

NOTE: Always use plenty of cutting fluid when using the Cutoff Tool.

SHERLINE PRODUCTS

INCORPORATED 1974

Rear-Mounted Riser Cutoff Holder

P/N 1286

Introduction

The Sherline cutoff tool and riser consist of a very slender high-speed tool steel cutting blade mounted in a special tool holder. The thinness of the blade (.040") enables it to feed into the part quite easily and at the same time minimizes the amount of waste material. The turning speed for parting should be approximately one-half the normal turning speed for any given material.

CAUTION: Never use a parting tool on a part mounted between centers. The part may bind on the cutter and result in a scrapped part or a broken cutting tool.

Purpose of the Rear-Mounted Riser Cutoff Holder

The rear-mounted riser tool holder allows you to use the cutoff tool from the backside of the part while you have a headstock riser (P/N 1297) mounted on your lathe. Because the part is rotating "up" on the backside, the cutting blade must be flipped over in the holder so that the cutting tip faces downward. This special holder raises the tool the amount needed to put the tip of the tool back to centerline height with the headstock riser in place. This will save you time by allowing you to leave the cutoff tool holder mounted to the backside of the table while you use a regular riser tool post in its normal position on the front side of the part.

Mounting the Cutoff Riser to the Crossslide

This tool holder is mounted on the backside of the part, or the side away from the crossslide handwheel (see Figure 1).

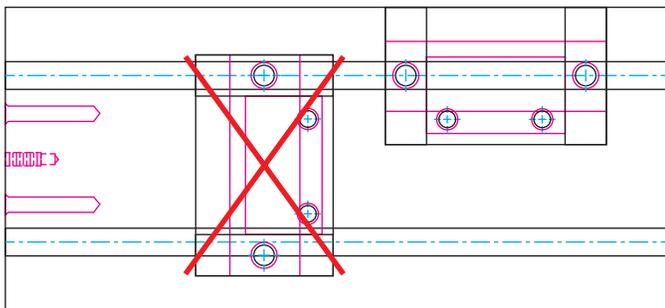


FIGURE 1—Proper mounting orientation on the crossslide.

Loosen the two clamping screws that hold the cutoff tool blade in place. Place the blade in the slot so the cutting tip is facing down. Lock it in position by tightening the two clamping screws. The only difference in using this

tool compared to the standard cutoff tool holder is that the crossslide table is now cranked toward the operator to cut off a part.

Use of the Rear-Mounted Cutoff Tool Riser

The farther the cutting tool is raised above the machine bed, the greater the chance of "chatter," so we increased the rigidity of the tool by enlarging the base area along with height. The holder uses two hold-down screws that mounts on the backside of the crossslide. The cutoff blade is mounted in the holder upside down and reversed with the tip of the blade pointed down, because cutoff tools have a tendency to lift rather than to dig in (see Figure 2).

The blade must be moved in or out to bring the tip to center in the same fashion as when it is used in a standard configuration, and a shim may be required to get the tip on center for really large diameters.

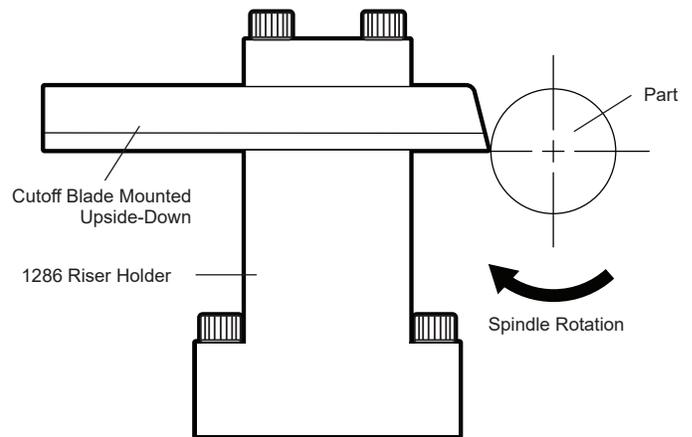


FIGURE 2—Proper blade orientation. (As seen from the headstock spindle.)

Parting off Large Diameters

If you want to attempt to go beyond the recommended maximum of 1" diameter stock, here are some suggestions. These are especially important on hard-to-machine materials.

1. Use plenty of cutting fluid.
2. Grind the cutting tip of the blade square rather than angled so it tracks straight and doesn't cause the blade to bend or wander.

- Align the blade accurately with the crossslide to assure a square cut. The most accurate way to make sure that your blade is perfectly square to the part, is to use a test indicator and indicate the side of the blade from the cutting tip to the holder body. Rotate the tool holder until the blade is square, and then tighten the holder mounting screws. The larger the diameter of the part, the more critical it is that the blade is square to the part.

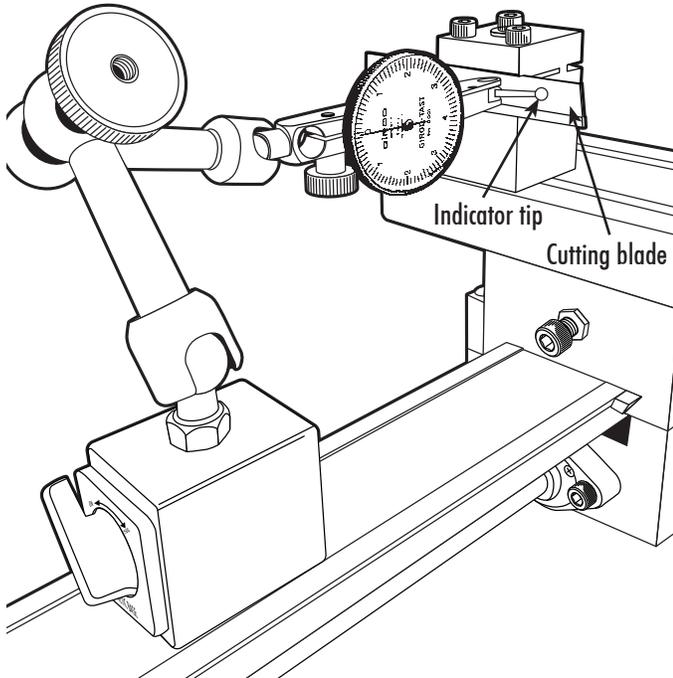
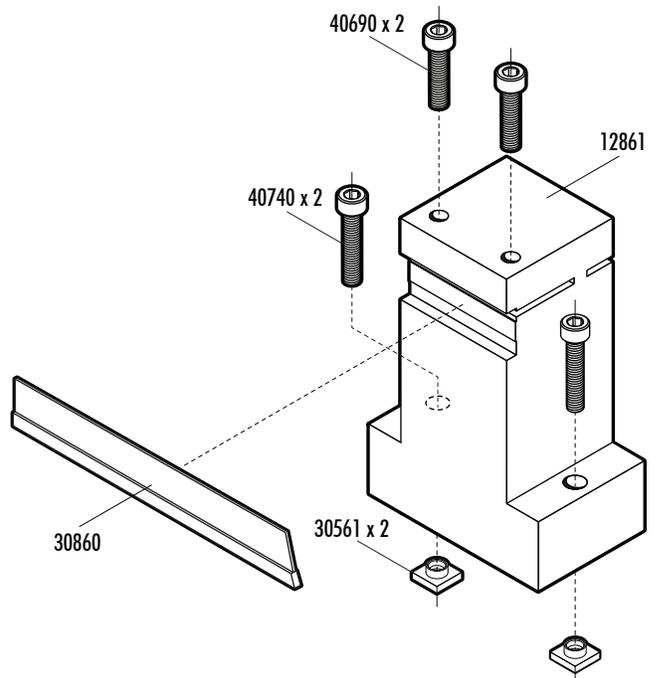


FIGURE 3—The standard rear-mounted cutoff tool holder (P/N 3018) is shown for reference.

- Listen to your machine. It will tell you when you are working it too hard before it “strikes back.”
- Last, but not least, don’t blame us if you break a blade!

Thank you,
Sherline Products

Exploded View



Parts List

NO. REQ.	PART NO.	DESCRIPTION
1	12861	Rear-Mount Riser Body
2	40690	10-32 x 3/4" SHCS
2	40740	10-32 x 7/8" SHCS
2	30561	T-Nut
1	30860	Cutoff Tool Blade