

HEIGHT ADJUSTING
SCREW (BRASS)

TOOL HOLDING
SCREW #10-24X3/4

LONG TOOL HOLDER
MAKE 2

CLAMP SCREW
#10-24X1-1/4

BASIC TOOL HOLDER
MAKE ABOUT 6 EACH

BORING TOOL HOLDER
FOR 1/2" SHANK

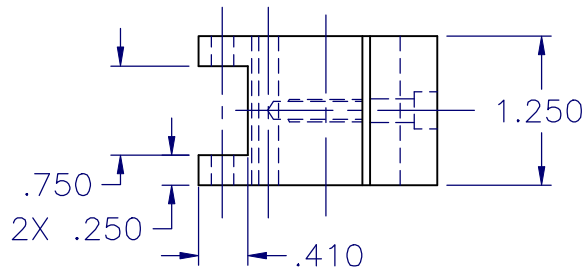
STANDARD 4-WAY
TOOL POST

PARTING TOOL HOLDER
FOR MICRO MARK
#82766 CLAMP
& #82867 BLADE

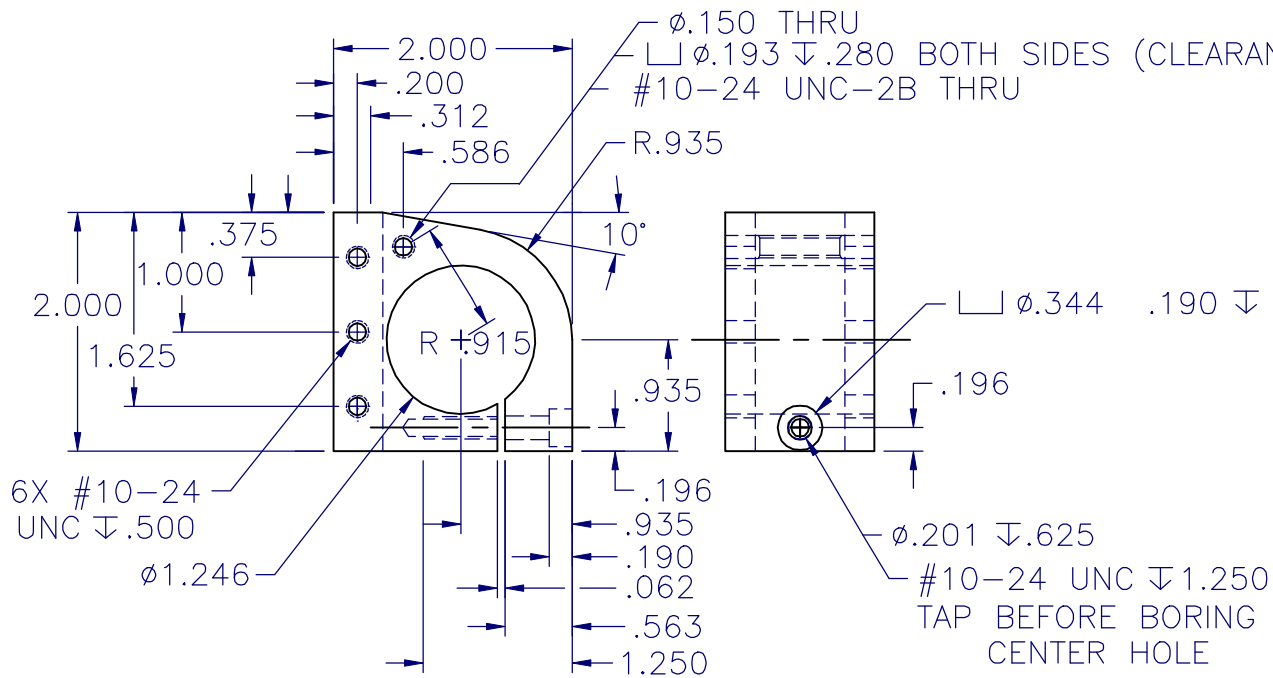
POST

HSS CUTTER

COMPOUND SLIDE ASSY



WIDE-MOUTH TOOL HOLDER



6X #10-24
UNC $\nabla .500$

$\phi 1.246$

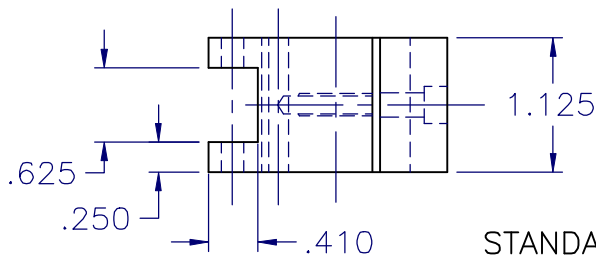
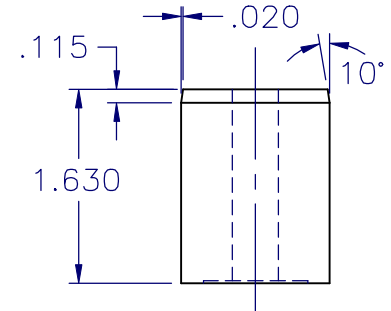
$\phi .150$ THRU
 $\phi .193 \nabla .280$ BOTH SIDES (CLEARANCE FOR TAP BODY DIA)
#10-24 UNC-2B THRU

R.935

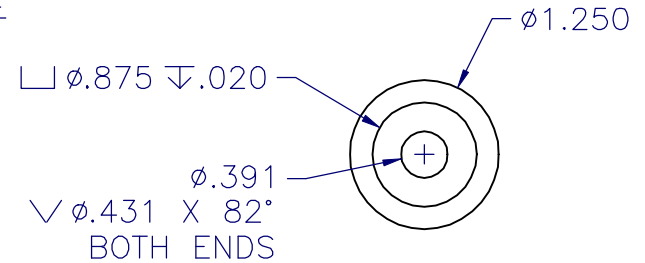
10°

$\phi .344 \nabla .190$

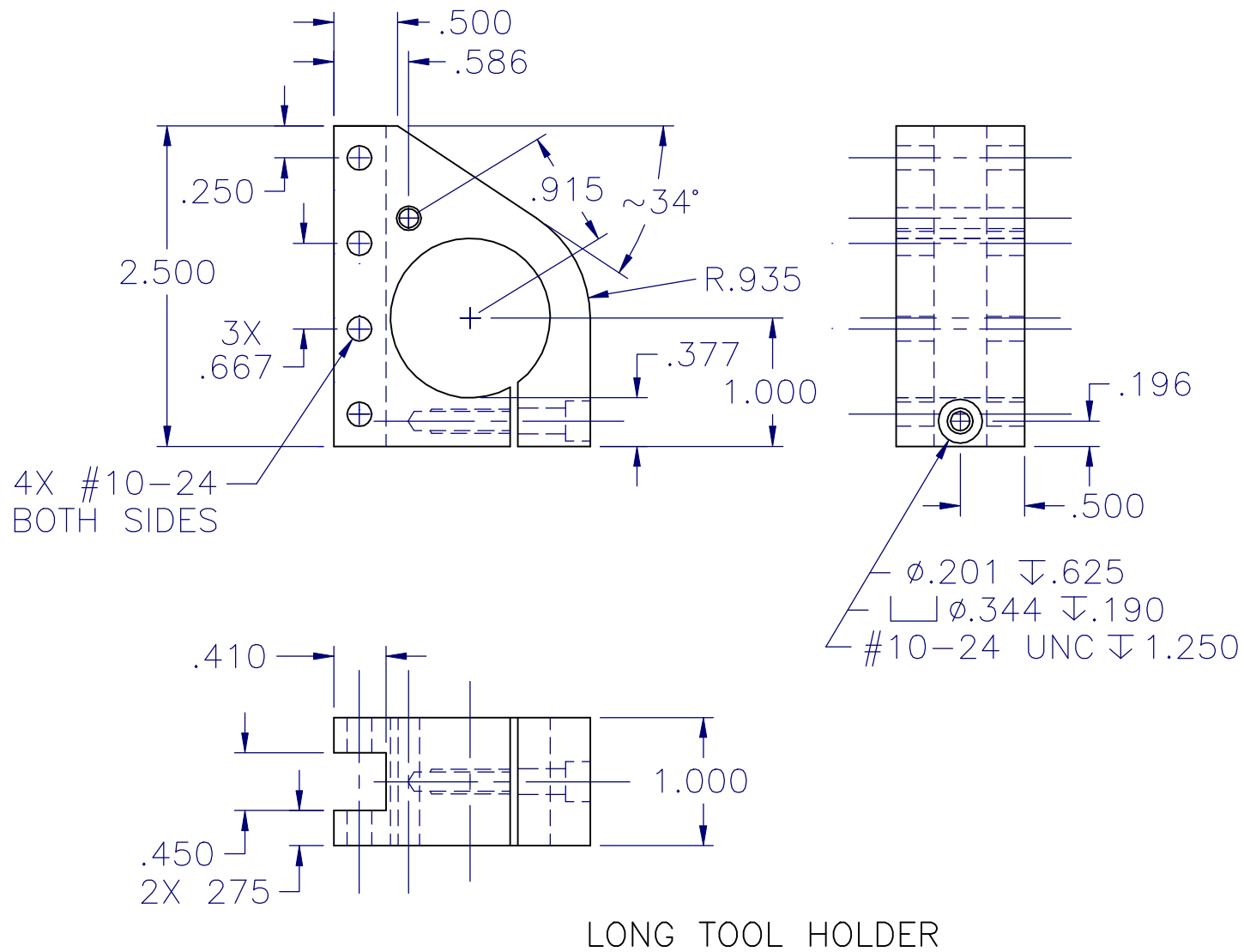
$\phi .201 \nabla .625$
#10-24 UNC $\nabla 1.250$
TAP BEFORE BORING
CENTER HOLE

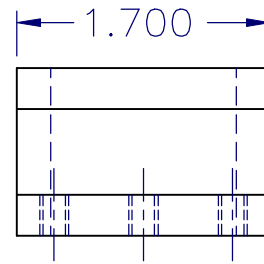
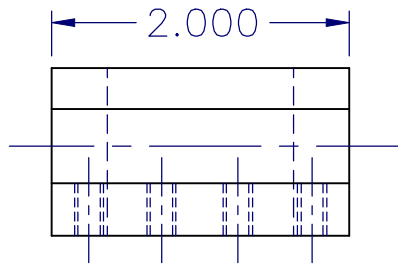


STANDARD TOOL HOLDER



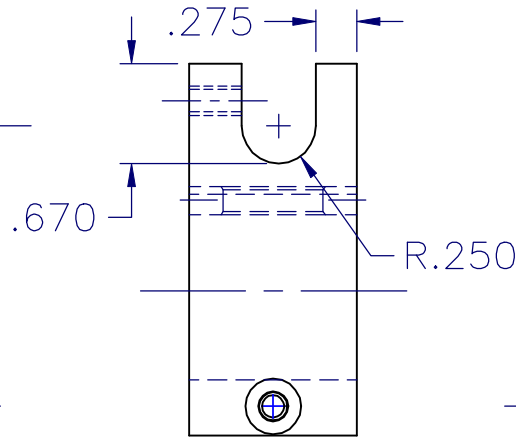
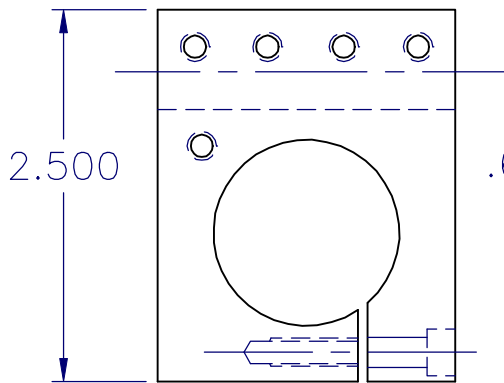
TOOL POST



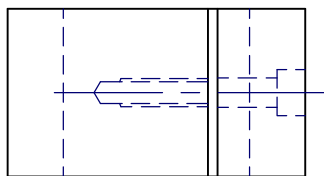
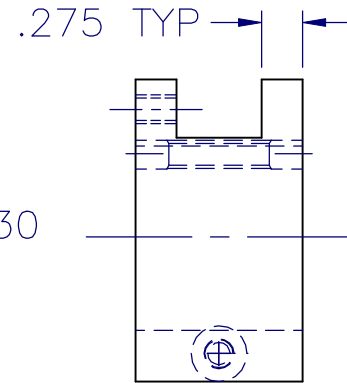


SCREWS SHOULD HAVE 120° POINT TO BEAR ON SHANK OF BORING TOOL

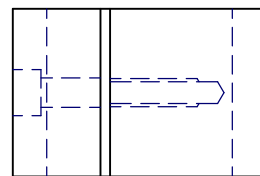
SCREWS SHOULD HAVE SLIGHT RADIUS CROWN & FIRST 2 THREADS REMOVED



USE #10 SCREWS FOR TOOL CLAMP



HOLDER FOR 1/2" SHANK BORING BAR



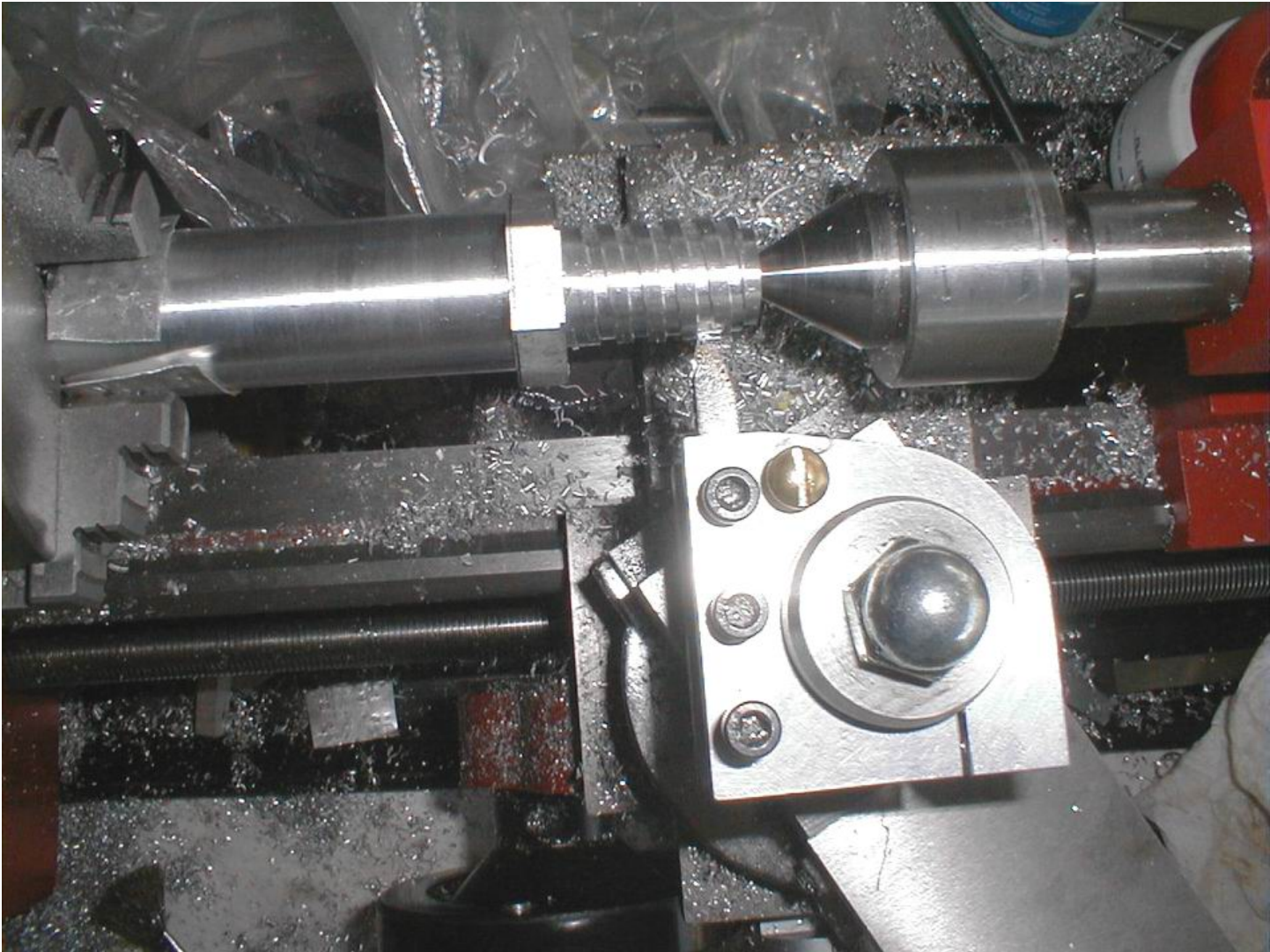
HOLDER FOR MICRO-MARK #82766 PARTING TOOL CLAMP WITH 82766 BLADE

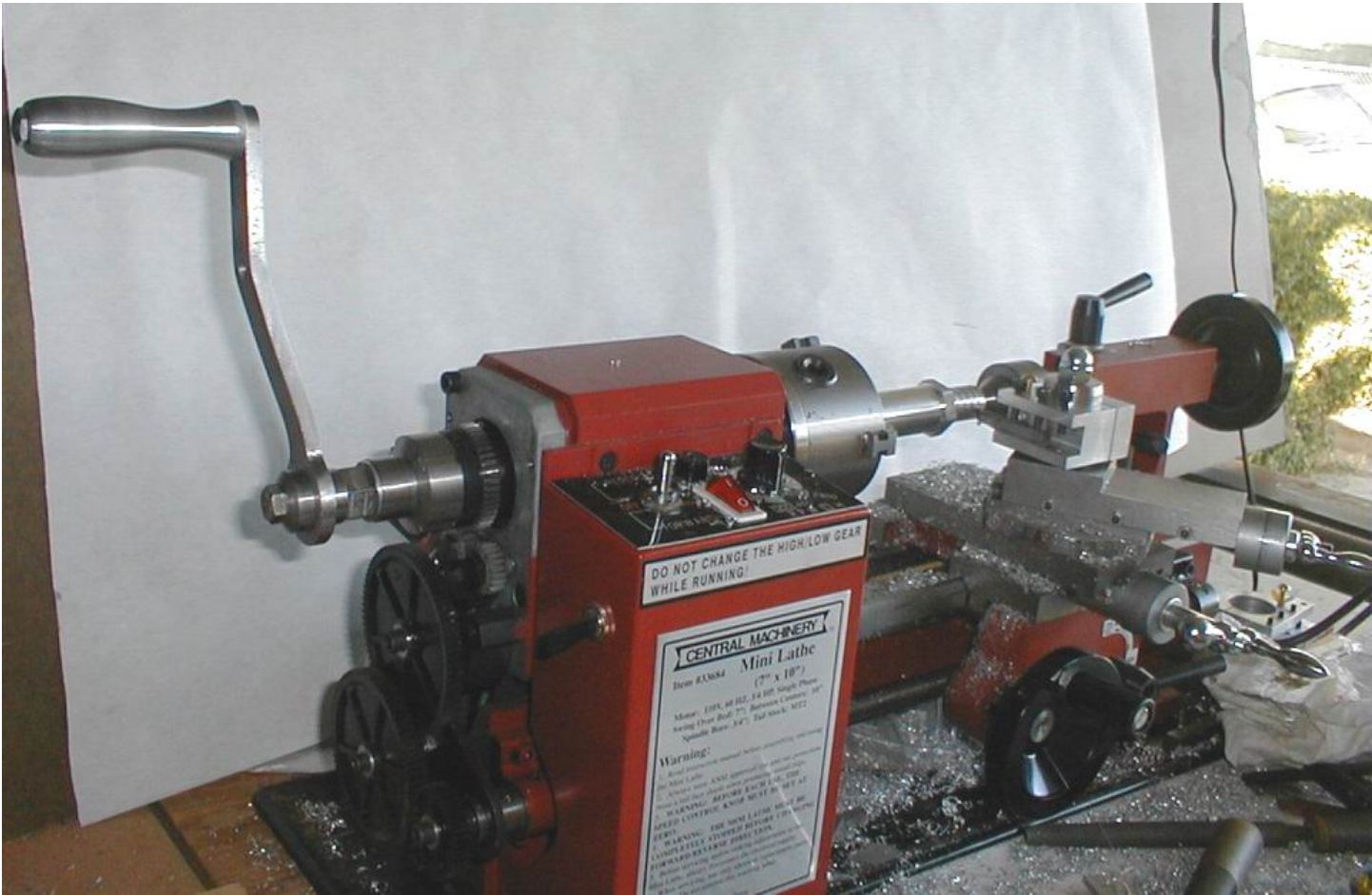
OTHER TOOL HOLDER SHAPES
MADE FROM AVAILABLE BLOCKS

ADJUSTABLE TOOL HOLDER FOR 7X** MACHINES

CONSTRUCTION NOTES:

1. MAKE POST FROM MILD STEEL OR STAINLESS ROD. (Aluminum on aluminum will eventually gall) POLISH.
2. MAKE TOOL HOLDERS OF 6061 OR 7075 -T6 MATERIAL. STEEL OR CAST IRON WORKS NICELY, BUT IS MORE WORK TO MACHINE.
3. SAW-CUT BLANKS FROM PLATE OR SQUARE ROD STOCK. LEAVE ALLOWANCE FOR FACING/SQUARING.
4. MOUNT BLANK IN 4-JAW CHUCK ON 7X** AND TRUE ALL 6 FACES. SHIMS MAY BE NEEDED TO AVOID JAWS TOUCHING EACH OTHER.
5. LAYOUT HOLE LOCATIONS USING A SQUARE AND SCRIBE. CENTER PUNCH EACH HOLE POSITION. INCLUDE CLAMP SCREW HOLES ON BOTH SIDES OF PIECE.
6. DRILL, COUNTERBORE AND TAP THE CLAMP SCREW HOLE. (AVOIDS DISTORTION OF CENTRAL BORE BY TAP)
7. MAKE A CENTER-FINDER TOOL OF 3/8 OR 1/2 DIA ROD. CENTER DRILL ONE END, TURN A 60° CONE ON THE OTHER END.
8. ADJUST THE BLANK IN THE 4-JAW CHUCK TO CENTER THE POST HOLE, USING A DIAL INDICATOR AND THE TOOL SUPPORTED BY THE TAIL STOCK AND THE CENTER PUNCH DIMPLE IN THE BLANK.
9. DRILL THROUGH TO LARGEST AVAILABLE DIAMETER, ENLARGE TO FINAL SIZE WITH BORING BIT. MAKE BORE DIAMETER .002 TO .005 LARGER THAN THE POST DIAMETER.
10. MILL OUT THE GROOVE FOR THE TOOL BIT.
11. DRILL AND TAP THE 6 CLAMP SCREW HOLES. USE #10-24 X 3/4" SHCS.
12. DRILL AND TAP THE HEIGHT ADJUSTER SCREW HOLE. COUNTER-DRILL THE TOP AND BOTTOM DEEP ENOUGH TO ALLOW YOUR TAP TO COMPLETELY THREAD THE MIDDLE.. THE COUNTER-BORE ALLOWS THE TAP TO PASS THROUGH ENOUGH TO GET A COMPLETE THREAD. USE #10-24 X 1.5" BRASS SCREW.
13. CHAMFER ALL EDGES, REMOVE BURRS FROM ALL HOLES, ESPECIALLY INSIDE TOOL GROOVE.
14. COUNTER-BORE ON BOTTOM OF POST HELPS AVOID MASHING CHIPS UNDER THE POST.
- 15 . SAW-CUT THE SLOT FOR CLAMPING AS THE LAST OPERATION.
16. FIND A M10X1.5 ACORN NUT TO MOUNT THE POST ON THE COMPOUND STUD. IF YOUR COMPOUND HAS BEEN MODIFIED, ADJUST POST LENGTH TO MATCH. C-BORE FOR NUT, IF NECESSARY.







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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.