

About the Gang-Tooling Tool Posts

We designed our gang-tooling tool posts specifically for our customers who want to convert their Sherline lathe into a "Chucker Lathe" or gang-tooling lathe. This tool post is also the standard tool post that we offer with our CNC Chucker Lathe.

Our gang-tooling tool post offers a convenient and accurate way to hold up to four tools with a known centerline-to-centerline distance of 1.500". This tool post (P/N 5930) has (4) 3/8" holes to hold boring bars, drill chucks, or tool bushings with two locking screws for each tool. We also offer a tool post (P/N 5935) that has (4) 5/8" holes for those wanting to use ER-16 collet holders with a 5/8" shank. If you want to hold standard WW collets in the 5/8" tool post, you can order the WW Collet Adapter for 5/8" Gang Tooling (P/N 2081). Using collets in the Gang-Tool Post means you can hold extremely small drills accurately on center.

The distance from the base to the centerline on both posts is .940" which is the same as all of our standard tool posts.

Mounting the Holder

On the base of the tool post, there are (2) 1/4" dowel pins to locate your tool post on either of the two T-slots on the crosslide. 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.

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 video link noted above.

Considerations Regarding this Tool Post and Its Possible End Uses

- 1. This tool post is designed to be used with our 13" Mill Table (P/N 50180 or P/N 67050) in place of the crosslide*. With the 13" mill table, there is enough room for this tool post, a Rear-Cutoff Tool Holder (P/N 3018), and one other single-tool style tool post.
- * NOTE: While the gang-tooling tool posts will mount on the 6" and 8" crosslides, their size renders them unusable on either of these crosslides. You can use one to three tools on the gang-tooling tool post on the 8" crosslide, but you can't use all four tool positions due to the short X-axis travel distance.
- 2. In order to mount drill chucks in this tool post, please see our 3/8" Chuck Arbor w/ 3/8" Shank (P/N 11850).
- 3. To effectively use this tool post on your on the lathe, you will need the 1294 Riser Plate for the 8" crosslide (.250" thick), or the 1295 Riser Plate for the 13" crosslide (.270" thick) in order for your tools to be on centerline with the headstock spindle. The gang-tooling tool holders will work on the Chucker Lathe without a headstock riser plate. The Chucker lathe was designed to use the 13" or 18" crosslides, which are .870" thick.
- 4. When you switch to a gang-tooling set up using the 8" or 13" crosslide along with a riser plate, "you will no longer be able to use your tailstock!" Your headstock centerline will now be .250" or .270" higher than your tailstock centerline.
- If you decide to go with this tool post and the gangtooling set up, you can easily switch back to doing tailstock work by removing the riser plate and this tool post.
- 6. For customers who want to use ER-16 collet holders with a 5/8" shank, we offer P/N 5935, which is the same as this tool post except it has 5/8" tooling holes.
- 7. Think about what kind of work you are going to be doing. This tool post is a great aid for making multiple

short to medium length parts that don't need the end support from a live center mounted in the tailstock.

Additional Parts Needed to Make the Full Conversion

P/N 50180 13" Mill table

P/N 50170/51170 13" X-axis leadscrew (inch/metric) P/N 50171/51171 CNC, 13" X-axis leadscrew (inch/metric)*

P/N 1295 Riser-block set for 13" table

The total cost of the above listed items is approximately

\$150.00. Please see the website for the pricing of each item.

* The CNC threaded rod with no handwheel adapter costs the same as the manual version.

Once your tool post is in place, load it up with your tools and start making chips.

Thank you,

Sherline Products Inc.

3/8" 4-Position Gang-Tooling Tool Post Exploded View & Part Numbers

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		Parts List	40340 x 3	
NO. REQ.	PART NO.	DESCRIPTION		
1 3 3 8 3 2			40660 x 3	
	ŀ	0.900	59303 x	40250 x 3
		1.500	1.500	— 1.500 ———
- 0.94(-	0±.001			0.3755"
		◀	6.300	

5/8" 4-Position Gang-Tooling Tool Post Exploded View & Part Numbers

Parts List					
NO. REQ.	PART NO.	DESCRIPTION			
ILU.	NO.				
1	59305	5/8" Four Position Gang-Tool Post Body			
3	40340	10-32 x 1" SHC Screw			
3	40250	Extended Tool-Post T-Nut			
8	40670	10-32 x 1/2" SHC Screw			
3	40660	#10 Washer			
2	59303	Steel Dowel Pin 1/4" x 3/4"			



