the power off and removing the power plug from the power socket.
- Generally, only new dry timber may be machined. Any recycled or found materials must be inspected and approved for use by the Duty Officer before being machined.
- No open flames are allowed in dusty areas, or the woodshed.
- Immediately report all accidents or incidents to the Duty Officer, no matter how small.
- If a procedure feels dangerous, or you are not fully confident, **DON'T TRY IT!** Ask for assistance from the Duty Officer or an experienced member.
- Workshop users are responsible for immediately cleaning up their work area and the equipment they used when done. This must be done before another person uses the equipment/area. Brooms, banister brushes, dust extraction hoses and compressed air hoses are provided.

Personal Protection Equipment

WHAT	USE	REQUIREMENTS
Appropriate Clothing	Mandatory	No loose-fitting clothing or jewellery, long hair to be tied back or in a hair net
Dust protection	Optional but recommended	Facial dust mask
Eye protection	Mandatory when using any equipment	Safety glasses and/or Face shield
Hearing protection	Optional	Earmuffs
Proper footwear	Mandatory	Fully enclosed footwear

Operator’s Responsibilities

Operator’s responsibilities include, but are not limited to, the following.

General Safety Responsibilities

- Wearing:
 - fully enclosed footwear, eye protection and suitable clothing – no loose clothing
 - long hair tied back, or in a hair net
 - no jewellery
- Using the dust extraction system, where installed on equipment.
- Checking that the equipment to be used is fit for purpose, if not, report it to the Duty Officer
- The safe and correct operation of equipment. If in doubt about how to operate a piece of equipment, ask the Duty Officer for assistance.
- Immediately report any faults, damage or malfunction of the equipment to the Duty Officer.
- Ensuring the equipment is not left running and unattended at any time.



- Ensuring good housekeeping at all times around the equipment, i.e., remove waste/off-cuts and sawdust from the equipment and immediate surrounds.

Equipment Specific Responsibilities

- Pre-Start:
 - ensure you are wearing the appropriate clothing, footwear and eye protection
 - ensure there are no slip/trip hazards near the equipment
 - check the electrical lead has a current tag and is in good condition - turn off the power before checking electrical leads. Report any damage or out of date tags to the Duty officer
 - familiarise yourself with the location of equipment on/off push buttons/switches
 - check that equipment safety guards are in place and functioning
 - check equipment for any other defects. Report any defects to the Duty Officer as necessary
 - ensure Club provided PPE is available and is serviceable condition for use, e.g., face shields
- Job Setup:
 - ensure the workpiece is fit to be machined and is: dry; not green or of the gummy resinous variety (e.g., pine); **bark free** (mainly applies to the drum and large belt sanders); not warped or cupped; free of paint, varnish, surface glue, nails, screws and other foreign matter
 - make sure, that if required, the workpiece can be securely fixed in place
 - have safety accessories required for the job are at hand and readily accessible (e.g., push sticks, clamps, jigs and equipment specific accessories)
 - utilise safety guards, fences and other accessories in the job setup process to ensure the workpiece remains stable throughout the operational stage
 - if long or extra wide pieces protrude into trafficable areas, cordon the area off using witches' hats
- Job Startup:
 - check that on/off push buttons/switches operate effectively. If defective report to Duty Officer
 - if dust extraction is available, ensure the extraction vent is open at the equipment before starting
 - ensure there are no objects or personnel in a position to impede the safe operation of the equipment, or that the operation may impact the safety of any other activity within the workshop
 - the workpiece and hands are well back from the cutting blade or disk before starting the equipment



- handling long lengths and extra wide material is a two-person operation. It is the operator's responsibility to ensure assistance is at hand when cutting long or extra wide pieces of material
- when cutting long and extra wide pieces of material ensure any intrusion into trafficable areas does not create a safety hazard for other workshop users
- Operating the Equipment:
 - press the start push button/on switch and allow equipment to come up to full speed before using to prevent overloading. Make sure items to be cut/drilled are well away from the operational end of the equipment before starting
 - if the equipment starts making strange noises, or malfunctions during startup or operations, turn it off, unplug it and report it to the Duty Officer
 - utilise fences, guards and other safety accessories to maximise safe use of the equipment
 - feed the workpiece evenly and firmly into equipment, do not force the operation, let the equipment do the work
 - keep all parts of your body, especially hands, well clear of moving equipment parts
 - ensure any feed into or from the equipment does not encroach into walkways
 - seek assistance when cutting long or extra wide material
 - keep work area free of trip hazards – place all offcuts in the bins provided, not the floor
 - stop the equipment if somebody comes to talk to you – distractions cause accidents
 - do not leave equipment running if unattended
 - always wait until a spinning blade stops moving before reaching to remove waste or off-cuts. Alternatively, to be on the extremely safe side, remove waste by using a push stick or piece of scrap so as to ensure an inadvertent switch malfunction doesn't turn deadly
 - turn equipment off before making any operational adjustments, such as adjusting table saw blade height
- On Completion of Task:
 - ensure the equipment is off and the dust extraction vent, if used, is closed
 - do not walk away from the equipment you have been operating until it has stopped
 - do not place power tools such as circular saws, angle grinders, arbor techs down on bench tops or the ground until they have stopped rotating
 - in the case of band saws, ensure the blade guard is down and covering the blade, and the blade completely retracted below bench level for table saws
 - remove offcuts and other waste material and place in the provided bins
 - clean up the equipment by removing sawdust and clean up immediate work area
 - return equipment and accessories to allocated storage area



EQUIPMENT GENERIC SAFE OPERATING PROCEDURES

There are a number of safe operating procedures (SOP[s]) that are common to all equipment (machinery and power tools) in Bribie and District Woodcrafters' workshops (see tables on pages 9 and 23). It is recommended that members be conversant with, and follow these procedures for safety and health reasons.

- In the event of an **ESB** being activated, a general power outage, or a tripped circuit breaker, make sure portable power tools in use at the time, **including the table routers**, are turned off, the power point also turned off and the equipment unplugged.
- Wear a face shield and/or safety glasses/goggle and dust mask.
- Ensure you are wearing the appropriate clothing and footwear.
- Tie long hair back, or put it in a hair net, and no jewellery.
- Do not wear full finger gloves or anything that would allow the hand or fingers to be pulled into revolving equipment.
- Be very aware of people around you, ask them to give you space if you need it.
- **IF YOU'RE NOT SURE HOW TO USE EQUIPMENT OR NEED A REFRESHER COURSE — ASK!**
- Ensure the timber to be put through the Club's equipment is dry, not green or of the gummy resinous variety (e.g., pine), is not warped, is free of paint, surface glue, nails and other foreign objects.

To be on the safe side, always check timber for the presence of metal, as well as its moisture level using one of the Club's metal detectors and moisture meters.

Metal detectors can be found on the larger thicknesser in the Molyneux Shed and on the SawStop table saw accessories panel in the Hillier Shed. The moisture meter is located in one of the equipment cupboards next to the SawStop. If you are unable to locate either, ask the Duty Officer.

When using the wood scale on the pin-type moisture meter, the percentage moisture content reading can range from 5% to 40%. Generally, the low end of this reading will fall into the 5% to 12% range, the moderate range will be 12% to 17%, and the high to saturated range will read above 17%. **Therefore, timber with a moisture content greater than 17% should not be put through the Club's equipment, especially the SawStop table saw in the Hillier Shed.**

- **Treated pine** timber is **not allowed** to be machined in anyway in Woodcrafters' workshops as its dust is toxic. Also, it should be noted that treated pine should not be burned under any circumstances. The fumes can be toxic and the ash is very toxic.
- Seek assistance with long pieces of timber or large panels.
- Use the dust extraction system at all times.
- Check that the equipment is safe to use. If not, report it to the Duty Officer.
- Before plugging power tools into a power socket, ensure the tool's switch is in the off position.



- Familiarise yourself with the location of equipment's on/off push buttons/switches.
- If equipment becomes faulty or inoperable during operation, stop using it and report it to the Duty Officer.
- Turn off equipment when you are done or when unattended. Make sure equipment has stopped before moving away.
- When you complete your work, clean the workstation and sweep the floor in the immediate area of the workstation. **Deposit all scrap in the bins provided for that purpose and not the floor.**

EQUIPMENT CLASSES

There are two classes of equipment for members' general workshop use:

- **Class 1** includes equipment commonly used by the home handyman and with which many have become familiar.
- **Class 2** includes equipment not usually found in a home handyman's workshop and have the potential to cause serious injury.

"HOW TO" YouTube VIDEO DEMONSTRATIONS FOR CLASSES 1 AND 2 EQUIPMENT LISTED IN THIS HANDBOOK CAN BE FOUND IN THE MEMBERSHIP SECTION OF THE CLUB'S WEBSITE.

<https://www.bribiewoodies.org.au>

IT IS STRONGLY RECOMMENDED THAT MEMBERS REVIEW THESE VIDEOS PRIOR TO THE ACCREDITATION PROCESS BEING UNDERTAKEN.

CLASS 1 EQUIPMENT

Angle Grinder	Biscuit Joiner	Dremel	Jig Saw	Sand Flee
Arbortech	Bobbin Sander	Drill Press	Linisher	Scroll Saw
Belt and Orbital Sanders	Brad Nail Gun	Drum Sander (Hillier Shed)	Pyrography Pen	
Bench Grinders	Circular Saw	Electric Drill	Router (Hand held)	

Angle Grinder

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure the timber being used is: dry; not green or of the gummy resinous variety (e.g., pine); free of paint, varnish, glue, nails and other foreign objects.



- When using the angle grinder, move the leading edge of the abrasive disc around the timber at an angle of around 30 degrees from the horizontal and avoid applying too much pressure in one place as this could lead to overheating, burn the work and damage the abrasive disc.
- Do not grind metal in the woodworking workshop.
- Never remove the guard. It can be rotated for optimum positioning.
- Before making operational adjustments, switch off the angle grinder and allow it to come to a complete standstill. Unplug it from the power point.
- Always use the auxiliary handle for maximum control over torque reaction and kickback.
- Secure the work properly on the workbench. Adjust your work to a comfortable height.

IF YOU DON'T KNOW HOW TO SECURE YOUR WORK — ASK!

- Allow the angle grinder to reach maximum revolutions before operating to avoid overloading.
- When carving with the carving attachment for the angle grinder, keep a firm grip of the grinder and be very careful as this attachment has quite an aggressive cut.
- Grip the angle grinder with both hands at all times.
- Turn off immediately after use. Do not put the angle grinder down until it has stopped rotating.
- On completion, clean the angle grinder and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Arbortech

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Ensure the timber being used is: dry; not green or of the gummy resinous variety (e.g., pine); free of paint, varnish, glue, nails and other foreign objects.
- When using the arbortech for sanding move the leading edge of the sanding disc around the timber at an angle of around 30 degrees from the horizontal and avoid applying too much pressure in one place as this could lead to overheating, burn the work and irretrievably damage the sanding disc.
- Allow the arbortech to reach maximum revolutions before operating to avoid overloading.
- Always use the auxiliary handle for maximum control over torque reaction and kickback.
- Secure the work properly on the workbench. Adjust your work to a comfortable height.

IF YOU DON'T KNOW HOW TO SECURE YOUR WORK — ASK!

- Before making operational adjustments, switch off the arbortech and allow it to come to a complete standstill. Unplug it from the power point.



- When carving with the carving attachment for the arbortech, be very careful as this attachment has a very aggressive cut.
- Grip the tool with both hands at all times.
- Turn off immediately after use. Do not put the arbortech down until it has stopped rotating.
- On completion, clean the arbortech and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Belt and Orbital Sanders

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure the timber to be sanded is: dry; free of paint, varnish surface glue, nails and other foreign objects.
- If the existing sanding belt is in need of replacement, make sure the replacement belt is the correct type for the application. Also, check the belt for correct direction of rotation before installing. Make sure the belt sander is turned off and unplugged from the power point before commencing belt exchange.
- Similar guidelines to those above apply for the replacement orbital sander sanding pads.
- Before making operational adjustments, switch off the sander and allow it to come to a complete standstill.
- Allow the sanders to reach maximum revolutions before operating to avoid overloading.
- Ensure material to be sanded can be held in place safely during operation. If unsure, ask for assistance.
- When using either sander, move it around the timber and avoid applying too much pressure in one place as this could lead to overheating, burn the work and damage the belt or sanding pad.
- Grip the tool with both hands at all times.
- Turn off immediately after use. Do not put the sander down until it has stopped rotating.
- On completion, clean the sander and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Bench Grinder

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.



- Make sure the grinder's dropdown guard (where applicable) is in place before starting the grinder.
- Ensure the wheels do not touch the work rest and that the gap between wheel and rest is no greater than 1.5mm.
- Check that the wheels are running true and are not glazed or loaded. If the wheels are not running true, or they are glazed or loaded, **DO NOT** use the grinder – report problems to the Duty Officer.
- Use accessories that are rated for the grinder only.
- Allow the bench grinder to reach maximum revolutions before operating to avoid overloading.
- Use both hands to hold tools being sharpened or ground.
- Move the workpiece across the face of the wheel in a uniform manner.
- Do not hold small objects by hand.
- Do not grind on the side of the wheel.
- Never force the workpiece against a wheel.
- **DO NOT GRIND NON-FERROUS METALS (E.G., ALUMINIUM) AS IT WILL CLOG THE PORES OF THE GRINDING WHEEL AND POSSIBLY CAUSE THE WHEEL TO EXPLODE. GRINDERS ARE FOR FERROUS MATERIALS ONLY. NEVER GRIND TIMBER OR PLASTIC.**
- Do not leave the grinder running unattended.
- When done, leave the grinder and immediate work area in a safe, clean and tidy state.

Biscuit Joiner

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure the timber being used is dry and free of nails and other foreign objects.
- Secure the work properly on the workbench. Adjust your work to a comfortable height.
- **IF YOU DON'T KNOW HOW TO SECURE YOUR WORK — ASK!**
- Grip the biscuit joiner with both hands at all times.
- Adjust the height and depth of the blade to suit the timber and biscuits used before plugging the jointer into the power socket.
- Before making operational adjustments, switch off the joiner and allow it to come to a complete standstill.
- Allow the joiner to reach maximum revolutions before operating to avoid overloading.



- Do not apply excessive force, especially when cutting hardwood, as this could overload the jointer.
- Do not attempt to cut material beyond the capacity of the jointer.
- Secure work with clamps or a vice, freeing both hands to operate the equipment.
- Turn off immediately after use. Do not put the jointer down until it has stopped rotating.
- On completion, clean the biscuit jointer and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Bobbin Sander

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.
- Ensure the timber to be sanded is: dry; not green or of the gummy resinous variety (e.g., pine); free of paint, varnish, surface glue, nails and other foreign objects.
- When using the bobbin sander, open the dust extraction vent before turning on the sander.
- Do not use worn out or loaded up sanding tubes. There is a cleaning stick next to the sander to use on loaded up sanding tubes. Use of the cleaning stick will make the sanding surfaces last longer and your sanding job easier.
- Always hold work securely, keeping fingers clear of the sanding tube while sanding.
- The bobbin sander is equipped with a selection of spindles of various diameters that suit a variety of shapes. Matching metal table-inserts are available and should be used to suit the spindle size. This keeps the gap between the spindle and table to a minimum.
- **A LEFT-HAND THREAD** at the base of the spindle fits a corresponding thread under the worktable to allow exchange of spindles. It should only be tightened firmly BY HAND. **The correct direction for loosening the spindle is clockwise and anticlockwise for tightening the spindle.**
- Do not leave the bobbin sander running unattended.
- Clean the tube with a cleaning stick during and after use.
- On completion of the sanding task close the dust extraction vent.
- Clean up the working area when finished - sander and immediate surrounds.

Brad Nail Gun

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the sequential trigger (trigger) and that it is operating correctly.
- Ensure compressed air is disconnected or turned off before loading or removing a nail strip into or out of the cartridge.



- Nail size should be about twice as long as the timber being fixed is thick.
- Never point the nail gun at yourself or anyone else.
- Remove finger from trigger when not driving fasteners. Never carry a nail gun with your finger on the trigger.
- Do not drive fasteners into a surface that is too hard.
- Do not drive fasteners on top of other fasteners or drive fasteners at too steep of an angle.
- Keep hands and fingers away from the nailing area. You could nail through the material and into your finger.
- Do not fasten too close to the edge of the material. The material could split and the fastener could fly free or ricochet, causing personal injury to you or someone in the work area.
- On completion, clean the nail gun and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Circular Saw

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure the timber being used is: dry; not green or of the gummy resinous variety (e.g., pine); not warped; and free of nails and other foreign objects.
- Most circular saw incidents occur due to kickback, a term used when the blade becomes jammed by the material being cut. This causes the circular saw to retract very quickly backwards out of the saw cut, allowing the blade to make contact with whatever is in its path, often the operator's hand or leg, causing cuts/lacerations.
- The most common cause of kickback is a result of poor operator practice. Other causes mainly relate to poorly maintained equipment.
- Ensure the blade guard is in place and functioning as required by the manufacturer.
- Ensure the item to be cut is held in a secure and stable mounting device such as a vice clamp combined on a bench or sawhorse.
- Set the saw cutting depth as shallow as possible, no more than three gullets below material being cut.
- Arrange and secure the material so that the saw will not bind as you are cutting the material.
- Ensure all nails, screws and other foreign matter are removed from the material being cut.
- Ensure you have stable footing.



- Allow the saw to reach full speed before starting to cut and allow it to cut steadily. **Do not force it.**
- Stand to the side when cutting material to avoid the saw if it kicks back.
- Use two hands to operate the saw - one on the trigger switch and the other on the front handle.
- Do not twist the saw to change, cut or check alignment. **DO NOT attempt to cut curves as this could result in kickback and serious injury.**
- Do not carry the saw with a finger on the trigger switch.
- Do not saw in awkward or overhead positions or restricted spaces.
- Never place a circular saw on a benchtop or on the ground while the blade is still rotating, doing so could result in the saw moving along the benchtop or ground and injuring either the operator or persons close by. Only put the saw down once the blade has stopped rotating and the guard is back in position.
- Unplug the cord before changing the blade or working on the saw.
- On completion, clean the circular saw and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Dremel

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, sanding drum for cracks, tear or excessive wear.
- Mandrel mounted wheels, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck.
- Always use the collet that matches the shank size of the accessory you plan to use.
- After changing the bits or making any adjustments, make sure the collet nut, chuck or any other adjustment devices are securely tightened.
- If necessary, secure the work properly on the workbench. Adjust your work to a comfortable height. **IF YOU DON'T KNOW HOW TO SECURE YOUR WORK — ASK!**
- Maintain a firm grip on the dremel and allow it to reach maximum revolutions before operating to avoid overloading.
- Do not apply excessive force – this could cause the dremel to kickback. Kickback is a sudden reaction to a pinched or snagged rotating cutter, sanding disc, or any other accessory and has the potential to cause damage to the accessory, the workpiece and the operator.
- Turn off immediately after use. Do not put the dremel down until it has stopped rotating.



- On completion, clean the dremel and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Drill Press

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.
- Secure work properly – use machine vice for small work.
- Ensure the chuck key (if used) has been removed from the drill chuck.
- Never start the drill press with the drill bit or cutting tool in contact with the workpiece.
- Do not attempt to drill material that does not have a flat surface. Round timber should be secured in a suitable "V" block jig.
- Ensure all drill table adjustment clamps are tightened securely.
- When drilling follow the machines speed/drill size guide – the bigger the drill the slower the speed.
- Allow the drill press to reach maximum revolutions before operating to avoid overloading.
- Feed downwards at a sufficient rate to keep the drill cutting. **Do not force it.**
- When drilling deep holes, frequently raise the drill bit from the hole to remove waste and cool the bit.
- If a drill bit binds, turn off the drill press and carefully turn the drill chuck backwards (anticlockwise) by hand to free the drill bit.
- Never reach around or under a rotating drill bit or grab the chuck to stop the drill press. This could result in a hand puncture or other serious injury.
- Before making adjustments to belts to increase or decrease the drill's speed, turn off the drill press and unplug it.
- Before removing waste accumulations switch off and bring the drill press to a complete standstill.
- Do not leave the drill press running unattended.
- On completion, remove the drill bit and return it to its correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Drum Sander (Hillier Workshop)

- Request the Duty Officer unlock and inspect the sander to ensure it is fit for purpose, noting any damage to the drum sanding surfaces prior to your use – sanding surface damage includes such things as: nicks; tears; resin/glue clogging; excessive wear in one location; or burn marks.



- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure the timber to be sanded is: dry; not green or of the gummy resinous variety (e.g., pine); **bark free**; not warped or cupped; free of paint, varnish, surface glue, nails, screws and other foreign matter. If your workpiece has any of the foregoing it is **NOT** to be put through this equipment, but sanded either by hand or portable equipment such as an orbital sander.
- Check that the workpiece is flat, of a consistent thickness and can be firmly supported on the conveyor belt. A pass through the planer/surfacer/jointer or thicknesser may be required to ensure the workpiece is flat and of a consistent thickness prior to sanding.
- Familiarise yourself with the location and operation of the drum **ON/OFF** push buttons and conveyor belt **ON/OFF** switch and their sequence of operation.
- Open the two dust extraction vents before commencing sanding operations.
- **DEPTH OF CUT**
 - for **SOFTWOODS the maximum depth of cut MUST NOT EXCEED**
 - **0.30mm** for timber **no wider** than 200mm
 - **0.10mm** or less for all timber **wider** than 200mm. Obviously, the wider the timber the greater the load on the sanding drums
 - for **HARDWOODS the maximum depth of cut MUST NOT EXCEED**
 - **0.20mm** for timber no wider than 200mm
 - **0.10mm** or less for all timber wider than 200mm. Obviously, the wider the timber the greater the load on the sanding drums, especially with hardwood
- The **minimum length** of timber to be put through the sander **is 250mm.**
- When sanding thin pieces, **less than 6mm thick**, use a backing jig to lift the piece off the conveyor belt. This will minimise the risk of the drum abrasive coming in contact with, and damaging, the conveyor belt.
- **TO SET THE INITIAL** distance of the conveyor belt from the drums, adjust the digital gauge, located on the front lefthand side of the sander, at **1.5mm more** than the thickness of the timber to be sanded.

This is done by either rotating the crank handle clockwise to bring the conveyor belt up closer to the drums (decreasing the number registered on the digital gauge) and counterclockwise to lower the belt, thereby increasing the number displayed on the digital gauge.

Start the sander allowing the drums to come up to maximum speed before starting the conveyor belt. Start the belt and allow it to come up to speed before loading it.

Feed the workpiece into the sander and if the sanding drums do not make contact with the workpiece slowly raise the conveyor belt until the drums just touch the workpiece (the lid may need to be in the raised position to do this properly, however, if this is required ensure you follow all safety protocols). Close the lid once the drums have come in contact with the workpiece.



Make several passes at this setting, feeding the workpiece into the sander at different locations across the width of the drum before adjusting the depth of cut. The depth of cut depends on the hardness and width of the timber.

Always do a minimum of four passes before the depth of cut is adjusted. Before adjusting the depth of cut check to see if the drums require cleaning, if they do, use the rubber cleaning stick provided in a trailing fashion across the drums to clean them.

Before continuing on with the sanding task use the compressed air and a banister brush to remove cleaning stick fragments from the drums, internal machine surrounds (especially the black rubber rollers) and conveyor belt. Removing the rubber fragments minimises the potential of pieces of rubber getting caught between the conveyor belt and the workpiece, thereby raising the height of the workpiece and therefore increasing the depth of cut, possibly damaging the workpiece and the drums' abrasive surfaces.

There is the possibility the digital gauge may be in need of recalibration, making any setting inaccurate, which in turn could result in the set depth of cut being on the aggressive side and as a consequence damaging the drums' abrasive surfaces as the workpiece is fed through the sander.

If the foregoing does occur, activate the emergency stop bar on the front of the machine, backoff the conveyor belt until the workpiece can be extracted and then seek assistance from the Duty Officer.

- **NEVER** over tighten the drum on the workpiece as excessive pressure on the work will cause overheating, burn the workpiece and irretrievably damage the abrasive material, effectively making the sander unfit for purpose.
- When sanding long workpieces support the overhang (infeed and outfeed sides of the sander).
- Distribute the wear on the drums' abrasive surfaces by moving the workpiece to a different location laterally across the infeed side of the sander.
- As mentioned previously, regularly inspect the sanding surfaces during sanding operations. Clean the abrasive surface using the provided rubber cleaning stick in a trailing fashion across the drums. Use compressed air and a banister brush to remove rubber particles from the interior of the sander's upper chassis, sanding drums, black rubber rollers and conveyor belt.
- The reason for this regular cleaning is to prevent sanding surfaces becoming clogged, overheating and burning, causing irreparable damage to the sanding surfaces, thereby rendering the machine unfit for purpose (out of order) until such time as the sandpaper has been replaced and machine approved for use by the maintenance team.
- On completion of the sanding task, clean the sander and immediate work area, close the dust extraction vents, switch off the sander at the wall isolator and request the Duty Officer inspect and relock the machine. **DO NOT** hand over the sander for someone else to use before it has been inspected and okayed by the Duty Officer.

Electric Drill

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.



- With exception to reference to power cables and power points, **this safe operating procedure also applies to battery operated drills.**
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Do not connect to the power source until all adjustments have been made and the drill bit has been installed and the chuck tightened.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Examine the material to be drilled for splits, loose knots, nails and any other material that might affect the safe operation of the drill.
- Select the correct sized drill bit. Tighten securely in the chuck. **Remove the chuck key** immediately after the drill bit has been installed/removed.
- Do not use dull or damaged drill bits.
- Ensure the workpiece is secure and well supported in a convenient position for drilling.
- The power drill must be held firmly to control operational accuracy and the rotational torque.
- Keep hands and fingers well clear of moving parts.
- Allow the drill to reach operating speed, then apply load gradually. Do not apply excessive force.
- Back the drill bit out to clear away all waste.
- Turn off immediately after use. Do not put the drill down until it has stopped rotating.
- On completion, clean the drill and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Jig Saw

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure the timber being used is dry and free of nails and other foreign objects.
- Always make sure the cable is out of the cutting zone.
- Do not connect to the power source while the blade is being installed or other adjustment are being made.
- Do not carry the jigsaw by the power cord, when disconnecting the jigsaw do not yank the power plug out of the socket.
- During operation do not make adjustments to the jigsaw until it has been switched off and come to a complete standstill and unplugged.



- Do not attempt to cut material beyond the capacity of the jig saw.
- Keep hands in sight and clear of all moving parts and cutting surfaces.
- Secure work with clamps or a vice, freeing both hands to operate the jig saw.
- Metal and wood cutting require different cutting blades, make sure you use the correct type for the job.
- Let the saw blade do the work. Jig saw blades are prone to be broken if excessive force is applied.
- Turn off immediately after use. Do not put the jig saw down until it has completely stopped.
- On task completion, clean the jig saw and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Linisher

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.
- Ensure the timber to be sanded is dry, free of paint, varnish, surface glue, nails and other foreign objects.
- When using the linisher, open the dust extraction vent before turning on the sander.
- Do not use worn out or loaded up sanding belts or discs. There is a cleaning stick next to the sander to use on loaded up sanding surfaces. Use of the cleaning stick will make the sanding surfaces last longer and your sanding job easier.
- Always hold work securely, keeping fingers clear of the belt and disc while sanding.
- When using the linisher disc, always place material on the table on the downward side of the disc's travel to hold it down on the table surface.
- Move your work across the surface of the abrasive. **DO NOT SAND IN ONE PLACE, THIS CLOGS, BURNS AND RUINS THE ABRASIVE SURFACE.**
- The sanding belt should track in the middle of the plate. **DO NOT USE** the belt sander if the belt is rolling off to one side or the other. Report any tears or holes or flaws in the belt to the Duty Officer. Do not attempt to realign the linisher yourself.
- Do not leave the linisher running unattended.
- Clean belts and discs with a cleaning stick during and after use.
- When sanding task completed close the dust extraction vent.
- Clean up the working area when finished, i.e., sander and immediate surrounds.

Pyrography Pen

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.



- The main concerns when doing pyrography are: **protecting yourself from toxic fumes and sawdust; preventing burns from heat tools; and being wary of the general fire hazard of putting heat to wood.**
- In many instances, the toxicity of timber is substantially increased when sanded or when heat is applied to it. It is recommended that pyrographers research the wood they intend using to understand what toxic chemicals are present in the material and whether those chemicals are released when sanded or when heat is applied.
- A good rule of thumb is to be selective with your choice of materials, choosing woods of low toxicity levels. Avoid *man-made* woods (e.g., MDF). These products contain chemicals like formaldehyde that you **DO NOT** want to inhale.
- **Refer to the Club's website to find out the toxicity of the timber you are using, or planning use.**
- Eliminate as many fumes as you can by working in a well-ventilated area. This should help prevent smoke from settling directly in your lungs. The use of a mask fit for purpose maybe an option for those concerned with the possible side effect of inhaling smoke fumes, especially those who suffer from respiratory problems.
- Do not overlook sawdust as a possible health hazard when preparing wood for use. The best practice is to avoid inhaling sawdust by wearing a dust mask appropriate for the task.
- The points of pyrography pens get very hot and can start a fire if mis-used. Do not use the pyrography pen near highly inflammable materials or liquids and polishes that produce inflammable vapours.
- Likewise, as long as one is careful with their pyrography pen, the risk of burning oneself is minimal. However, it is wise to always use extreme caution with any object that emits high levels of heat. Therefore, never leave pyrography pens near other objects, and never set them too close to your skin or clothing.
- Keep all cables clear of the work area. Do not lay the pen down - get into the habit of storing it in on its stand.
- Do not leave the pyrography pen switched on unattended.
- When done, clean the pyrography pen and associated equipment as required and return it to the correct storage location.
- On completion ensure you leave the work area in a safe, clean and tidy state.

Router (Hand)

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure the timber being used is dry and free of nails and other foreign objects.



- Most power tools are built in a way that requires the direction a piece of wood moves through the cutter head to be in the opposite direction of the cutting head's spin direction. So, you need to ensure that the blade or router bit cuts against the motion of the wood instead of with it.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece and cutting zone.
- Do not connect to power source while the router bit is being installed/changed or other adjustments are being made.
- Do not carry the router by the power cord, when disconnecting the router do not yank the power plug out of the power socket.
- During operation do not make adjustments to the router until it has been switched off and come to a complete standstill and unplugged.
- Allow the router to reach maximum revolutions before operating to avoid overloading.
- Do not attempt to cut material at a depth beyond the capacity of the router.
- Watch for vibration or wobbling as this could indicate an inappropriately installed router bit.
- Keep hands in sight and clear of all moving parts and bit.
- Turn off immediately after use. Do not put the router down until it has stopped rotating.
- On completion, clean the router and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Sand Flee

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Ensure the timber to be sanded is dry, free of paint, varnish, surface glue, nails and other foreign objects.
- When using the sand flee, open the dust extraction vent before turning on the sander.
- Allow the sand flee to reach maximum revolutions before operating to avoid overloading.
- Do not use the sand flee if sanding abrasive is loaded up, use the cleaning stick next to the sander to clean the drum surfaces before use. Cleaning the drum abrasive with cleaning stick on a regular basis during operation will make the sanding surfaces last longer and your sanding job easier.
- Always hold work securely against the bed, keep fingers clear of the drum while sanding.
- Clean the drum with a cleaning stick after use.
- Close the dust extraction vent on completion of sanding task.
- Do not leave the sand flee running unattended.
- Leave the sand flee and your immediate working area in a safe, clean and tidy condition.



Scroll Saw

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Check that the power lead does not create a trip hazard and that it is well clear of the workpiece.
- Ensure the timber being used is dry and free of nails and other foreign objects.
- Ensure the scroll saw (saw) is securely fixed on a stable and level surface.
- Choose the correct size and style blade for the material and the type of cutting planned.
- Ensure the blade teeth point downward, toward the table.
- Tighten the blade securely in the chucks and adjust it in-line with the blade support.
- Ensure the blade tension is properly adjusted. If "knocking" is heard, readjust the tension.
- Before starting the cut, watch the saw while it runs. If it makes an unfamiliar noise or vibrates excessively, stop the saw immediately and isolate from the power supply. Do not restart the saw until finding and correcting the problem.
- Allow the blade of the saw to reach full operating speed before starting to cut.
- Keep hands and fingers clear of the saw's point-of-operation.
- Firmly hold the workpiece with both hands. Feed the saw only as fast as the teeth will remove the wood easily – **DO NOT** force the workpiece through the blade.
- Keep your face and body to one side of the blade and out of line with a possible thrown piece if the blade should break.
- Turn the saw off and wait until it has completely stopped before removing scraps or making adjustments.
- Do not leave the scroll saw running unattended.
- On completion, clean the scroll saw and return it to the correct storage location.
- When done, ensure you leave the work area in a safe, clean and tidy state.

CLASS 2 EQUIPMENT

Band Saw	Planer/Surfacer/Jointer	Thicknesser	RESTRICTED USE	
Drop Saw	Spray Gun/Booth	Torque Centre	Band Saw (Timber Shed)	Chain Saw (Timber Shed)
Guillotine	Table Router		Belt Sander (Molyneux Shed)	Horizontal Band Saw (Timber Shed)
Lathe	Table Saw		Breakdown Saw (Timber Shed)	Large Thicknesser (Hillier Shed Annex)



Band Saw

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.
- Ensure the timber to be cut is dry and free of nails and other foreign objects.
- When using the band saw, open the dust extraction vent before starting the band saw.
- Adjust the upper guide assembly so it is around 6mm above the work, possibly a little more for the big band saw in the Hillier shed.
- Allow the saw to reach full speed before starting to feed the work.
- The timber must be held flat on the table.
- Feed the saw only as fast as the teeth will remove the wood easily – **DO NOT** force the timber through the blade. Seek assistance with long pieces of timber or large panels.
- Where possible, maintain at least a 100mm margin of safety. This means that the hands/fingers should always be at least 100mm away from the blade when the saw is running.
- Plan cuts to avoid backing out of curves, whenever possible. Stop the band saw before backing out of a long curved or straight cut. This can be avoided by putting relief cuts around the curve that allow waste to fall off the body of the workpiece once the blade has passed through the relief cut.
- Make turns carefully and do not cut radii so small that the blade is twisted then broken.
- Round timber should not be cut unless mounted firmly in a "V" jig.
- Do not let small pieces of wood accumulate around the blade. Move them out of the way with a push stick or, turn off the saw, wait till the blade stops, and then clear the table.
- When cutting very thin material use a "zero clearance guide" (a thin sheet of MDF or Masonite) underneath the material being cut to prevent small pieces of timber dropping through the table insert onto the lower bearings and possible jamming the band (blade) and causing the band to break.
- Turn off the band saw as soon as you finish working. Lower the upper guide assembly to cover the blade when not in use. Do not leave the band saw running unattended.
- Close the dust extraction vent.
- When done, sweep the table and your immediate work area. Put all scrap in the scrap bin provided – **NOT THE FLOOR.**

Drop Saws

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.



- Ensure the timber to be cut is dry and free of nails and other foreign objects.
- When using the drop saw, open the dust extraction vent before starting the drop saw.
- Allow the saw to reach full speed before starting the cut.
- Maintain a 150mm margin of safety from the blade. This means that you must keep your hands/fingers at least 150mm away from the path of the saw blade.
- Keep the blade guard in position at all times.
- Hold timber firmly on the table and against the fence – use a clamp if required.
- After making the cut, but before raising the saw, make sure that the blade has come to a complete stop.
- When making multiple cuts of various angles do not move hands under the blade whether it is moving or not.
- When you complete your work return the saw to its park position, ensuring the blade guard is in place.
- Sweep the workstation and the floor. **All scrap goes in the scrap bin provided – NOT ON THE FLOOR.**
- Close the dust extraction vent.

Guillotine

- Observe SOP[s] listed on page 4 “General Safe Operating Procedures” thru’ to and including “Equipment Generic Safe Operating Procedures” pages 9 and 10.
- **BEWARE! THIS GUILLOTINE HAS SCALPEL SHARP BLADES – KEEP FINGERS WELL CLEAR OF THE BLADES WHEN USING THIS EQUIPMENT.**
- The guillotine is only to be used for trimming joints that has been pre-cut.
- Do not attempt to cut material beyond the capacity of the guillotine.
- Ensure the timber to be cut is dry and free of nails and other foreign objects.
- Hold material firmly to prevent inaccurate cutting due to creep, but making sure your fingers are well clear of the blade before commencing the cut.
- Be aware of other personnel in the immediate vicinity that could be distractions and ensure the area is clear of trip hazards before using the guillotine.
- Ensure the cutting table is clear of scrap and tools.
- Remove the operating handle when the guillotine is not in use, but being left unsecured for others to use.
- On completion, clean the guillotine and replace and lock the storage cover.
- When done, ensure you leave the work area in a safe, clean and tidy state.

Lathe

- Observe SOP[s] listed on page 4 “General Safe Operating Procedures” thru’ to and including “Equipment Generic Safe Operating Procedures” pages 9 and 10.



- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.
- Ensure the timber to be turned is free of nails and other foreign objects.
- Before starting the lathe make sure the headstock lock is disengaged and the tailstock, banjo and tool rest are securely clamped.
- Open the dust extraction vent before turning on the lathe.
- Ensure your workpiece is securely fastened to the faceplate, chuck or between centres. If between centres, check tightness on a regular basis as it could loosen due to vibration.
- Rotate the workpiece by hand to check that it clears the tool rest and the body of the lathe.
- Select turning speed carefully. Large diameter workpieces must be turned at the lowest speed. Always use the lowest speed to rough out work.
- **ALWAYS START THE LATHE AT LOWEST POSSIBLE SPEED BEFORE ADJUSTING TO REQUIRED SPEED.**
- Allow the lathe to reach full speed before starting to turn the workpiece.
- Keep the tool rest adjusted close to the work and at the correct height.
- Glued up timber should cure for at least 24 hours before mounting on the lathe.
- Remove the tool rest for sanding and polishing operations, after you've turned the lathe off and it has come to rest.
- Never leave a lathe running unattended. **TURN IT OFF** when not in use, even if it is only for a second or so to attend to, e.g., something on your work bench, or talk to another member.
- Close the dust extraction vent on completion of turning or sanding task.
- When done, clean up your work station and general work area, and return all accessories (e.g., tool rest, live and drive centres) to their correct place on the shadow board.

Planer/Surfacers/Joiner (Planer)

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.
- Ensure the timber to be planed is dry, free of paint, varnish, surface glue, nails and other foreign objects.
- Open the dust extraction vent before turning on the planer.
- Maximum cut depth for jointing an edge is no more than 0.75mm for hard wood and 1.50mm for softwood.
- Before making any operational adjustments to the cutter head depth, switch the planer off and wait for the cutter head to come to a complete stop.
- **The workpiece must be at least 300mm long and no less than 10mm thick.**



- Allow the planer to reach full speed before starting to feed the workpiece.
- Keep your hands away from the cutterhead, even though the guard is in position. Maintain at least 150mm margin of safety.
- Use a push stick whenever possible and especially when planing a flat surface. Never apply pressure directly over the knives with your hand.
- Feed the work so that the cutter head knives will cut “with the grain”. Hold the workpiece firmly and apply even pressure as you feed it through the knives. **DO NOT** plane end grain.
- Stand to the side of the infeed table to avoid possible kickbacks.
- Close the dust extraction vent on completion of planing work.
- Never leave the planer running unattended.
- When done, clean the planer bed and your immediate work area. Put all scrap in the scrap bin provided – **NOT THE FLOOR.**

Table Router

- Observe SOP[s] listed on page 4 “General Safe Operating Procedures” thru’ to and including “Equipment Generic Safe Operating Procedures” pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Ensure the workpiece is dry and free of nails and other foreign objects.
- Most power tools are built in a way that requires the direction a piece of wood moves through the cutter head to be in the opposite direction of the cutting head’s spin direction. So, you need to ensure that the blade or router bit cuts against the motion of the wood instead of with it.
- Routers operate at very high speed (between 8,000 and 24,000 rpm) it is therefore essential that the cutter head is secured firmly.
- Do not connect to power source while a router bit is being installed/changed or other adjustment are being made.
- Open the dust extraction vent before turning on the router.
- Ensure the table is clear of tools and other items that could cause distraction or move into the path of the workpiece or router bit.
- Ensure that the router bit is sharp and free of resin build up.
- Check the router bit for rotational clearance before starting the router.
- Adjust fence, guards and waste material extraction for maximum protection and efficiency.
- Allow the router to reach full speed before starting to feed the work.
- Watch for vibration or wobbling as this could indicate an incorrectly installed router bit.
- Feed in must be against the direction of rotation. **NEVER** feed the workpiece between the fence and the router bit as the bit will drag the workpiece through and jettison it out the



feed-out side of the table at considerable speed and force - woe betide anybody that gets in the way.

- Feed work slowly into the router bit.
- Do not attempt deep cuts, use several passes at increased depth or height to achieve the required result.
- Jigs, fixtures and templates should be used wherever possible.
- Keep hands in sight and clear of all moving parts and bit.
- During operation do not make adjustments to the router until it has been switched off and come to a complete standstill.
- Close the dust extraction vent on completion of task.
- Never leave the table router running unattended.
- When done, clean the table and your immediate work area. Put all scrap in the scrap bin provided – **NOT THE FLOOR.**

Table Saw

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.
- Ensure the timber to be cut is dry, is not warped, is free of paint, surface glue, nails and other foreign objects. Warped timber **IS NOT** to be cut on this equipment.
- The foregoing is especially important for the SawStop (Tables Saw Hillier Shed) as this saw's blade carries a small electrical signal, which the safety system continually monitors. When skin, very moist timber or metallic coated Perspex come in contact with the blade, the signal changes because the human body, moist timber and metallic coated Perspex are conductive. The change to the signal activates the safety system and fires the brake, stopping the blade in less than 5 milliseconds.

The blade's angular momentum drives it beneath the table, removing the risk of subsequent contact. Power to the motor is shut off instantaneously and the saw will remain inoperative until the blade and brake are replaced.

In the vast majority of cases, coming in contact with the spinning blade will result in a minor cut. However, if your hand moves into the blade due to incorrect use of the saw and the blade is rotating at high speed, it is possible for you to receive a serious injury.

Despite the SawStop's safety features, treat it the same way you would any of the other equipment in the workshops, i.e., potentially dangerous if safe operating procedures are not followed.

- Open the dust extractor vent before turning on the table saw.
- Set the blade so that it extends no more than three gullets above the timber to be cut. The riving knife will rise to the same height of the blade.



The riving knife rides within the kerf to maintain an even gap between the two cut sides of the timber being cut, preventing jamming which could cause the workpiece to be forcefully ejected rearward toward the saw's operator. For operator safety, do not remove the riving knife.

The term "kerf" is used to describe the thickness of the cut that a woodworking saw blade makes in a piece of wood as it cuts through it.

- Stand to one side of the blade – not directly behind it. Do not reach across the blade.
- Allow the saw to reach full speed before starting to feed the workpiece.
- Make sure that the workpiece has fully passed the blade before turning the saw off.
- Maintain 150mm margin of safety from the blade. A variety of push sticks are provided and must be used when cutting closer than 150mm.
- Rough timber must be surfaced and at least one side jointed before being cut on the table saw.
- **NEVER CUT TIMBER FREE HAND - ALWAYS USE A FENCE.**
- Do not let small scrap cuttings accumulate around the saw blade. Turn the saw off to remove or use a push stick to carefully push them away.
- Members (tailers) helping to "tail off" long timber from the saw should not push or pull the timber, but support it as necessary. The operator must control the feed and direction of the cut utilising the appropriate fence for the job.
- Tailors should not squeeze the timber together as this will jam the timber onto the cutting blade with possible damaging consequences. It is better to ease the timber apart, especially the waste timber, keeping the wanted timber up against the fence.
- If the item being cut is longer than it is wide use the cross-cut fence, i.e., the fence that is at right angle to the blade and runs parallel to the body of the saw when installed.
- **DO NOT** use both fences at the same time, as this an exceedingly unsafe practice.
- For safety reasons, the use of a feather board to secure timber firmly against the rip fence (the fence that is parallel to the blade) on the feed-in side of the blade is highly recommended.
- When you complete your work, turn off the saw and remain until the blade has stopped.
- Never leave the table saws running unattended.
- Clear the saw of dust and waste. Return the saw blade to below table surface.
- **SWEEP THE WORK AREA AND DEPOSIT OFFCUTS IN THE PROVIDED BIN/S - NOT THE FLOOR.**
- Close the dust extraction vent before leaving the table saw.

Thicknesser

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.



- Ensure you are familiar with the location and operation of the **ON/OFF** push buttons and that they are operating correctly.
- Ensure the timber being used is dry, free of paint, varnish, surface glue, nails and other foreign objects.
- Only new wood is to be put through the thicknesser. However, previously used timber may be used after inspection by, and approval of, the Duty Officer.
- Open the dust extractor vent before turning on the thicknesser.
- Do not set the thicknesser to the maximum cut when planing off timber. Two or more passes through the thicknesser at smaller cut settings will provide a better finish than one large cut. Be aware that some woods are harder than others; hard woods will need smaller cuts (less than 0.75mm); and softwoods no more than 1.5mm.
- Short pieces (less than 300mm) passing through the thicknesser can, at times, get stuck inside the body of the thicknesser, **DO NOT** attempt to push it through with your hand, use a push stick, or turn the thicknesser off, back the cutter head off and remove the piece using a push stick and try again but on a lesser cut.
- Do not drop heavy timber onto the in-feed or out-feed beds. These beds are made of cast iron and only supported by bolts at the join, heavy timber hitting the rim of either bed could damage the bed.
- To alleviate the potential for "snipe" use a timber flatbed on top of the rollers. There is one provided in the Molyneux Shed near the thicknessers. Snipe is a noticeably deeper cut on the leading and/or trailing end of a piece of timber after having passed through a thicknesser.
- Allow the thicknesser to reach full speed before starting to feed the work.
- **DO NOT** increase the cut while timber is in the thicknesser.
- Support the long pieces properly at the in-feed and at the out-feed.
- Never look through the thicknesser's feed opening when the cutter head is revolving.
- Never leave the thicknesser running unattended.
- Clear the thicknesser of dust and waste. Sweep the immediate work area.
- Close dust extraction vent before leaving the thicknesser.

Torque Centre

- Observe SOP[s] listed on page 4 "General Safe Operating Procedures" thru' to and including "Equipment Generic Safe Operating Procedures" pages 9 and 10.
- The torque centre is a multi-application piece of equipment, engineered to facilitate the use of power tools such as the circular saw, chain saw, electric drill, and router. The Club's torque centre is currently configured as an inverse table router, where the workpiece remains static and the router is mobile, traversing the workpiece. As opposed to the table router, where the router remains static and the workpiece is fed through the router bit.
- Ensure you are familiar with the location and operation of the **ON/OFF** switch and that it is operating correctly.



- Do not connect to power source while a router bit/cutter head is being installed/changed or other adjustments are being made.
- Ensure the timber being used is dry, free of paint, varnish, surface glue, nails and other foreign objects.
- Ensure router bit/cutter head to be used is sharp and free of resin build up.
- To install/remove a router bit/cutter head engage the plunge lock lever, rotate the chuck to engage the spindle lock, this will then engage the power switch lock stopping the router from being inadvertently started. On completion of your task disengage the plunge lock lever, which in turn will release the spindle/collet lock and disengaging the power switch lever allowing the router to be started.
- Open the dust extraction vent before turning on the torque centre.
- Ensure the table is clear of tools and other items that could hinder safe operation.
- Ensure the workpiece is firmly clamped to the torque centre table and that clamps will not obstruct or foul the router bit/cutter head.
- Allow the torque centre router to reach full speed before addressing the workpiece.
- Watch for vibration or wobbling as this could indicate an incorrectly installed router bit.
- During operation do not make adjustments to the router until it has been switched off and come to a complete standstill.
- Close the dust extraction vent on completion of task.
- Never leave the torque centre running unattended.
- When done, clean the table and your immediate work area. **Put all scrap in the scrap bin provided – NOT THE FLOOR.**

RESTRICTED USE EQUIPMENT

- Observe SOP[s] listed on page 4 “General Safe Operating Procedures” thru’ to and including “Equipment Generic Safe Operating Procedures” pages 9 and 10.
- Restricted use equipment is listed in the table on the next page.

Band Saw - Timber Shed	Breakdown Saw – Timber Shed	Horizontal Band Saw – Timber Shed
Belt Sander - Molyneux Shed	Chainsaw – Locked Box Molyneux Shed	Large Thicknesser – Hillier Shed Annex

- Use of this equipment is only permitted by those currently accredited to do so.
- Further accreditations will be carried out on an as needs basis.

SOURCES:

The information contained in this document has, in part, been sourced from Woodworking Workshop Safe Operating Procedures, manuals and “how to” equipment operation sheets published on the respective websites of the following organisations:



- Baylor University and the Department of Environmental Health and Safety, Waco, Texas, U.S.A.
- Bayside Woodturners and Woodcrafters Club Inc., Manly, Queensland, Australia.
- Blackall Range Woodcrafters Guild, Montville, Queensland, Australia.
- Bribe and District Woodcrafters Assoc. Inc.
- Canadian Centre for Occupational Health and Safety, Canadian Government.
- Child, Peter/Robert Sorby, Sheffield, UK.
- Department of Education, Queensland Government, Australia.
- Kur-Ring-Gai Community Workshop "The Shed", St. Ives, New South Wales, Australia.
- Office of Human Resources, Department of Natural Resources, Georgia, U.S.A.
- University of Iowa, Iowa, U.S.A.
- WorkSafe Western Australia Commission; Government of Western Australia.

Numerous YouTube video demonstrations were also sourced for information on safe operating procedures for all of the items of equipment listed in this document. The hyperlink for these demonstrations can be found on Woodcrafters' website under the "MEMBERSHIP" submenu.



