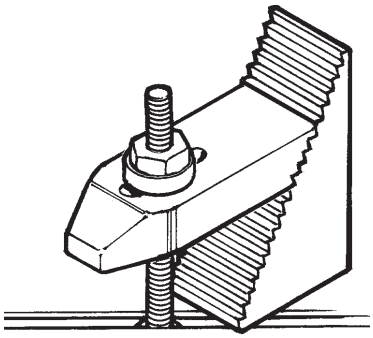


SHERLINE PRODUCTS
INCORPORATED 1974

Step Block Hold-Down Set

P/N 3013

Look in any machine shop supply catalog and you will find hold-down sets that consist of step blocks with corresponding clamps that use T-nuts and studs. This is a very practical way to solve one of the more difficult problems that come up in the machine trades; that is, clamping a part to the table. I am sorry I didn't get around to manufacturing these sooner, but there was always a more pressing problem to solve until now.

Not much is required in the way of instructions in order to use these clamps. A few illustrations are included to give you some tips. The biggest problem you can create for yourself is overtightening the nut and damaging the T-slots on your mill table. You have to realize that you are stronger than your machine when you have both the lever (wrench) and the screw working to your advantage (or disadvantage).

In addition to the threaded studs we provide, 10-32 threaded stock can be purchased from most industrial suppliers and cut to length if you need a longer piece. We have also provided an extra, non-anodized section of step block extrusion for you to cut up into smaller step blocks and machine flat should you need them *(See Figure 1)*.

A nice feature of this set that you won't find even in more expensive, full-size sets is the radiused nut and washer. They allow the nut to pull the washer down flat on the clamp even when it is slightly tilted. I appreciate this kind of detail and felt our customers would too.

—Joe Martin
President and Owner

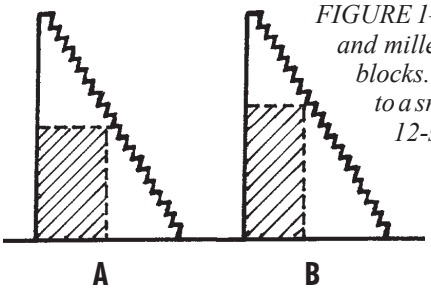


FIGURE 1—(A) Shows a block cut and milled to two equal 10-step blocks. (B) Shows a block cut to a smaller 8-step and larger 12-step block.

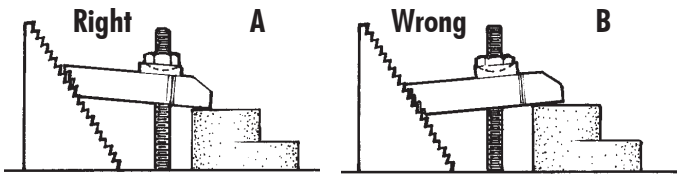


FIGURE 2—(A) Shows the correct way to hold a part. The tip of the clamp should grip the part. (B) Shows the wrong way, with the clamp angling upward and pushing down on the edge of the part. (NOTE: The angles are exagerated for illustration purposes. Keep the clamps as close to level as possible in actual use.)

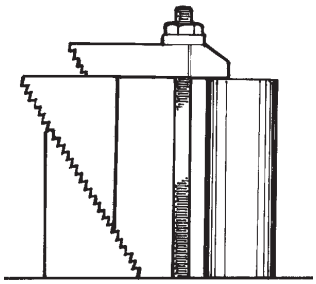
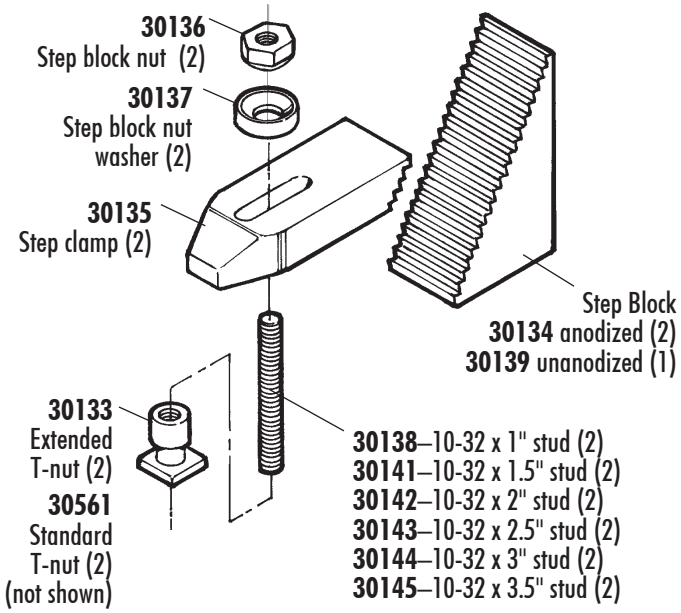


FIGURE 3—The blocks can also be stacked as shown to hold very tall parts. (A long piece of 10-32 threaded stock will be required.)

Exploded View and Part Number List