

Skill Activity 2

PARTS AND ADJUSTMENTS OF A DRILL PRESS

After you have done the reading, this portion of the unit will help you become familiar with our drill presses, their operation, and the tooling you will be using. In our lab at Madison College we have 2 types of drill presses: a variable speed model (Clausing), and a step-pulley machine (Rockwell). It's important to remember that speed changes on the Clausing should only occur while the machine is running, whereas the belt changes on the Rockwell should only occur while the machine is stopped and unplugged.

Completed	Procedure
<input type="checkbox"/>	1. Use the labeled diagram and manual to locate the following parts of the machine: switch, depth stop, quill, feed lever, quill lock, table, table raising mechanism, column, table locking clamp, chuck, chuck key, and step pulley or variable speed control.
<input type="checkbox"/>	2. Unlock the table locking clamp and practice moving the table up and down.
<input type="checkbox"/>	3. Start the machine. To change the speed, you must adjust the pulleys at the top while the machine is not running.
<input type="checkbox"/>	4. Set the depth stop at 3" on the depth stop scale.
<input type="checkbox"/>	5. Move the quill down until it hits the stop and lock it. Measure the actual amount of travel with your 6" rule. Make a mental note of any difference the depth stop indication and actual quill travel. It is often important to bore holes in specified depth, and even small errors in machine adjustments can be critical.
<input type="checkbox"/>	6. Release the quill lock; retract the quill.