

**SHERLINE**  
**PRODUCTS**  
INCORPORATED 1974

## MILL TOOLING PLATE

P/N 3560

The mill tooling plate went into production after a request from a customer who had damaged his mill table. It was an intelligent request because we use tooling plates on many of our large shop machines. They not only protect the machine's table from damage, but they provide an inexpensive, modifiable surface for clamping work that is as flat as the machine's original table. We felt it was time the Sherline miniature machine tool line should be able to benefit from this same shop practice.

### Use of the Mill Tooling Plate

Like a lathe faceplate, the mill tooling plate should be looked at as somewhat disposable. It was manufactured more for making it easier to clamp down hard-to-hold parts than for protecting the table. It has a hole pattern predrilled to make it easy to clamp down the Sherline mill vise. Two additional holes were also added to accommodate the Sherline rotary table, but you should feel free to drill whatever additional holes are needed to meet your particular clamping and setup needs. We use 10-32 holes for the Sherline clamp screws. Unless you have a particular need for another size, you might want to stay with that size for additional holes so the same size screws can be used in all holes.

The material used for the plate is cast aluminum which is milled to 1/2" thickness. Though not quite as strong as extruded grades, it is very stable and free from internal stresses so it will not warp when you drill additional holes. The surface is not anodized as it is intended to be drilled and machined to suit your unique needs.

### Clamping to the Tooling Plate

Use all six mounting screws and T-nuts provided to mount the tooling plate to your mill table. Do not overtighten T-nuts or you can damage your table slots. The heads are countersunk into the tooling plate to leave your working surface free from obstructions.

### Clamping Parts to the Tooling Plate

It should always be your goal to try and hold a part as firmly as possible for milling. If a part moves during the cutting

process it will probably be ruined. The heavier the cut you wish to take, the more important this becomes. The best way to hold a part more securely is by adding more clamping points. Do not overtighten the points you already have. For example, on the mill vise, use four clamping points rather than two.

For drilling holes in a part or to make fixtures to clamp to the table for some setups, it might be helpful for you to know that the holes are 1.16" (29.46 mm) on centers.

Joe Martin, President and Owner  
Sherline Products

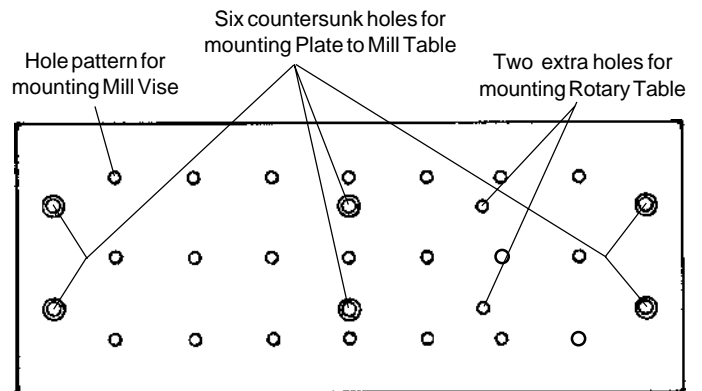


FIGURE 1-- Mill tooling plate hole pattern. Drill additional holes as needed for your particular jobs.

### MILL TOOLING PLATE PARTS LIST

NO. REQ.	PART NO.	DESCRIPTION
1	35610	1/2" Tooling Plate (approx. 4" x 10")
6	40510	10-32 x 7/16" Socket Head Cap Screws
6	30560	T-Nuts (Reorder number for set of 10)