

# Lapidary Equipment Use Rules

## **Safety**

- You MUST ALWAYS wear safety glasses when using lapidary equipment\*, etc.
- Long hair must always be tied back.
- When using lapidary equipment\*, remove items such as scarves and loose jewelry that could get entangled in the equipment. If wearing long sleeves either roll them up or secure the cuffs so that they do not dangle.
- Ensure that the work area is clean and free of debris.
- All equipment must be used as intended and according to instructions.
- Proper attire includes a shirt or blouse and jeans, trousers, or shorts and shoes.
- No bare feet. No open-toed shoes.
- Always turn off the water and power to the machine you are using whenever you leave or turn away from that station no matter how briefly. This includes just turning away to talk to someone and when “just getting up to check on something”.
- If unsure about something, ASK FOR ASSISTANCE!
- Only authorized personnel are permitted to repair or replace wheels or blades on the equipment.

## **Machine Rules**

- Water coolant must be used when using the grinding or polishing machines. A steady drip of 1 to 4 drops per second are sufficient. The coarser the grit wheel in use a higher drip rate should be used. Periodically check the water reservoir to make sure you have enough in the reservoir supply.
- When using the felt or canvass polish laps with polish slurries less water may be used. The trick is to keep the wheel moist but not wash away the polish slurry.
- Use the whole lap face not just the center. Move and rotate the stone across the lap face not just in one place.
- Do not use excessive application pressure to your stone on the lap. Let the lap do the work. If it is not working fast enough, you may need to go back to a coarser grit.
- Do not polish or grind sharp points or edges on the grinding wheels that are foam or rubber backed. It will damage them. Start on the coarser grit metal plated wheels to remove sharp points or edges to round, contour or soften those areas. Then you can move along to the finer grits.
- Always turn off water and machine when not in use. This includes just turning away to talk to someone and when “just getting up to check on something”.
- Inform a Club Officer if there are any problems with a machine.

- Always thoroughly clean each lap after use before moving onto a finer lap.
- Do not dry the polish lap when done. Do not use two different polish slurries on one felt or canvas polish lap.
- If you notice a larger scratch develop on your stone from using the lap notify a Club Officer that you think the lap is contaminated.
- When you finish using a machine clean and dry it.
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## **Trim Saw Rules**

### **Safety**

- You MUST ALWAYS wear safety glasses.
- When using power tools, long hair must be tied back. Remove items such as scarves and loose jewelry that could get entangled in the equipment. If wearing long sleeves either roll them up or secure the cuffs so that they do not dangle.
- Ensure that the work area is clean and free of debris.
- All equipment must be used as intended and according to instructions.
- Proper attire includes an apron tied back and worn over a shirt or blouse and jeans, trousers, or shorts.
- No bare feet, flip flops or sandals.

### **Machine Rules**

- Oil coolant must be used when cutting with this machine. A light but steady stream of oil is required. To get the correct stream fill the reservoir so that between 1/8" to 1/4" of the bottom diamond saw blade is submerged in the oil. Too much oil in the reservoir will cause the stream to flood and shower the user and work area making it unsafe. Too little oil will dry the cut, creating toxic dust and ruin the blade and stone. Periodically add more oil to the reservoir as needed.
- The Trim Saw is for cutting slabs only. Slabs should be marked with the saw lines in pencil or aluminum scribe with a straight edge prior to cutting.
- Do not use excessive application pressure with your slab on the blade. Let the blade do the work. A steady, gentle application of the slab to the blade is required. Do NOT twist or turn the slab. If the cut is aligned incorrectly pull it out carefully and start slowly over with the new and correct vector. Saw all the way through the cut.
- Always turn off machine when not in use. This includes just turning away to talk to someone and when "just getting up to check on something".
- Small scraps can be put in a container for tumbling rough.
- Inform Club Officer if there are any problems with the machine.
- When you are finished using the machine clean and dry it and empty the water reservoir.

## **10” Oil Cooled Slab Saw Rules**

### **Safety**

- You MUST ALWAYS wear safety glasses.
- When using power tools, long hair must be tied back. Remove items such as scarves and loose jewelry that could get entangled in the equipment. If wearing long sleeves either roll them up or secure the cuffs so that they do not dangle.
- Ensure that the work area is clean and free of debris.
- All equipment must be used as intended and according to instructions.
- Proper attire includes an apron tied back and worn over a shirt or blouse and jeans, trousers, or shorts.
- No bare feet, flip flops or sandals.

### **Machine Rules**

- Oil coolant must be used when cutting with this machine. To get the correct stream fill the reservoir so that a light but steady stream of oil is brought up by the blade. Too much oil in the reservoir will cause a heavy stream which will flood and shower the user and work area making it unsafe. Too little oil will dry the cut, creating toxic dust and ruin the blade and stone. Periodically add more oil to the reservoir as needed.
- The Slab Saw is for cutting rocks under 4” square only. There is a block of wood that is cut to the largest dimensions as a guide. If your rock is larger than the guide block see the supervisor for advice or choose another rock.
- Do not use excessive application pressure with your rock on the blade. Let the blade do the work. A steady, gentle application of the rock to the blade is required. Do NOT twist or turn the rock once you start cutting. If the cut is aligned incorrectly pull it out carefully and start slowly over with the new and correct vector. Saw all the way through the cut.
- Always turn off machine when not in use. This includes just turning away to talk to someone and when “just getting up to check on something”.
- Users are allowed 3 cuts per turn. When you are done ask if anyone else wants to use the saw. The saw is meant for personal use and not commercial quantity cutting.
- Inform Lapidary Supervisor if there are any problems with the machine.
- If you are the last person to use the machine clean and dry it and empty the water reservoir. Empty the drain bucket outside NOT in the sink.

## **Lapidary Wheel Grinder Use Rules**

### **Safety**

- You MUST ALWAYS wear safety glasses.
- When using power tools, long hair must be tied back. Remove items such as scarves and loose jewelry that could get entangled in the equipment. If wearing long sleeves either roll them up or secure the cuffs so that they do not dangle.
- Ensure that the work area is clean and free of debris.
- All equipment must be used as intended and according to instructions.
- Proper attire includes an apron tied back and worn over a shirt or blouse and jeans, trousers, or shorts.
- No bare feet, flip flops or sandals.

### **Machine Rules**

- Water coolant must be used when grinding or polishing on this machine. A steady drip of 1 to 4 drops per second are sufficient. The coarser the grit wheel in use a higher drip rate should be used. Periodically check the water reservoir to make sure you have enough in the reservoir supply.
- If the machine has an Expandable Rubber Drum Wheel you MUST ALWAYS have a belt on the wheel. Failure to do so can cause the wheel to break apart and injure someone.
- Use the whole wheel face not just the center. Move the stone across the wheel face not just in one place.
- Do not use excessive application pressure to your stone on the wheel. Let the wheel do the work. If it is not working fast enough you may need to go back to a coarser grit.
- Do not polish or grind sharp points or edges on the grinding wheels that are foam or rubber backed. Only on the metal plated wheels should sharp points or edges be removed, rounded, contoured or softened.
- Always turn off water and machine when not in use. This includes just turning to talk to someone and “just getting up to check on something”.
- Inform Lapidary Supervisor if there are any problems with the machine.
- If you are the last person to use the machine clean and dry it and empty the water reservoir. Empty the drain bucket outside NOT in the sink.

## Lapidary 6 Wheel Grinder Use Rules

### **Safety**

- You MUST ALWAYS wear safety glasses.
- Scarves and loose jewelry that could get entangled in the equipment. If wearing long sleeves either roll them up or secure the cuffs so that they do not dangle.
- Ensure that the work area is clean and free of debris.
- All equipment must be used as intended and according to instructions.
- Proper attire includes an apron tied back and worn over a shirt or blouse and jeans, trousers, or shorts.
- No bare feet, flip flops or sandals.

### **Machine Rules**

- Water coolant must be used when grinding or polishing on this machine. A steady drip of 1 to 4 drops per second are sufficient. The coarser the grit wheel in use a higher drip rate should be used. Periodically check the water reservoir to make sure you have ample supply.
- Use the whole wheel face not just the center. Move the stone across the wheel face not just in one place.
- Do not use excessive application pressure to your stone on the wheel. Let the wheel do the work. If it is not working fast enough you may need to go back to a coarser grit.
- Do not polish or grind sharp points or edges on the grinding wheels that are foam or rubber backed. Only on the metal plated wheels should sharp points or edges be removed, rounded, contoured or softened.
- Always turn off water and machine when not in use. This includes just turning to talk to someone and “just getting up to check on something”.
- Inform Lapidary Supervisor if there are any problems with the machine.
- If you are the last person to use the machine clean and dry it and empty the water reservoir. Empty the drain bucket outside NOT in the sink.