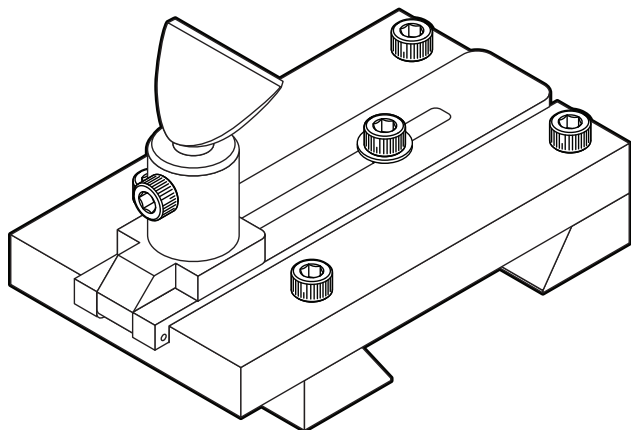


CW TIP 2 — Flip Over T-Rest for Sherline Lathe/Gary Combs



Custom Flip Over T-Rest for the Sherline Lathe

Gary Combs is a clock repair person who has an NAWCC* sanctioned Jeweler's Lathe with all the accessories, including a flip over T-rest. The flip over spade allows for quick and close inspection, and precise measurement during the manual graving process.

Gary relates that he was taking an NAWCC Lathe course, which required manual graving and the use of a T-rest on a Sherline lathe. The T-rest for the Sherline lathe does not have the flip over capabilities of that found on a jeweler's lathe, so he decided to make his own using his Sherline Mill and Lathe.

[*National Association of Watch & Clock Collectors](#)



FIGURE 1—Sherline's W. R. Smith T-rest. A T-rest is used by watchmakers to support a hand-held cutting tool called a "graver." World-renowned watch- and clockmaker, William R. Smith designed a T-rest especially for the Sherline lathe that clamps to the lathe's bed in seconds.

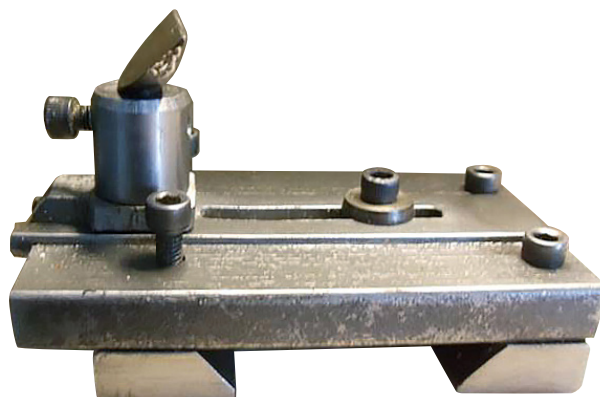


FIGURE 2—Gary Combs' T-rest.

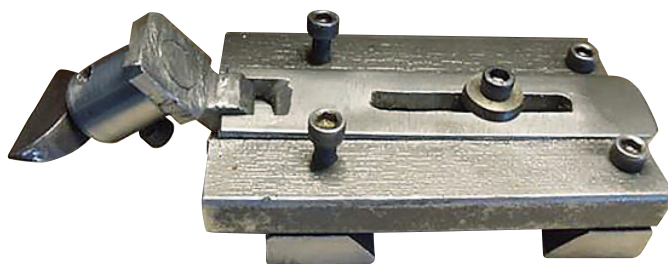


FIGURE 3—Flip over T-rest in the open position.

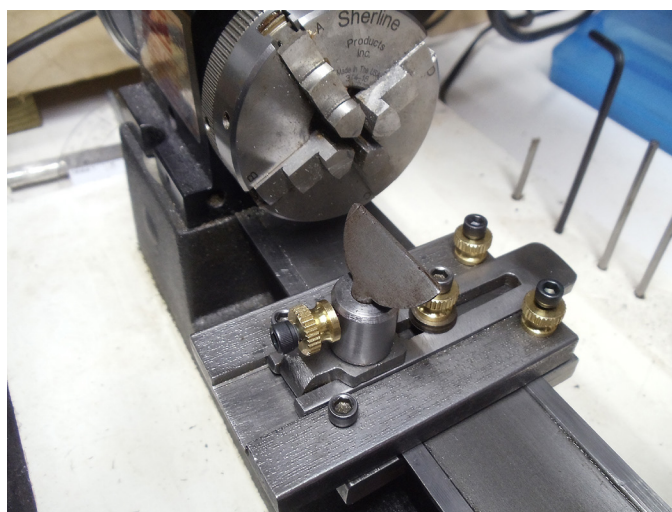


FIGURE 4—Gary's T-rest mounted on the bed of his lathe. In this photo, he has upgraded some of the Allen screws to include knurled nuts to make it installable and adjustable by hand. If you decide to use the knurled nuts, you will have to increase the length of the screws by .25" as detailed on page 3.

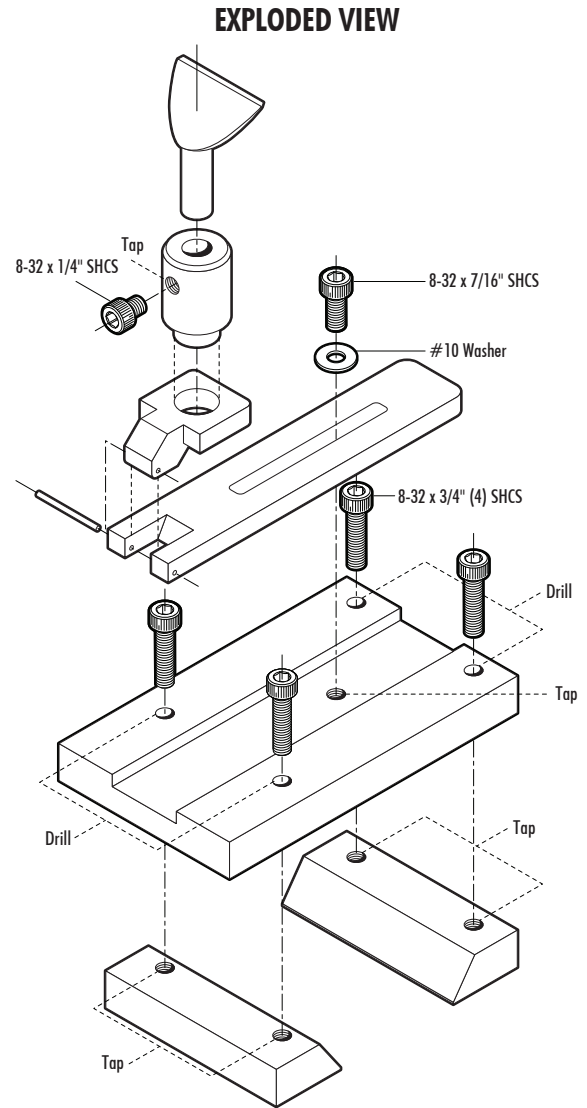
Notes on Drilling and Tapping the Screw Holes

There are four holes in the saddle base that are not tapped, which allow the screws to pass through and thread into the dovetail blocks. Use a #20 or #19 drill bit (~.169" hole) to allow the screw threads to easily pass through the base.

Use a #29 drill bit for all the other holes that will be tapped for all the threaded holes:

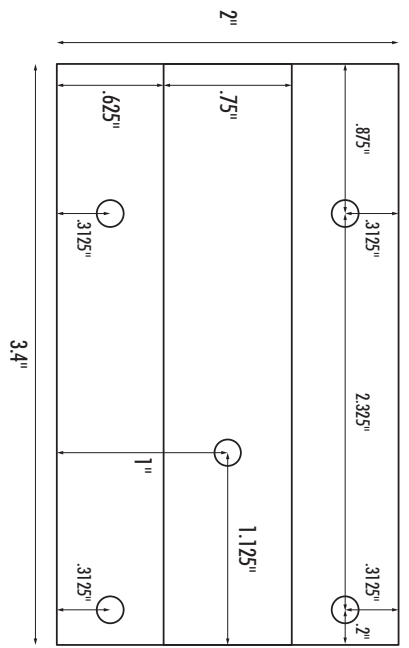
- All screw holes were tapped for 8-32 threads
- 2 in each of the Dovetail blocks
- 1 in the center of the channel of the saddle base
- 1 in the T-rest pedestal

See the exploded view for details on which holes get drilled or tapped.

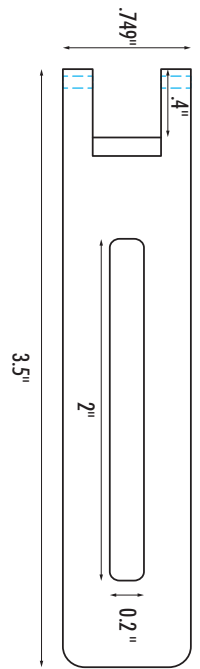


NOTE: See page 3 for a dimensional drawing of Gary's flip over T-rest.

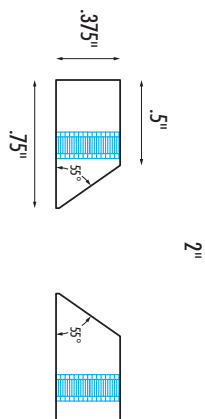
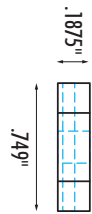
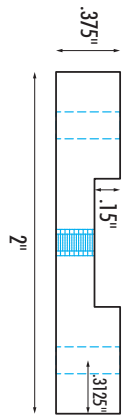
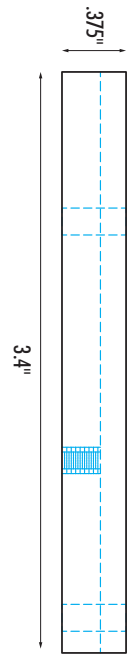
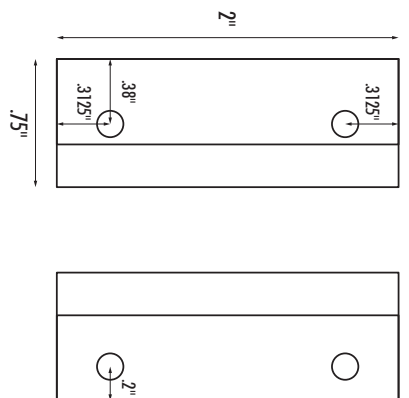
SADDLE BASE



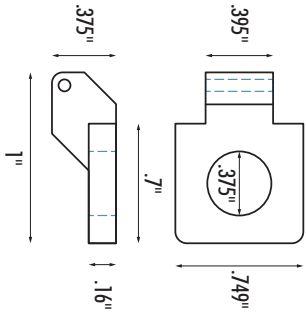
T-REST SLIDE PLATE



DOVETAIL BLOCKS



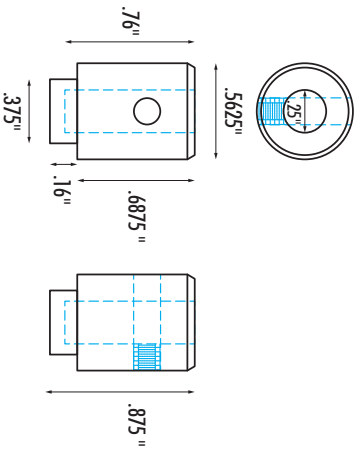
T-REST PIVOT FLIP



T-REST PIVOT PIN



T-REST PEDESTAL



NOTES

1. The pivot pin stock (piano steel rod, .07" dia.) friction fits through the slide plate and the pivot flip.
2. The T-rest pedestal post friction fits into the flip.
3. The spade (not shown) is borrowed from a jeweler's lathe, and its friction fit into the pedestal. **CAUTION:** The vertical center hole in the T-rest pedestal needs to match the spade post diameter to prevent the spade from spinning in the pedestal during lathe operation.
4. 8-32 x 3/4" (4) Socket head cap screws to attach the saddle base to the dovetail blocks.
5. 8-32 x 1/2" Socket head cap screw to attach the plate to the saddle base.
6. 8-32 x 1/4" Socket head cap screw to attach the spade to the pedestal. Regarding the threaded post hold-down screw (.2" down from top): The hole must be drilled completely through the pedestal to allow the top to enter and fully thread the hole.