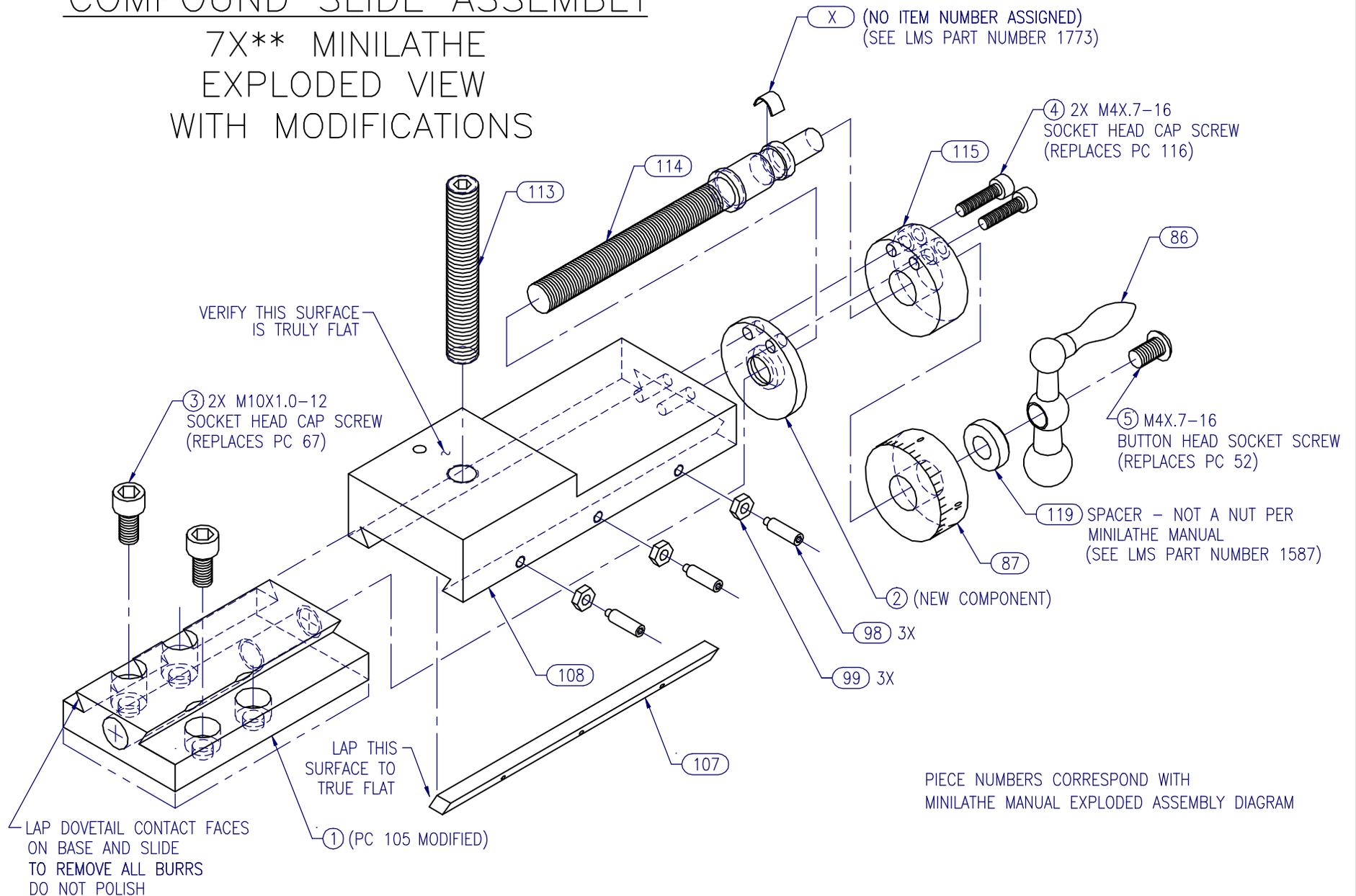
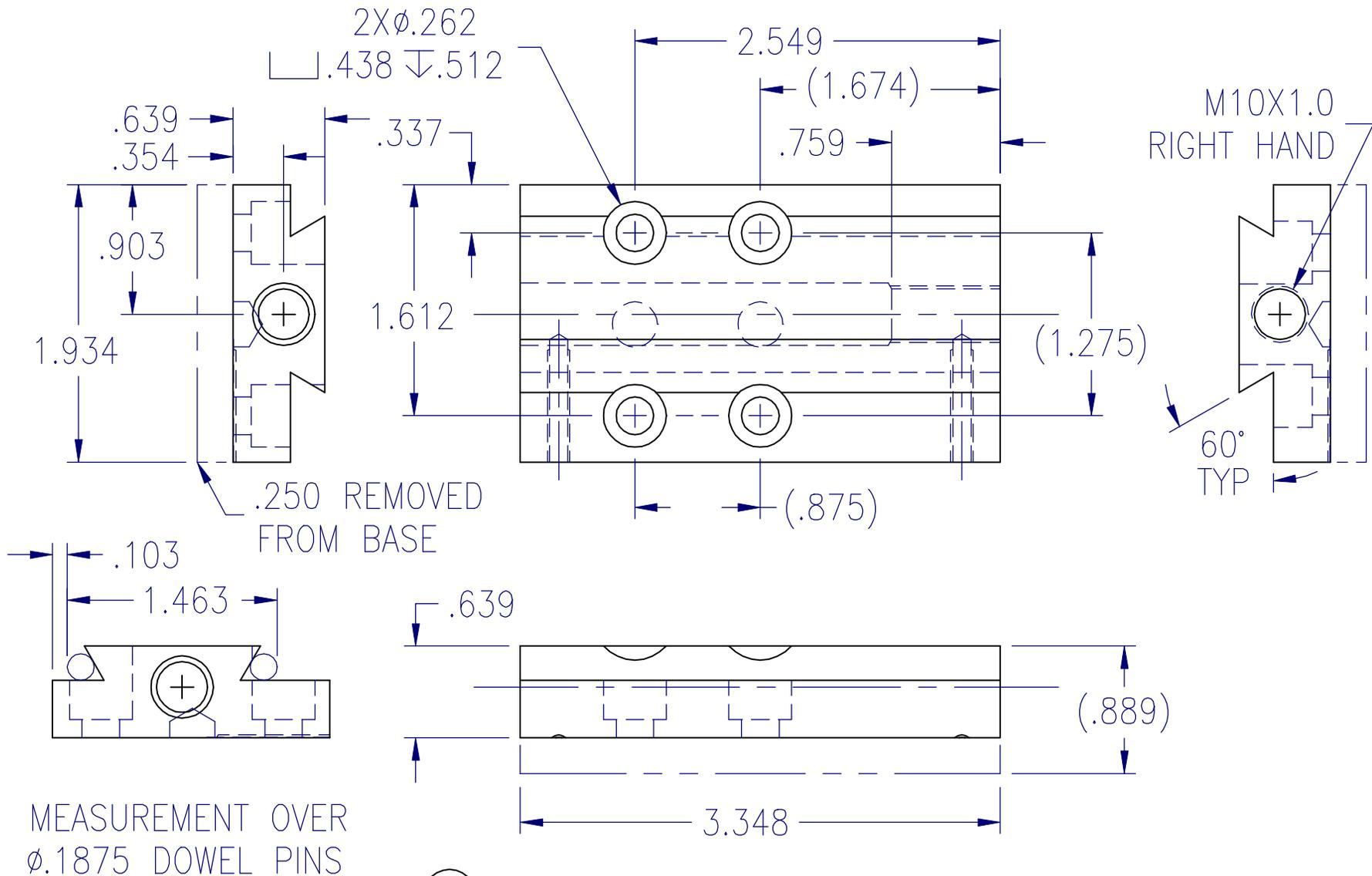


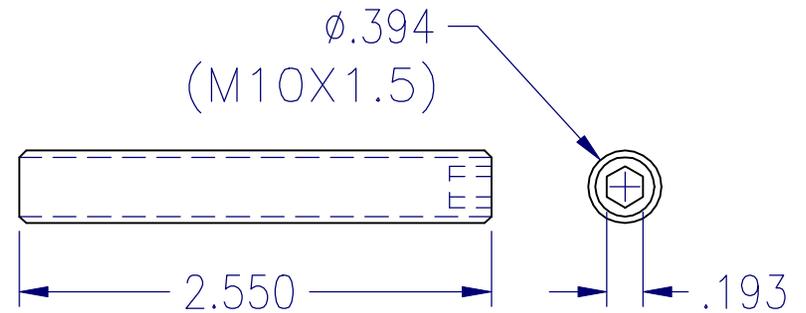
# COMPOUND SLIDE ASSEMBLY

## 7X\*\* MINILATHE EXPLODED VIEW WITH MODIFICATIONS

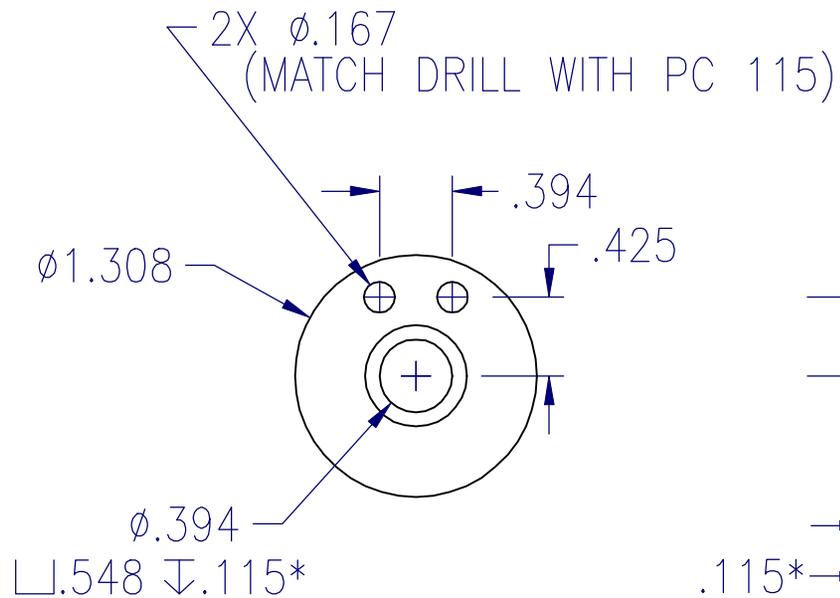




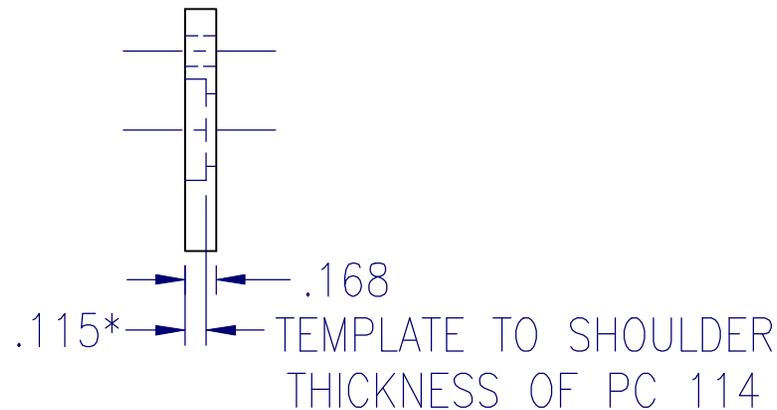
① COMPOUND BASE (PIECE 105)  
 7X\*\* MINILATHE (MODIFIED DIMENSIONS)

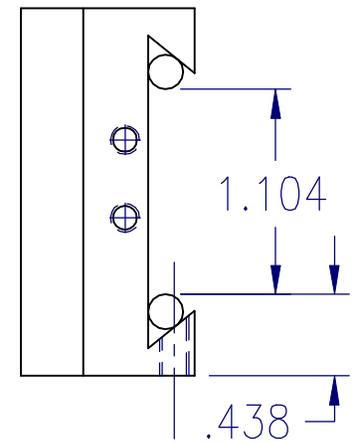
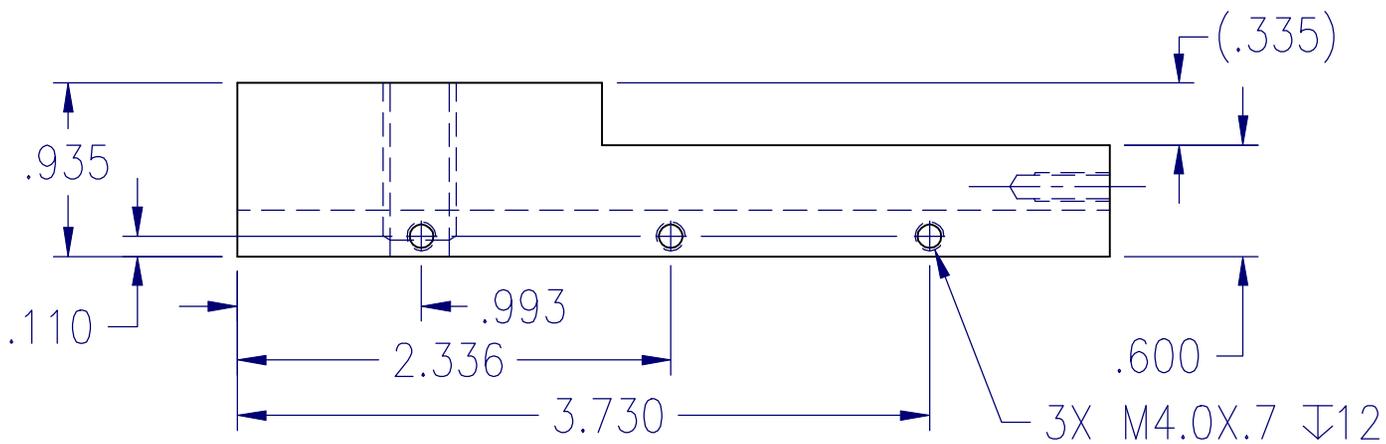
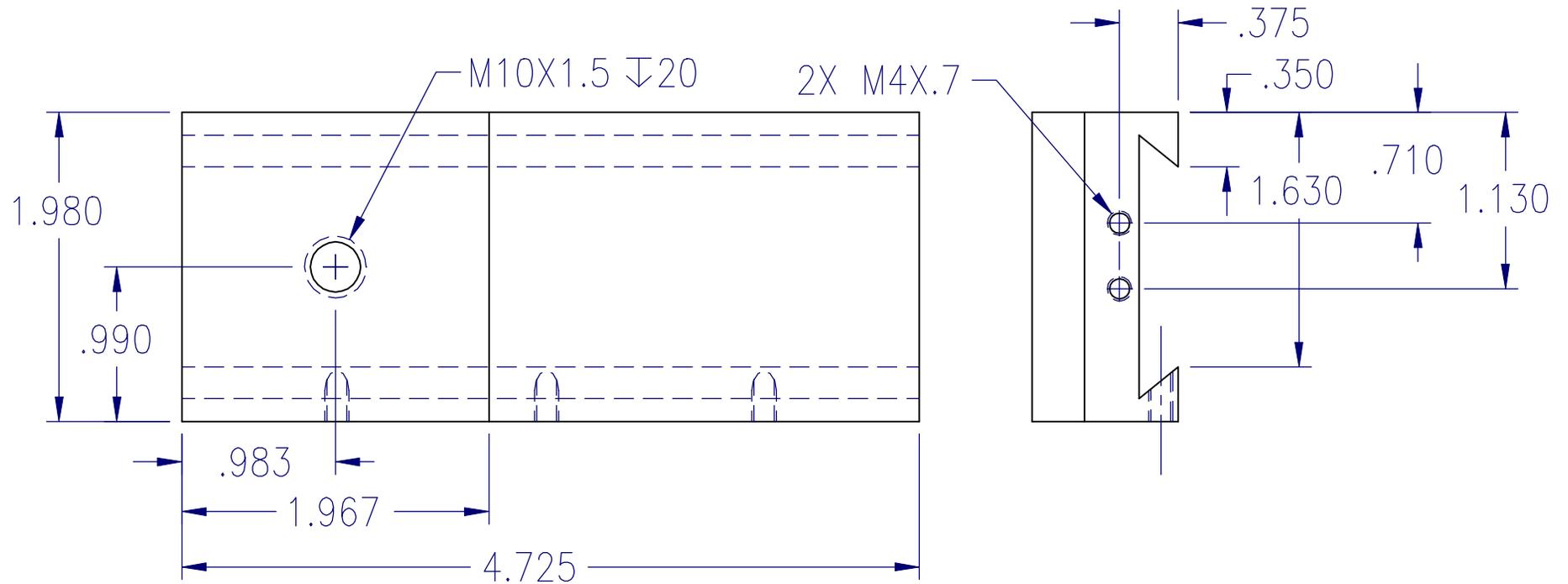


POST, TOOL BLOCK  
 (PIECE 113)  
 MEASURED DIMENSIONS



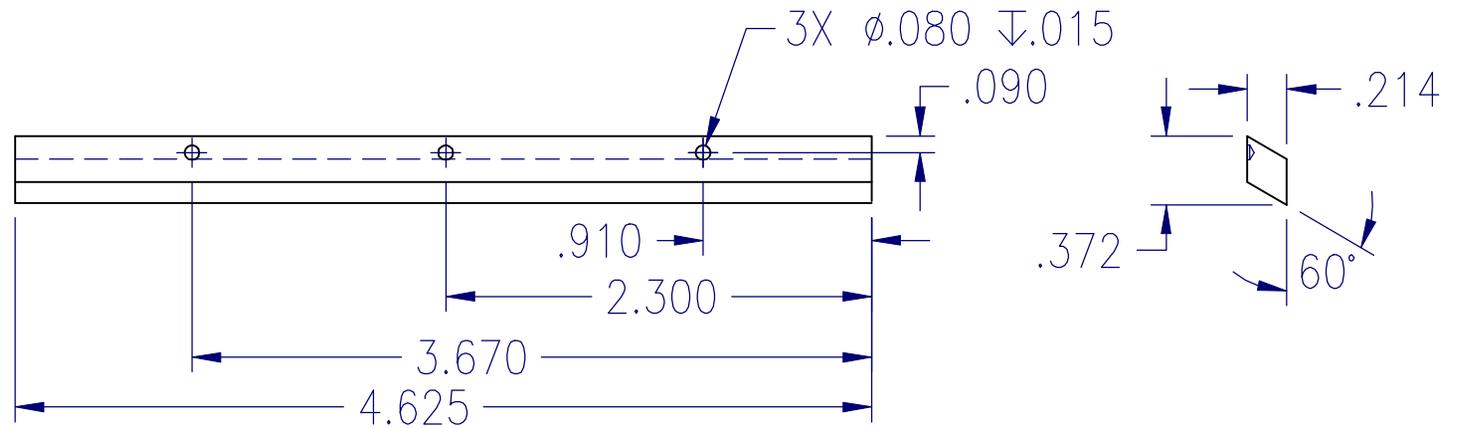
② THRUST WASHER  
 FEED SCREW  
 CUSTOM PART



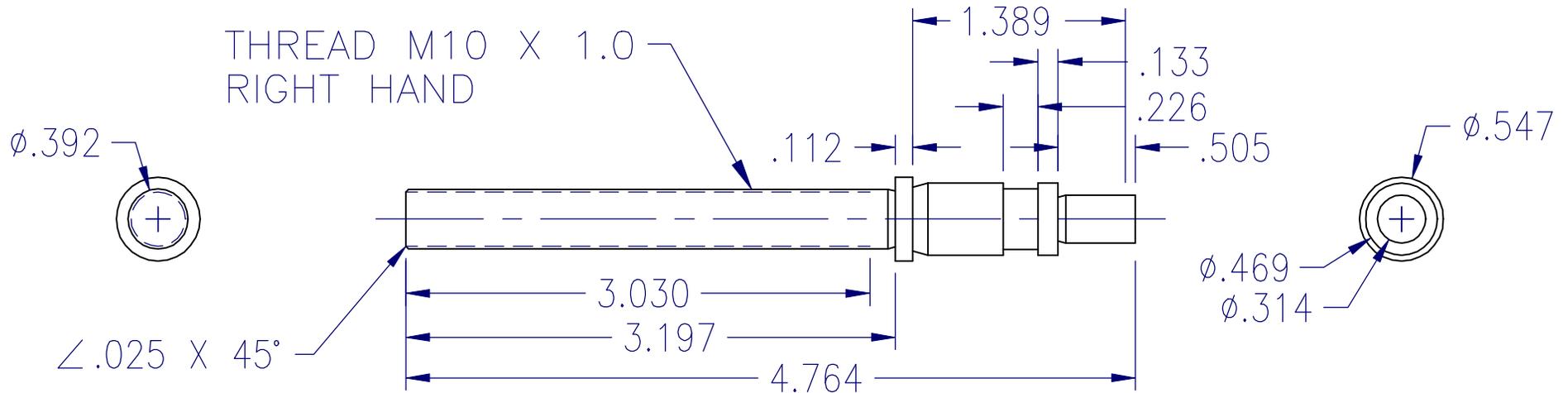


COMPOUND SLIDE (PIECE 108)  
MEASURED DIMENSIONS

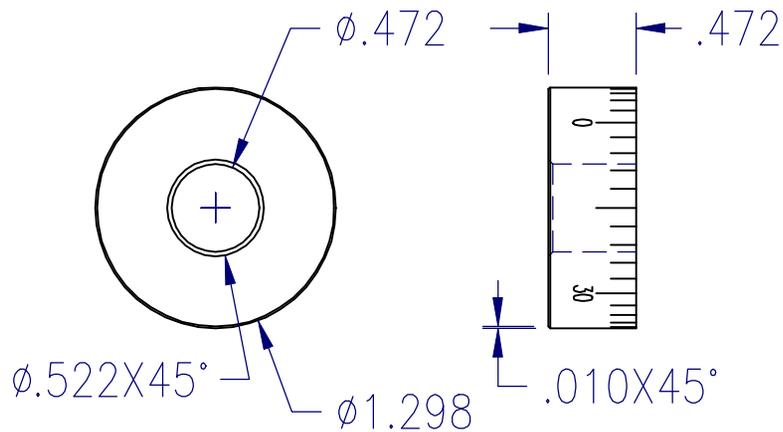
MEASUREMENT OVER  
Ø.1875 DOWEL PINS



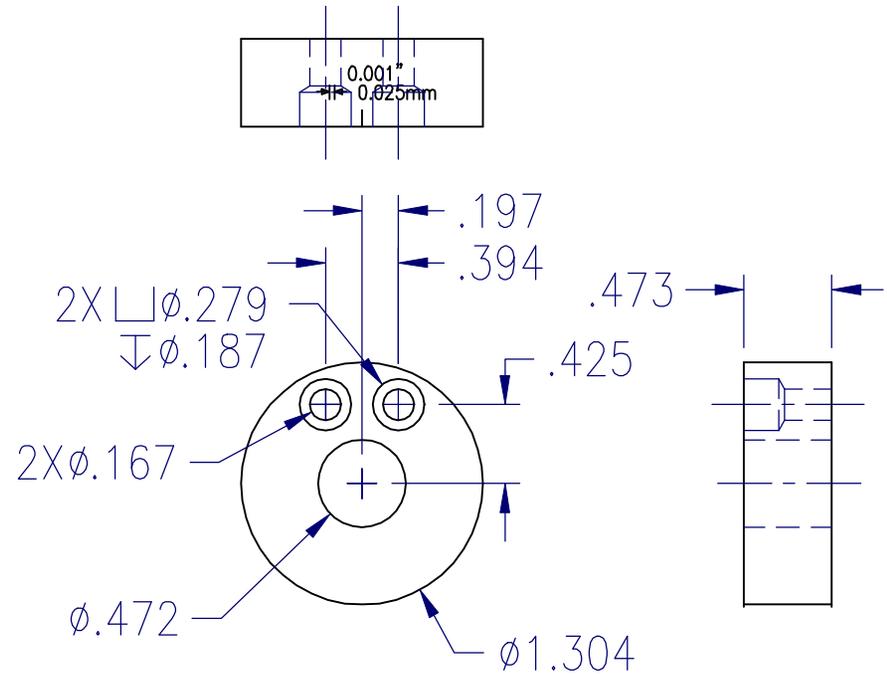
GIB (PIECE 107)  
MEASURED DIMENSIONS



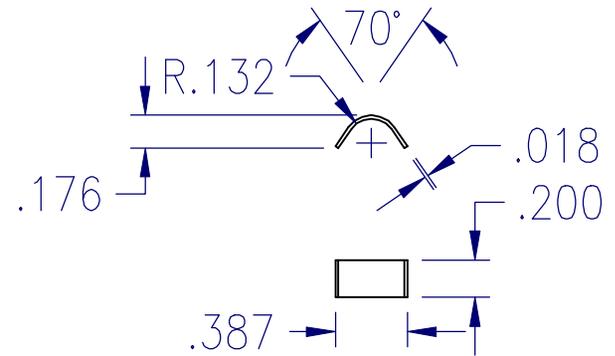
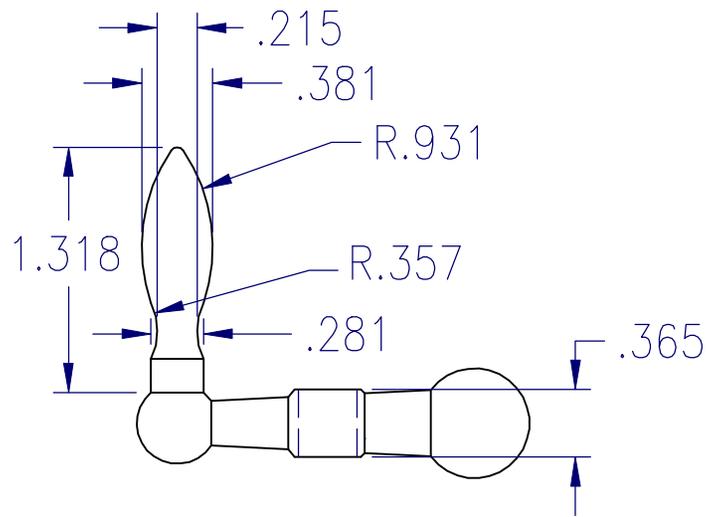
FEED SCREW (PIECE 114)  
MEASURED DIMENSIONS



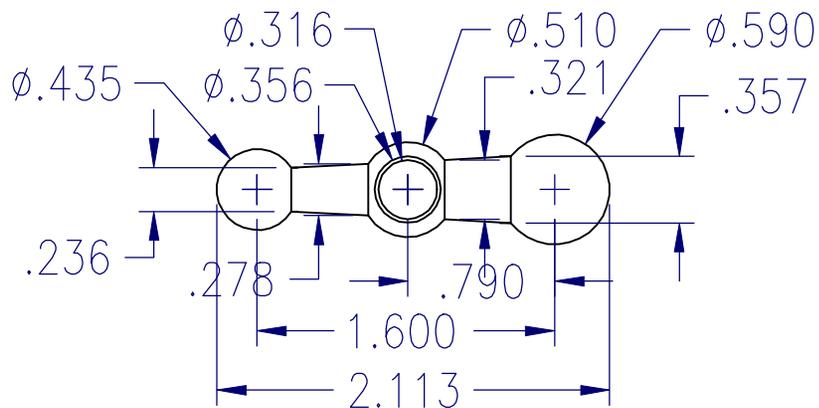
DIAL, COMPOUND  
 (PIECE 87)  
 MEASURED DIMENSIONS



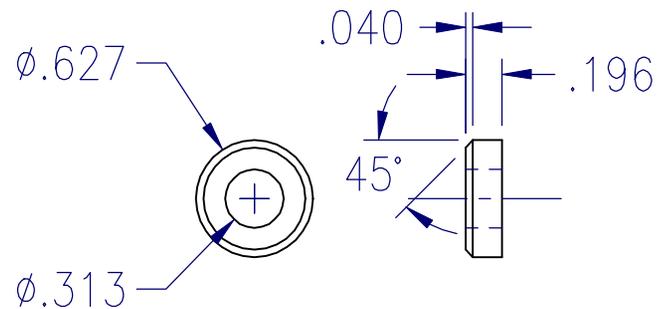
BRACKET, COMPOUND  
 (PIECE 115)  
 MEASURED DIMENSIONS



SPRING, DIAL FRICTION  
(NO PIECE NO. ASSIGNED)  
MEASURED DIMENSIONS



HANDLE (PIECE 87)  
MEASURED DIMENSIONS



SPACER, HANDLE (PIECE 119)  
MEASURED DIMENSIONS

To whomever may be interested;

I finally finished the drawing set for the modification of the Compound Slide. Not having an assistant armed with a stick to hit me when I should be finished, I was not content just drawing the modifications. I went ahead and made measured drawings of all the parts of the assembly, then made another Isometric exploded view of the whole assembly.

The modification consists of milling 1/4" of material off the bottom of the base casting. Since this eats most of the threaded holes for attaching the protractor gizmo, it becomes an artifact in the odds n' ends bin. To set the compound angle, use an adjustable protractor from General Tool, or similar. They come with either a rectangular or semi-circular base piece, and both will work, but, I almost always select the rectangular one when re-setting the compound. If the set angle is 30.5 degrees off the axis of the CS, then the metric in-feed screw will produce a motion in the X direction of exactly (pretty close) 1/2 of the motion according to the Compound dial.

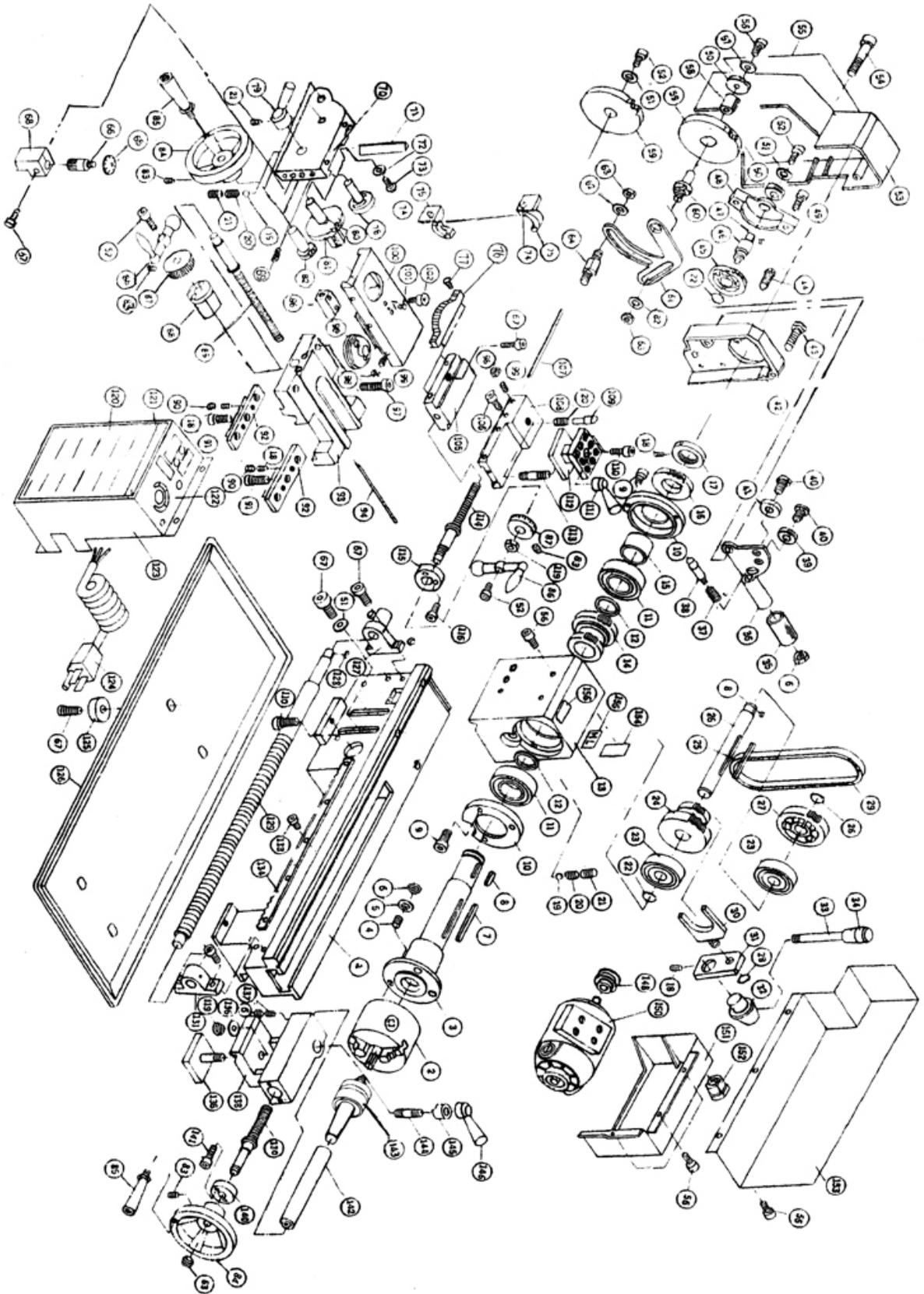
The second ingredient of the Mod is to make a thick washer, part 2, which has a recess of exactly the thickness of the shoulder on the feed screw part. The closer the fit, the less bearing end-play there will be in service. Obviously, if the shoulder is thicker than the recess, the feed screw will be clamped tight when assembled. The compromise is about freedom of movement vs. control of play. If the recess is too deep, then clamp some abrasive paper on a flat surface and grind the excess away by hand lapping. Do not make the face convex by sanding more on the edges than the center, it will work poorly. On the other hand, if the fit is too tight, make a gasket of paper or plastic sheet to space the parts away from the shaft. If it loosens some in service, remove a layer of gasket.

My ACAD installation is set up to print the drawing pages to an HP Laserjet 4L model. This printer is equipped with software to print HPGL-2 files. The ACAD print options are adjusted to enable various drawing colors as specific line thicknesses. So, black object lines print fairly heavily, most colors print in a light (thin) line, and magenta prints in a double-heavy line for making section lines. Magenta is a gross color that sort of dominates everything, so it gets the least-used task. I can't see blue on black, and red on black is difficult to read. A white background hurts the eyes after a while. This got so annoying, I finally went searching for a screen background color that would make all the 7 primary colors more easily viewed. The preferred settings are: R 160,G 192, B 192 which produce a soft green background.

In the drawing package, the various components of the assembly have the maker's piece numbers called out. These correspond with the drawing in the original manual, similar to the attached image. Oh, yes, the drawing sheet called COMPOUND1-A is the same as COMPOUND1-1, except that the hidden line layer is turned off. The hidden lines are yellow, which does not print well in most cases. Hope you can make the images out OK. If not, make an adjustment in the ACAD file.

Enjoy, Ralph

# Assembly Diagram and Parts List



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All ideas, procedures, modifications and whatever is described or shown here is to be used at risk of the reader.

Take care and work safely.