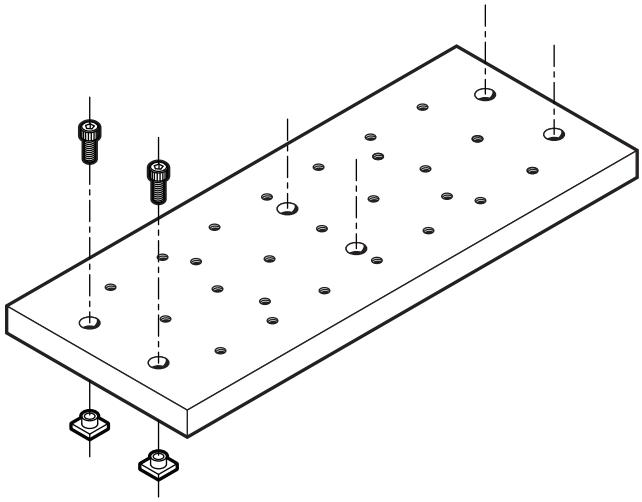

SHERLINE PRODUCTS
INCORPORATED 1974

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. 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 pre-drilled 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 6061-T6 aluminum which is milled to 1/2" thickness. The surface is not anodized as it is intended to be drilled and machined to suit your unique needs.

The top and bottom surface of these tooling plates are machined. However, there may be as much as .002" thickness variation overall. In order to get near perfect flatness of your tooling plate, we recommend that you skim cut the top with a flycutter once your head has been trued in (See the *Machine Assembly and Instruction Guide; Vertical Milling Machine Operation, Using a Dial Indicator*, page 30.). This is the same method that we use on the full size mills in our shop.

Clamping the Tooling Plate to the Mill Table

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.

Thank you,
Sherline Products Inc.

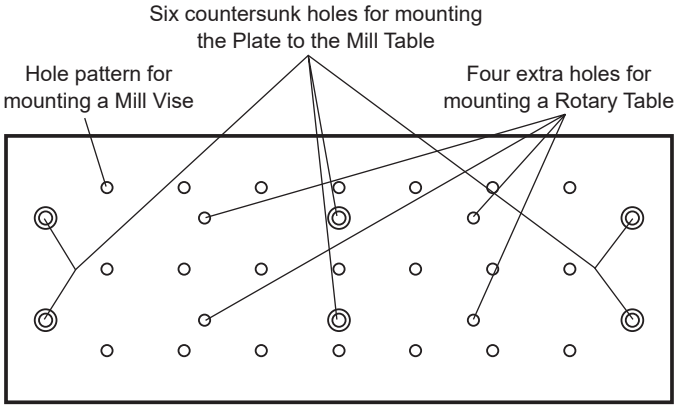

FIGURE 1—Mill Tooling Plate hole pattern. Drill additional holes as needed for your particular jobs.

Parts List

NO. REQ.	PART NO.	DESCRIPTION
6	30560	10-32 T-Nuts (Reorder number for set of 4)
1	35610	1/2" Tooling Plate (4" x 10")
6	35620	10-32 x 7/16" Socket Head Cap Screws

Rotary Table Tooling Plate

A round tooling plate P/N 3725 is available for use on the Sherline rotary table P/N 3700 or 8700. It functions on the rotary table in much the same way the 3560 tooling plate works on the mill table.