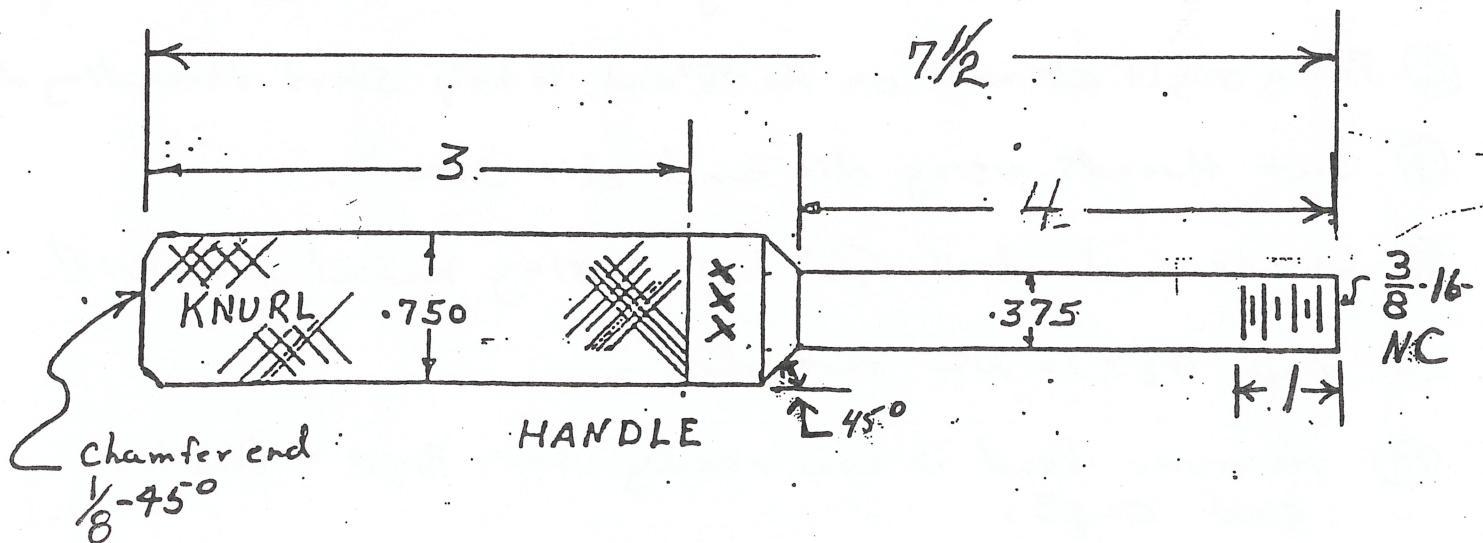


Hammer Handle Procedures

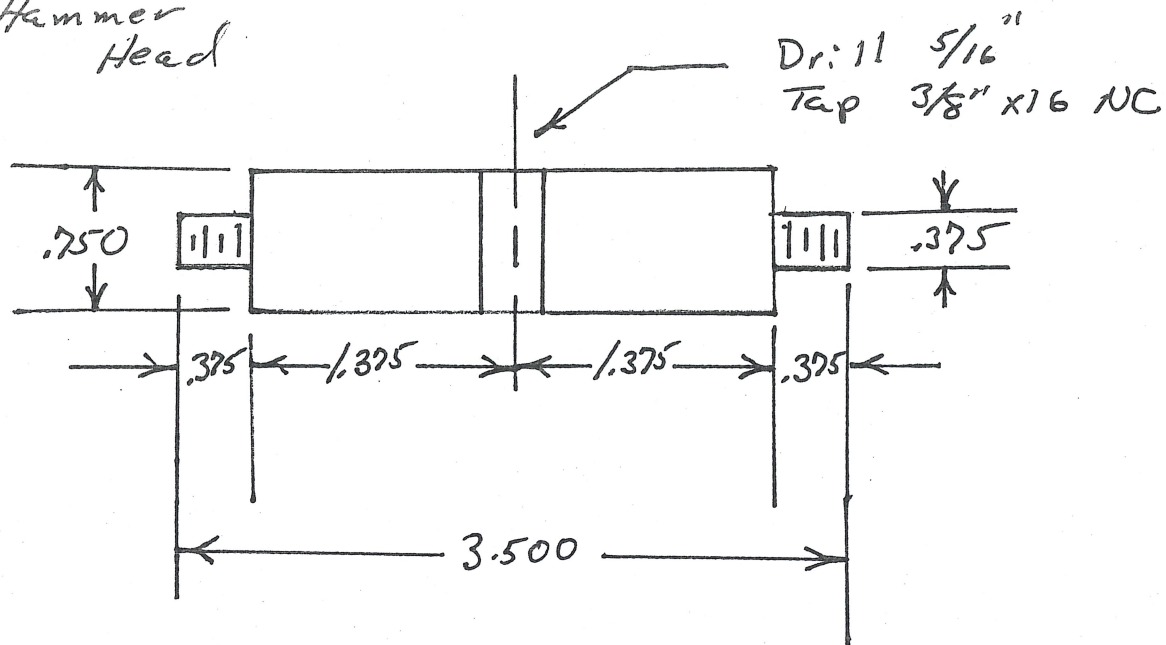
1. Use your step exercise as the stock for your handle
2. Mount between centers with the lathe dog on the .375" end
3. Turn the first three steps to .750" Diam.

NOTE: Speed-500 RPM Feed-.010"/Rev. for rough cut
.003"/Rev. for finish cut

4. Turn the 3/16 x45-degree chamfer on the end
5. Reverse the piece between centers and turn the smaller three steps to the finished diam. of .375". Be sure to the .750" end has a total finished length of 3.500".
6. Turn the 45-degree taper between the large and small end
7. Lay out the 3" knurl length.
8. Stamp your initials and the year in the 5/16" space using vee blocks.
9. Mount 3-Jaw chuck on the lathe and knurl large end.
10. Clean knurl using solvent and the wire wheel.
11. Reverse piece and turn a small chamfer on the .375 end to help starting threads
12. Lay out thread length and cut threads using a die and die stock.
13. Handle is now ready for assemble.



Hammer
Head



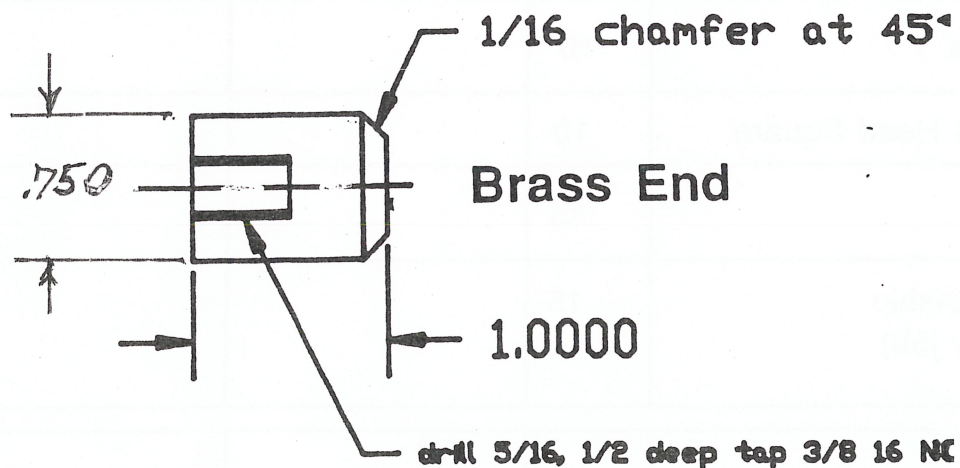
Procedures

- ① Cut one piece of $3/4"$ D. CRS stock 3.750" long
- ② mount work in 3 Jaw chuck or Collet Chuck
- ③ Face one end and de burr.
- ④ ReChuck end for end and face to finished length
- ⑤ Turn $3/8"$ Diam. for threading - make sure shoulders are square.
- ⑥ Put a slight chamfer on the $3/8"$ end to help start threading die.
- ⑦ Cut threads using die and die stock.
- ⑧ Locate and drill $5/16"$ hole using Radial Arm Drill.
- ⑨ Tap $3/8 \times 16 \text{ NC}$ threads.
- ⑩ Hammer head is now ready for Brass & Plastic end caps.

RAH
11/10/06

Brass End (plastic)

1. Cut one piece of $7/8$ " Brass stock $1\ 1/4$ " long
2. Mount in 3-jaw chuck (bump center)
3. Face end (do not center drill)
4. Rechuck end for end and center drill
5. Face to length – center drill again if needed
6. Drill $5/16$ " Diam. $1/2$ " deep on the lathe
7. Tap $3/8$ " –16-NC
8. Chuck back in lathe and counter sink $1/8$ " internal chamfer
9. Assemble steel and brass ends together
10. Chuck steel and turn brass to finished diameter
11. Chamfer brass end
12. Assemble hammer handle and head
13. Cross drill for $1/8$ " roll pin
14. Press in roll pin
15. File off any exposed threads from handle
16. Buff
17. Grade your own work
18. Tape hammer to evaluation sheet and turn in for instructor's grade



NAME _____

HOUR _____

Soft Face Hammer Evaluation Sheet

		Points Possible	Student	Instructor
Head	1)	Head Length	10	
	2)	<i>Roll-Pin Location</i>	10	
	3)	<i>Brass / Plastic Fit</i>	5	
	4)	Chamfers	5	
	5)	Drilled Centered	10	
	6)	Drilled Straight	10	
	7)	<i>Handle cutoff/Filed</i>	5	
Handle	8)	Knurl	15	
	9)	Handle Length	10	
	10)	Lg. Dim.	10	
	11)	Sm. Diam.	10	
	12)	Chamfers	10	
	13)	Handle & Head Square	10	
	14)	Finish	15	
	15)	Craftsmanship (Quality job)	15	
Total Possible		150 points	150 -A 135 -B 120 -C 105 -D 90	