

VIDEO INSTRUCTIONS AVAILABLE For instructions on indicating in your Gang-Tooling Tool Post please visit our YouTube channel at <u>https://www.youtube.com/</u> watch?v = cXdPrWSL3LA

SHERLINE PRODUCTS

INCORPORATED 1974

Rear Side Cutoff Multi-Tool Holder P/N 5931 (3/8"), P/N 5936 (5/8")

The tool holder is mounted on the back side of the part, or the side away from the crosslide handwheel. 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.

Using the Holder as a Rear Mounted Cutoff Tool

Using the holder as a rear mounted cutoff tool allows you to use the cutoff tool from the back side of the part. Because the part is rotating "up" on the back side, the tool 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.

Stack Tolerance

Each of the parts on the crosslide have tolerances of \pm .001". The three parts are made up of the lathe saddle, the table, and the tool post (bottom of the post to centerline of the tool holders). If you stack up the tolerance of each part there is the potential of \pm .003". Also, the tolerance on the headstock riser thickness (if it's being used in conjunction with the 13" mill table), and the distance from the bottom of the headstock to the centerline of the spindle is \pm .001". A worst case scenario is that you might be off center in your height by \pm .005". (Stacking tolerances in most cases, however, will be within \pm .002".) You may need to employ the use of shim stock to adjust for any difference in stack height. For instructions on indicating in your tool holder please visit the YouTube link noted above.

Additional Instructional Resources

- For more details on cutting tool inserts please see the instructions *Carbide Cutting Tool Inserts and Holders; P/N 7600 (<u>7600inst.pdf</u>).*
- For more details on rear mount cutting tool inserts please see the instructions 3018 Rear Mount Cutoff Tool and Holder; P/N 3018 (<u>3018inst.pdf</u>).
- For more details on the gang-tooling tool posts please see the instructions *Four-Position Gang-Tooling Tool Posts; P/N 5930 (3/8"), P/N 5935 (5/8") (<u>5930inst.pdf</u>).* For those using the four-position gang tool post there are additional circumstances that must be considered.

About the Rear Side Cutoff Multi-Tool Holder

The rear side cutoff, multi-tool holder was designed to complement our four position, gang-tooling tool posts (P/N 5930 or P/N 5935). It can be used in conjunction with the gang-tooling tool post, or on its own for our customers who want to convert their Sherline lathe into a "Chucker Lathe" or gang-tooling lathe.

Our rear side cutoff, multi-tool holder offers a convenient and accurate way to hold up to two, round boring tools, and a slot for holding a cutoff tool blade (P/N 30860). This tool post (P/N 5931) has (2) 3/8" holes to hold boring bars, drill chucks, or tool bushings, and a slot to hold P/N 30860 cutoff tool blade with two locking screws for each tool. We also offer a tool post (P/N 5936) that has (2) 5/8" holes for those wanting to use ER16 collet holders with a 5/8" shank.

The distance from the base to the centerline on both posts is .940" which is the same as all of our standard tool posts, and the holes have a known centerline-to-centerline distance of 1.500". These holders are machined from solid aluminum and have a black anodized finish for long life.

Mounting the Holder

On the base of the tool post, there are (2) 1/4" dowel pins to locate your tool post in parallel on either of the two T-slots on the crosslide when using boring tools. Because the T-slots on our crosslides are extruded, they may not be perfectly parallel and perpendicular to the machine. The actual width of the T-slot is between .255" and .258". On most machines you can locate both pins against the same side of the T-slot and be square enough. If this is not the case with your crosslide, there should be enough movement available between the T-slot and the locating pins to allow you to indicate your tool post in square and then lock it in place.

You can also mount the tool post perpendicular to the crosslide and use the slot to hold a cutoff tool blade. When the tool post is mounted in this orientation, you will have to remove the 1/4" dowel pins and use only the T-nuts aligned to the T-slots. This holder was designed so the tool location would be in front of the crosslide. This will allow the cutting tool to be used without interfering with longer tools that may be in the P/N 5930 gang-tooling tool post.

Considerations Regarding this Tool Post and Its Possible End Uses

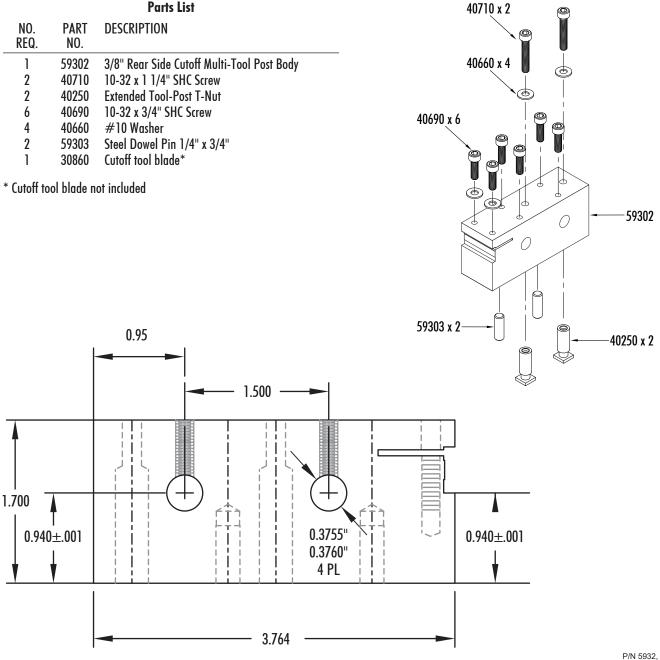
- This tool holder can be used on the 6" and 8" crosslides, unlike the four position, gang-tooling tool post; P/N 5930 (3/8"), P/N 5935 (5/8")*, which was designed to be used on our 13" crosslide.
- * **NOTE:** Due to the travel on the 6" crosslide, using this tool holder with it mounted parallel to the crosslide, the overall length of the tool holder will take up virtually all of the travel distance of the crosslide. This holder can be used mounted in a perpendicular orientation to the crosslide on the backside and still leave enough travel for another tool post to be mounted on the front side or one that is set up for drilling or boring operations.

However, the size of this holder will limit its use on a 6" crosslide. Our 8" crosslide has an additional 2" of travel and it will allow better use of this tool holder when mounted in a parallel orientation. We just want you to be aware of the travel restrictions of your machine, before you purchase one of these holders.

- 2. In order to mount drill chucks in this tool holder, please see our P/N 11850 "3/8" Chuck Arbor w/ 3/8" Shank."
- 3. For customers who want to use ER16 collet holders with a 5/8" shank, we offer P/N 5936, which is the same as this tool holder except it has 5/8" tooling holes.

Thank you, Sherline Products Inc.

3/8" Rear Side Cutoff Multi-Tool Holder Exploded View & Part Numbers



5/8" Rear Side Cutoff Multi-Tool Holder Exploded View & Part Numbers

