

 <b>DALHOUSIE UNIVERSITY</b> <i>Inspiring Minds</i>  <b>Safe Work Instructions for Hand Held Routers</b>	<b>Policy Sponsor:</b>  Assistant Vice President Facilities Management	<b>Approval Date:</b>  December 2015
	<b>Responsible Unit:</b>  Trade Services	<b>Revisions:</b>  January 2018

#### **Known Hazards**

Kick back of material, discharge of objects, dust inhalation, sharp edges, poor footing, pinch points, over reaching, moving parts, hot router blades

#### **Training Requirements**

Proper use of the dust collection system, proper use of router, orientation using owners manual.

#### **Personal Protective Equipment Requirements**

Safety boots, dust mask, safety glasses or goggles or a face shield, hearing protection

### **Safe Job Procedures**

Job steps are listed in the order in which they must be completed. Key activities follow each step. Key steps and the associated activities must be followed in the order presented to achieve maximum efficiency in safety, production, quality and overall loss prevention.

#### **Pre-Operation:**

- Disconnect from power supply before checking tool and making any adjustments or changing bits.
- Ensure that bit is securely mounted in the chuck and that the base is tight.
- Secure the stock in place to prevent sudden torque or kickback from the router.
- Check stock thoroughly for nails, staples, screws or other foreign objects.

#### **Operation:**

- Always wear the required personal protective equipment.
- Ensure the Power Switch is OFF before plugging router into power supply.

- Ensure all cords are clear of the cutting area.
- Ensure that the bit is set for the depth of the cut.
- Hold onto the router with both hands at all times when the router is running.
- Keep router base flat against the material being cut during operation.
- When inside routing start the motor with the bit above the stock to be routed.
- When the router reaches full power lower the bit to the required depth.
- When routing outside edges guide the router counter clockwise around the stock.
- When routing bevels, moldings and other edge work make sure the router bit is in contact with stock to the left of a starting point and is pointed in the correct cutting direction.
- Feed the router bit into the material at a firm controlled speed.
- With softwood you can sometimes move the router at faster speeds.
- With hardwood, knotty and twisted wood, or with larger bits, cutting may have to be at slower speeds.
- Listen to the sound of the motor as you work, it can indicate safe cutting speeds.
  - When the router is fed into the material too slowly the motor makes a high pitch whine.
  - When the router is pushed too hard the motor makes a low growling sound.
- When the type of wood or the size of the bit requires you to go slow make two passes to prevent the router from burning out or kicking back.
- To decide the depth of cut you will make, and, how many passes to make test the router on scrape lumber similar to the material you will be routing.
- Remove the bit from the material being routed.

- Turn OFF router.
- Allow the router bit to stop rotating before setting the router down.
- Clean up dust and debris in work area.
- Ensure the router is disconnected from the energy source.
- Clean the router and store bit.
- If this tool is found to be defective during a pre-work inspection or if it malfunctions while in use it should be tag as such and removed from service immediately.
- Report defective or malfunctioning equipment to your supervisor immediately.

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