



This is the bottom of the clapper.

Height: 2.720"

Width: 1.750"

Thickness: 0.750"

Radius of bottom: 2.00". The circle in the center of the picture under the "2" is a plugged hole used as the pivot point to cut the radius.

Tool post hole dimensions:

Diameter: 1.050"

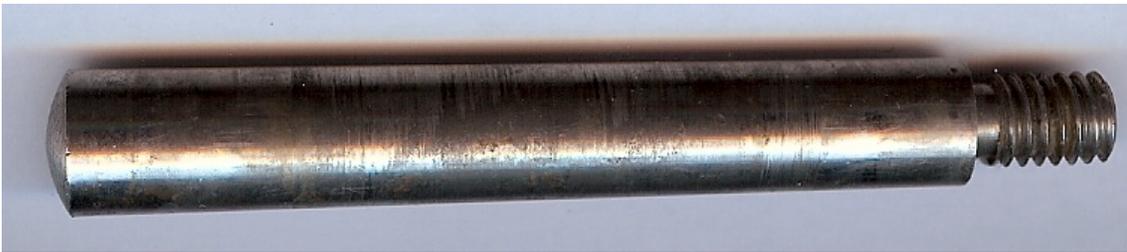
Recess diameter: 1.255"

Recess depth: 0.155"

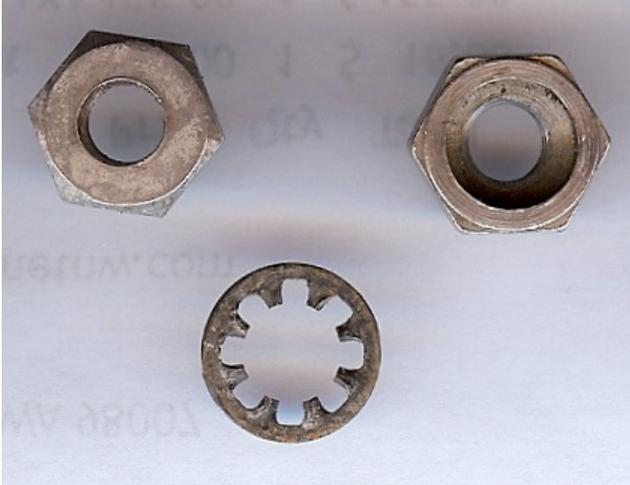
Hole center from bottom: 0.800"



Location of pivot hole: 2.375" from bottom of clapper. Bottom of clapper is flush with clapper box.  
Pivot hole is #8 taper reamed with clapper in place  
Clapper end is radiused 0.375"



Pivot pin is a #8 taper. Length overall is 3.600" from large end crown to end of threads.  
Threads: 5/16"-18, 1/2" long. Clearance cut for single point threading.



Nuts for taper pin. The nut that goes against the clapper box is recessed to clear exposed end of taper.  
Recess of nut is 0.085". Diameter of recess to clear pin.



The bottom of the clapper box is ground and polished iron.

Diameter of stock: 4.050"

Remove 0.625" from each side of round stock

The width between the parallel sides is 2.800"

Thickness of stock: 1.060". It is a casting so this varies slightly.

The pivot hole diameter: 0.375"

The pivot hole center is 0.975" from the bottom

The slot is 2.500" from the pivot. The slot width is 0.440"

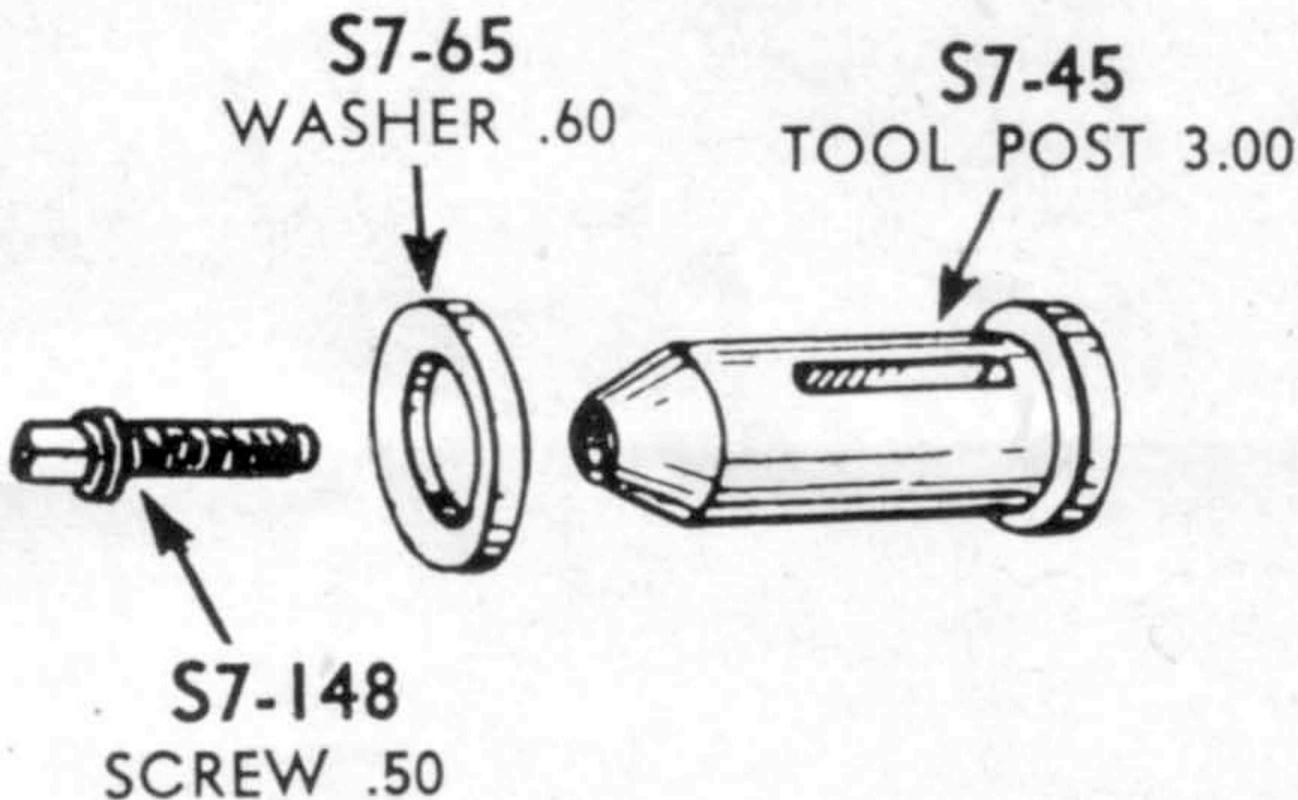
The slot length is 1.700"



The clapper box is milled to leave a thickness of 0.315" and is parallel to the clapper box bottom  
The cutout width provides a slip-fit of the clapper and is appx. 1.755"  
The pivot hole is counter sunk at 90 degrees, depth to allow flush fit of attaching screw.



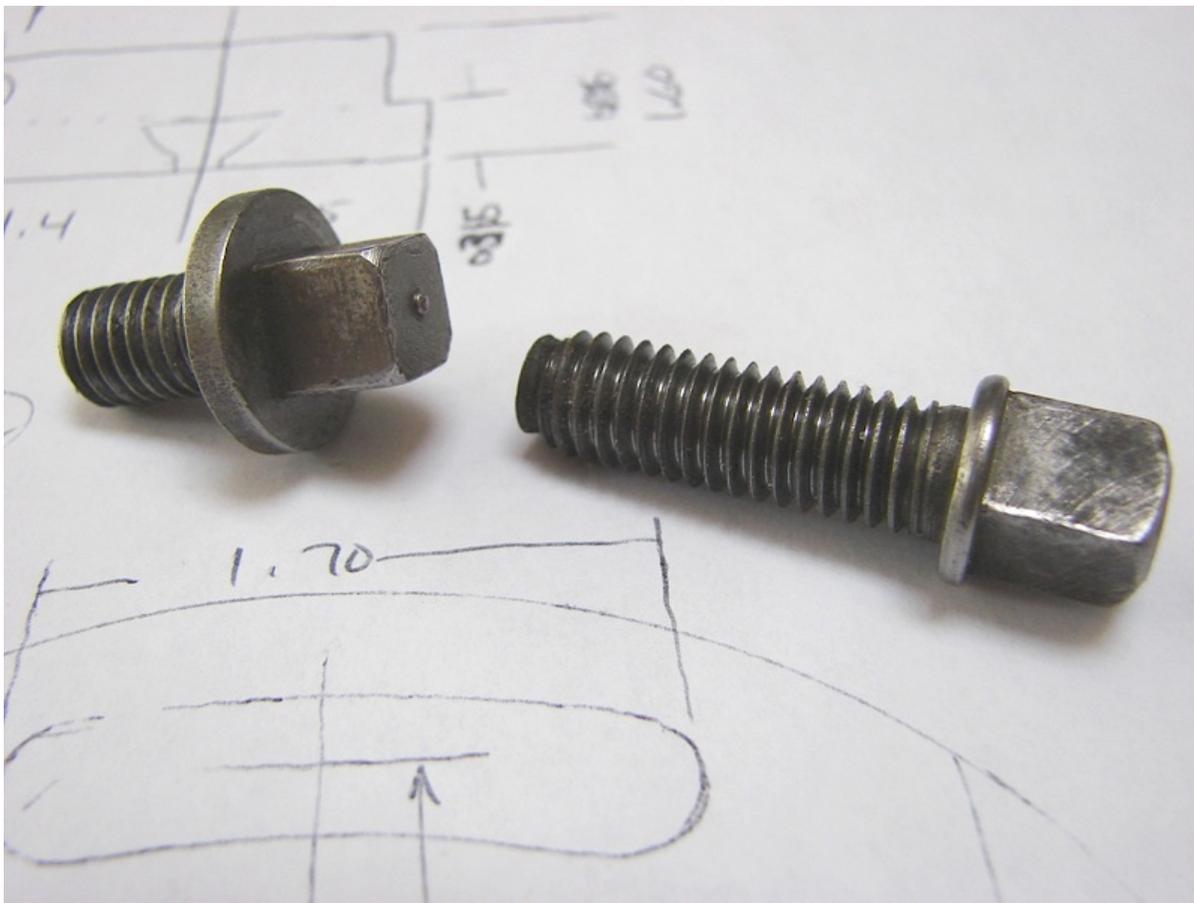
The sides are radiused to clear the clamping bolt.  
Hole diameter is reamed to size (#8 taper)  
Hole center is 2.375" from bottom, same as clapper.



# S7-45X TOOL POST ASSEMBLY

1/4  
MAC

- The tool post length is 2.75"
- The rim diameter is 1.185"
- The rim thickness is 0.125"
- The body diameter is 0.991"
- The slot width is 0.440"
- The bottom of the slot is 0.693" from the bottom surface of the base
- The slot height is 1.165". The bottom of the slot is flat, the top radiused.
- The top of the body is tapered at a 60 degree included angle
- The taper begins 2.250" from the base surface
- The thread is 3/8"-16
- The washer external diameter is 1.435"
- The washer internal diameter is 1.150"
- The washer thickness is 0.220"
- The clamp bolt length over all is 1.740"



The smaller bolt is the clapper angle bolt, S7-66

The overall length is 1.165"

The flats are 0.372" wide

The flats are 0.375" high

The shoulder diameter is 0.750"

The shoulder thickness is 0.125"

The thread is 3/8" - 16

The longer bolt is the tool post bolt, S7-148

The overall length is 1.742"

The flats are 0.372" wide

The flats are 0.455" high

The shoulder diameter is 0.560"

The shoulder thickness is 0.075"

The end of the bolt is turned to 0.285" for a length of 0.085"

The end of the bolt is machined flat

The thread is 3/8" - 16

The clapper and tool post parts drawing is [a large clickable image here](#).