

TOOL HEIGHT GAUGE

P/N 3009

The Purpose of the Tool Height Gauge

The Sherline tool height gauge makes the task of setting the tool tip to cut at the center height on your lathe an easy one. Normally you would have to move the table close to the tailstock or headstock and insert a dead center into the spindle to provide a center point for measurement. This gauge is simply set on the table and the tool checked against the predetermined center height ledge. Two heights are provided: One for the normal tool holder and one for the longer tool holder used with the riser block option.

The gauge is turned from steel and heat treated for durability. It should locate the tip of the tool within .003" (.07mm) of the true lathe center. The gauge has been made very accurately, however there can be a "tolerance buildup" in the production lathe parts being measured. I think you will find this gauge to be accurate enough for 99% of your work and a useful addition to your shop.

Using the Height Gauge on Your Lathe

The tool is most useful with the rocker tool post (P/N 3057) and the cutoff tool holder (P/N 3002) where height of the tool tip can easily be adjusted. When using the tool with a standard tool post, the tool may have to be shimmed slightly to achieve the center height you desire, especially on tools which have been resharpened.

HINT: The simplest shim stock I have found is a piece of business card paper. If several thicknesses are required, the softness of the paper will start to become a problem, but one or two thicknesses work just fine. When thicker shims are needed, metal shim stock should be used.

Setting the Height of the Tool Tip

The tip of the tool should be cutting at or slightly below the center of the part. For smaller parts (1/16" diameter or less), the tip should be very close to center. For larger parts (3/8" diameter or larger), the tip should be several thousandths below center.

—Joe Martin, President and Owner
Sherline Products Inc.

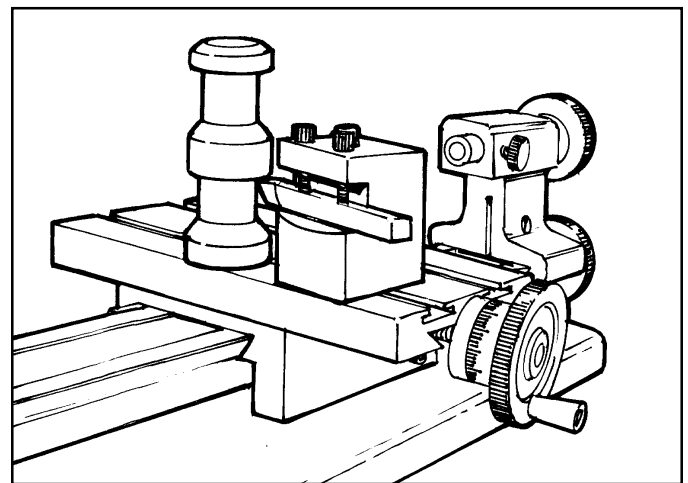


FIGURE 1—Confirming the height of a standard 1/4" cutting tool in a rocker tool post. Loosen or tighten the front and rear adjustment screws to change the height of the tool tip. In a standard tool holder, use shims to adjust the tool height.

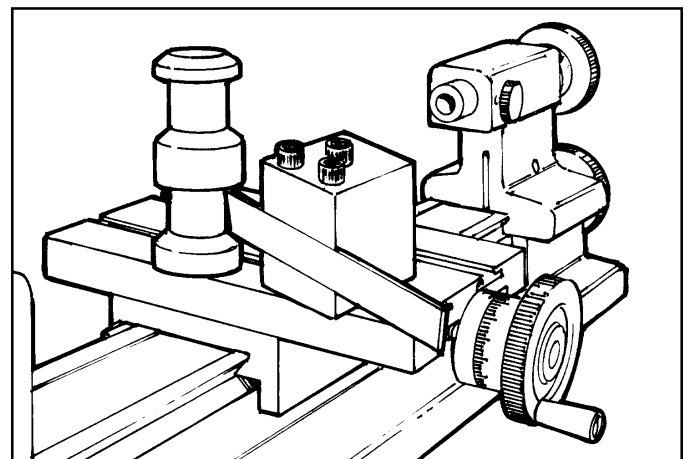


FIGURE 2—Adjusting the height of a cutoff tool in the cutoff tool holder. The holder holds the tool at an upward angle and the tip height is adjusted by sliding the tool back and forth in the slot.