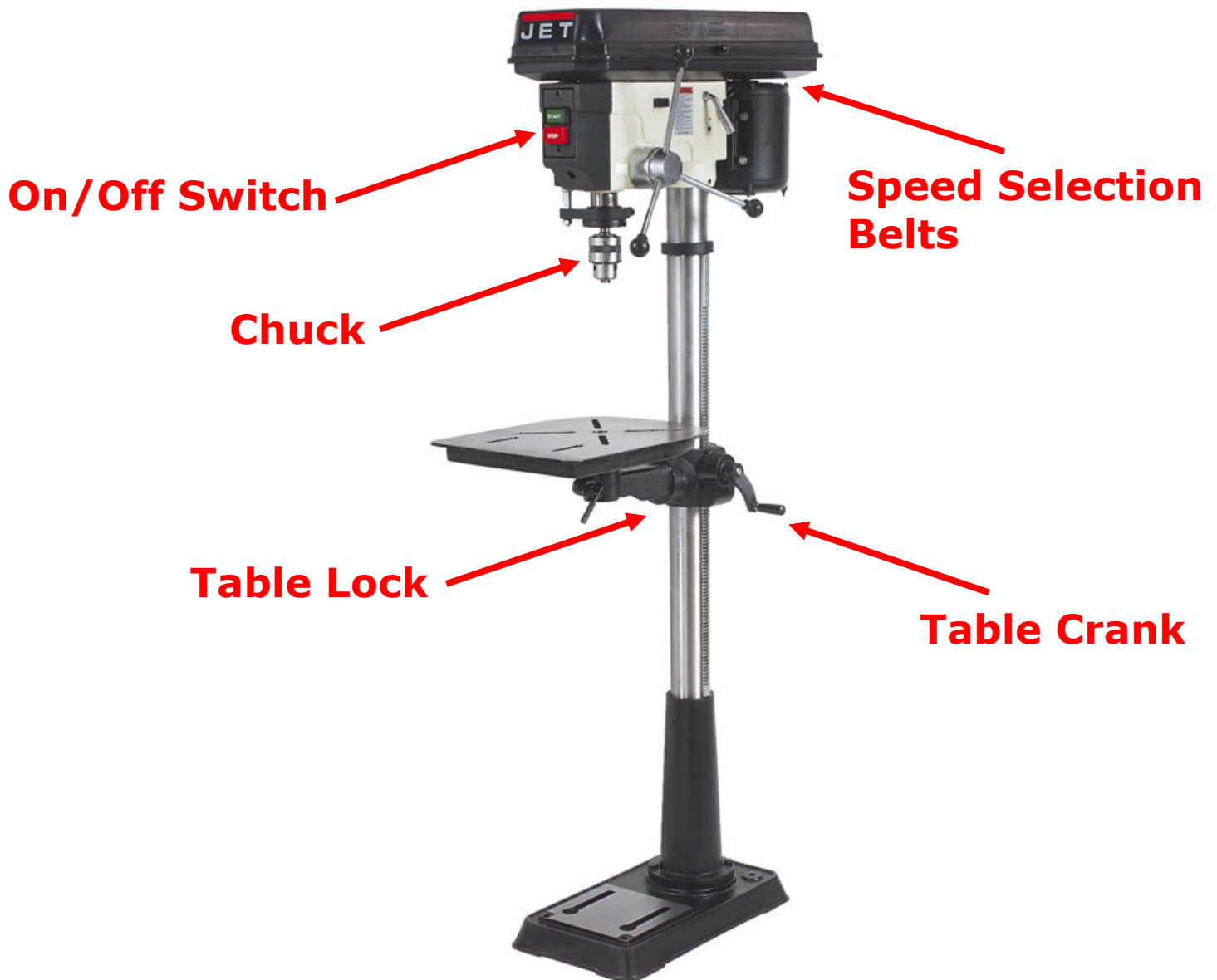




Fab Lab Tool Training Rubric:

Drill Press



Personal Protective Equipment

- Standard shop personal protective equipment (safety glasses, tie back long hair, no flowing clothes, etc.) are required.
- No gloves, no bracelets.

Safe Operation:

- **DO NOT** perform any operation freehand. **ALWAYS** hold the workpiece firmly against the table so it will not rock or twist. Use clamps or a vise for unstable workpieces. **MAKE SURE** all clamps and locks are firmly tightened before drilling.
- **DO NOT** try to drill material too small to be securely held
- **DO NOT USE** wire wheels, router bits, shaper cutters, circle (fly) cutters, or any other tool that is not a drill bit
- **DO NOT** exert side pressure on drill bits to widen holes.
- Hold drill bits while both installing and removing from the chuck. Tighten the chuck with the chuck key. Return the chuck key to its holder.
- Never turn the drill press on before clearing the table of all objects (tools, scraps of wood, etc.)
- Before starting to drilling operation, watch the drill bit to make sure it does not wobble or vibrate.
- Let the spindle reach full speed before starting to drill.
- Use the recommended speed for the size of bit and material.
- Use appropriate cutting fluids while drilling into metals.
- **DO NOT** force the drill too hard, and let the cutting tool do the work. “Peck” the drill to clear chips from the hole.
- Ensure the spindle has come to a complete stop before touching the workpiece.
- To avoid injury from accidental starting, always turn the switch “OFF” and unplug the drill press before installing or removing any accessory or attachment or making any speed adjustment.
- Keep all guards in place and in working order.

Common Maintenance Operations

- Return drive pulleys to original configuration when finished working, remove all bits from the chuck, and clean the table

Allowable Materials

- Wood only on wood shop drill presses; no wood on metal shop drill presses.

Fab Lab Tool Training Test:

Drill Press

Student's Name: _____

Instructor's _____

Name: Date of ____/____/____

Test:

Point out the following tool features:

- ☐ On/Off Switch
- ☐ Drill Chuck Open/Close
- ☐ Table Lock, Table Crank
- ☐ Speed Selection Belts
- ☐ Clamping equipment

**Personal Protective
Equipment:**

N/A

Safe Operation:

1. Demonstrate safe chucking/un-chucking of a variety of different bits.
2. Raise/Lower/Lock Table.
3. Demonstrate safe drilling procedures into a test piece, verifying hand position
4. Demonstrate setting speeds and returning the drill press to default positioning when done.

Common Maintenance:

N/A

Allowable Materials:

N/A

Passed: YES / NO

Instructor's Signature: _____