Router Table

Safety Accreditation Notes

Revised March 2015

Note: Accreditation should be viewed as the start of a learning experience, not the end. Continue to learn as much as you can about setting up and using each item of equipment. By increasing your knowledge, you will reduce the chance of an accident and get better results. If you are unsure of any aspect of use, ask an experienced operator.

Safety

1. Hearing protection must be worn and safety glasses or a face shield are desirable.
2. Avoid gloves and loose clothing. Tie up long hair.
3. Use dust extraction.

Operation using a table

1 Workpieces must be supported either by the fence or by using a bit with a bearing. Freehand routing should not be attempted on the Router Table.

2 Feather boards and push sticks should be used to assist in controlling the movement of the workpiece particularly when using the fence.

3 The Guild's Router Table is fitted with a Triton Router. This Router has safety features including an on/off switch lock cover and locking through the table for bit changing. Notwithstanding these features it is always prudent to disconnect the power supply before changing/installing router bits. A router which suddenly starts up when you are working on changing bits will leave you with substantial damage and you may not always be using a Triton router. The router has a speed control and this should be adjusted to suit the size of bit being used:

Setting	RPM	Cutter Diameter
5	20,000	Up to 25mm (1")
4	18,000	25 - 50mm (1" - 2")
3	14,500	50 - 65mm (2" - 21/2")
2	11,000	Over 65mm (21/2")
1	8,000	Use only if burning

4 Determining the proper feed rate for any bit is relatively easy, assuming the router speed is set correctly for the bit. If the bit burns the wood, the feed rate is too slow. If the wood chips or blows out ahead of the bit, the feed rate is too fast. Granted these are generalizations and there are other factors that could contribute to these problems, but they remain important clues about what you may be doing wrong.

5 Always check the router bit before using. Bits which are chipped should not be used and should be discarded (with the agreement of the Shed Boss or who-ever is in charge at the time). This will ensure that action is taken to replace the bit. If the bit has a bearing ensure that the bearing is clean and moves smoothly. Apply a light oil to the bearing periodically. If there is any part of the bit using a grub screw, ensure that the screw is properly tightened.

6 Keep the table clear of sawdust, chips and offcuts during operation. Any loose material will affect the accuracy of cuts and create the potential for the workpiece to not be properly controlled.

7 Take several small passes rather than attempt a cut in one pass. Not only may the cut be unsatisfactory and the workpiece damaged but significant stress will be put on the bit and router with obvious safety and maintenance implications. Trying to remove too much material in a single pass can cause or increase burning and blow out ahead of the bit. It is always better to make multiple light cuts than fewer deeper cuts. Lighter cuts (up to 2 mm) are far safer and produce much better results.

8 Direction of feed. Work in the majority of cases should be fed from right to left using the front of the bit. If using a bit with a bearing guide, for example on the inside of a frame, the cutting direction should be continued around the frame against the rotation of the bit. If the wood is introduced in the same direction as the bit is rotating the cutting edges instantly become extraordinarily efficient high-speed power feeders that can suddenly eject the wood, leaving the operators empty hands dangerously close to the cutter. This situation is particularly dangerous because the force the operator was applying to the wood before it kicked out immediately causes the now empty hands to lurch toward the bit. Disaster can be the instantaneous result. Never feed an item between the fence and the bit.

9 Occasionally an operation may require a 'climb cut'. This is where the workpiece is fed into the bit in the direction of rotation. If you haven't used this type cut before and think you need to attempt it seek advice from an experienced operator. In any event such cuts must only be attempted with much care, light cuts and attention to safety.

10 If you find yourself faced with a router-related task that you do not completely understand or do not have the proper safety equipment for, the only prudent course of action is to stop! Wait until you get the information and equipment to make the operation safe. The task will be there later, your fingers may not.

When you have finished your job

Clean up all sawdust and offcuts. Offcuts should be placed in the bin provided and when that is close to being full, can be emptied into the trailer. Sawdust should be swept up and the area vacuumed with the large vacuum on wheels.

References: Triton Router Manual

http://www.newwoodworker.com