

Skill Activity 1

Parts & Adjustments of a Fixed Spindle Shaper

Note: while this is specific to the Oliver Shaper in our lab, some items are universal with all shapers.

COMPLETED

PROCEDURE

1. Standing at the machine, use the labeled diagram to locate the following:
 - * main power disconnect * On/Off switch * table
 - * spindle * spindle raising wheel * wheel locking lever * fence
 - * table inserts * foot brake * spindle locking pin
2. In the storage cabinet, identify: * shaper cutters * spacers * T bushings * shaper wrenches * starting pin * different size spindles * table inserts * Set up manual
3. Unlock the spindle raising wheel and practice raising and lowering the spindle.
4. Locate the various adjustment points on the fence. With the left half of the fence bolted tightly, unlock the right side and practice moving it in and out. Use the straight edge to line up the two halves, then lock into place. Use a screwdriver to loosen the bolts holding the wooden fence halves in place. Practice moving them to narrow and widen the center opening. **NOTE:** The center opening should always be set at the minimum width that will allow the cutter head to be used. (1/4" clearance is considered optimum).
5. Clear the table of everything but the fence. Switch the main power disconnect ON. If there is a spindle in the machine, make sure it is securely tightened and the spindle lock is disengaged. Switch the motor ON briefly, then OFF. Observe the direction of spindle rotation. It should be counterclockwise (CCW). **THE FOOT BRAKE MUST BE APPLIED ON THE OLIVER SHAPER WHEN STOPPING TO PREVENT THE DRIVE BELT FROM SLIPPING DOWN.**

