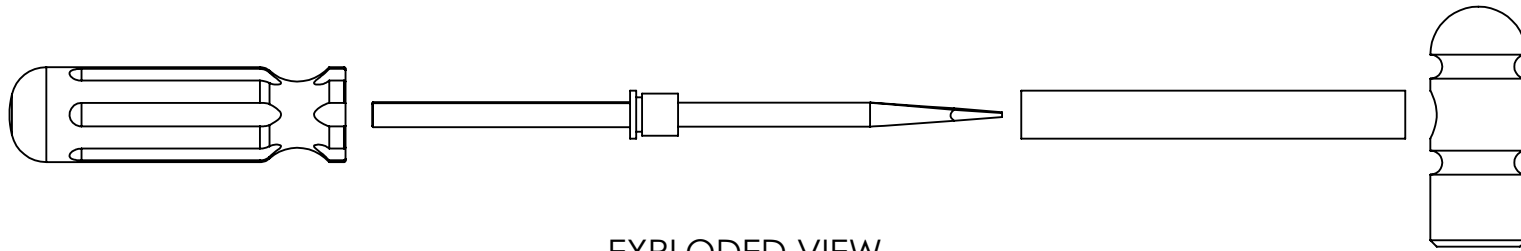
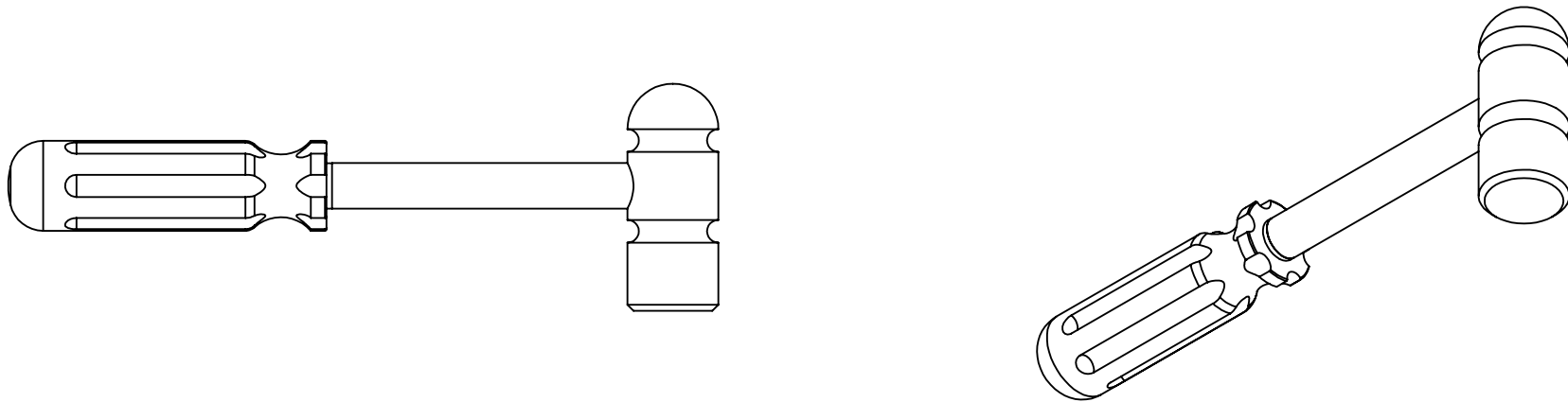



EGR100 Hammer Screwdriver Project



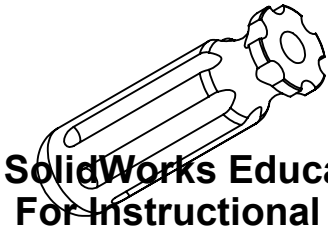
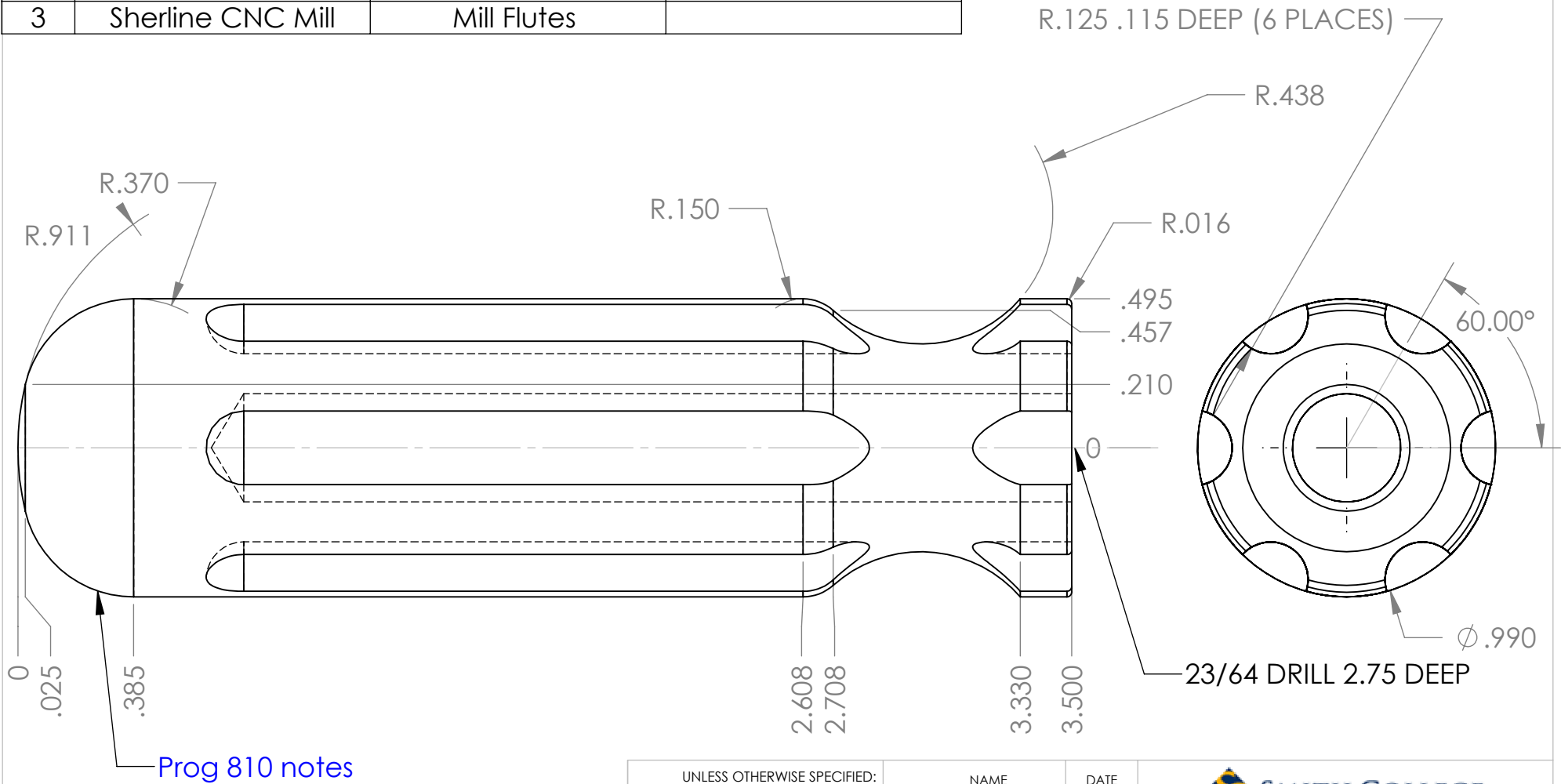
EXPLODED VIEW




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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/32"$ ANGULAR: MACH $\pm .5$ BEND \pm TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ INTERPRET DRAWING PER: ASME Y14.5-1994 MATERIAL Steel/Acrylic FINISH REMOVE ALL SHARP EDGES AND BURRS	NAME	DATE	 SMITH COLLEGE	
	DRAWN EJJ	7/16/09		
	CHECKED D&E	9/5/12	<h2>Hammer Assembly</h2>	
	ENG APPR.			
	MFG APPR.			
	QUAL APPR.		SIZE A	Part
	COMMENTS:		PART REV	DOC REV 5
			SCALE: 2:1	WEIGHT:
			SHEET 1 OF 7	

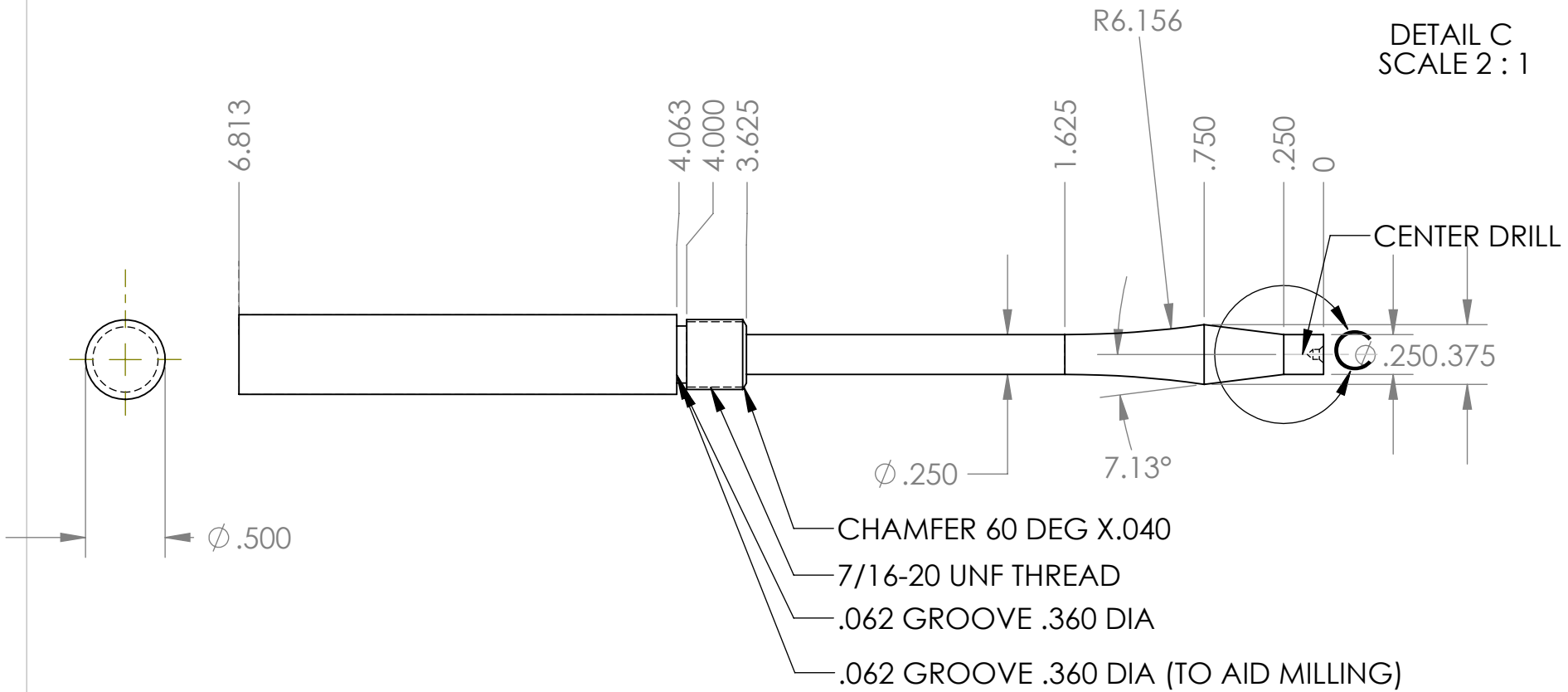
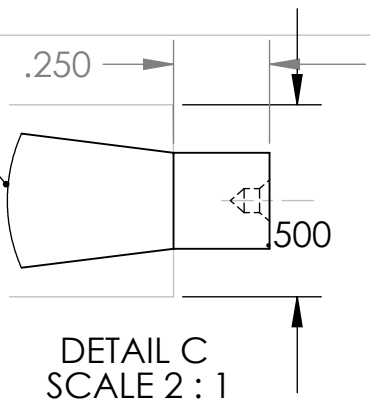
Operations List			
1	Trak CNC Lathe	Turn radiuses, Cutoff	Program 810
2	Trak CNC Lathe	Face Cleanup, Drill	DRO
3	Sherline CNC Mill	Mill Flutes	



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 SMITH COLLEGE	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/32"$ ANGULAR: MACH $\pm .5$ BEND \pm TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$		DRAWN EJJ	7/16/09		
INTERPRET DRAWING PER: ASME Y14.5-1994		CHECKED D&E	9/5/12	<h1>Hammer Handle</h1>	
MATERIAL Clear Acrylic		ENG APPR.			
FINISH		MFG APPR.			
REMOVE ALL SHARP EDGES AND BURRS		QUAL APPR.			
		COMMENTS:		<div> <div>SIZE A</div> <div>Part</div> <div>PART REV</div> <div>DOC REV 5</div> </div>	
				<div> <div>SCALE: 1:2</div> <div>WEIGHT:</div> <div>SHEET 2 OF 7</div> </div>	

OPERATIONS LIST		
1	Saw	Cut stock to 7 length
2	Trak CNC Lathe	Face/Turn/Center Drill one end
3	Trak CNC Lathe	Turn profile/Thread/Groove Prog 711
4	Wire brush wheel	Burnish threads

Prog 711 notes

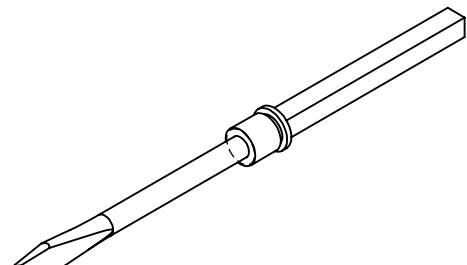
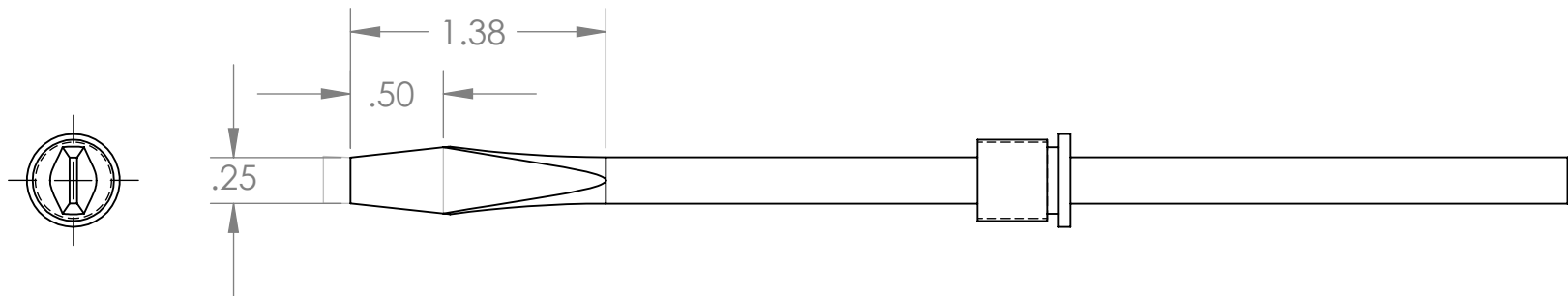
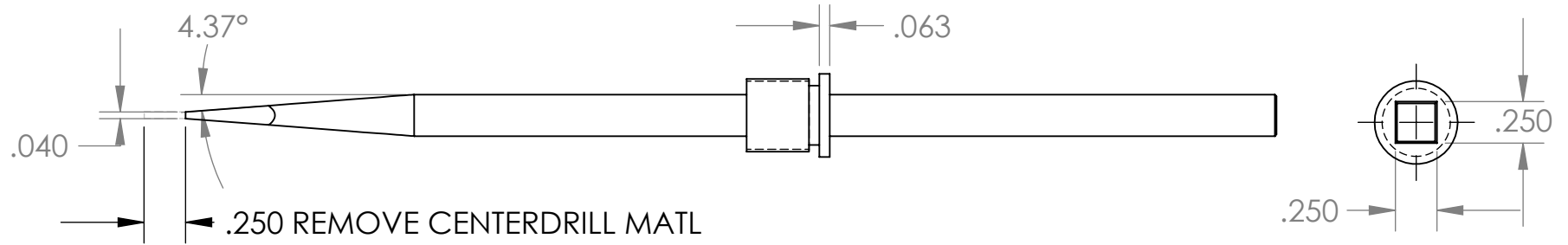


UNLESS OTHERWISE SPECIFIED:		NAME	DATE		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/32"$ ANGULAR: MACH $\pm .5$ BEND \pm TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$		DRAWN EJJ	7/16/09		
INTERPRET DRAWING PER: ASME Y14.5-1994		CHECKED D&E	9/5/12	<h1>CNC turned shaft</h1>	
MATERIAL Steel		ENG APPR.			
FINISH		MFG APPR.			
REMOVE ALL SHARP EDGES AND BURRS		QUAL APPR.			
		COMMENTS:		SIZE A	Part
				PART REV	DOC REV 5
				SCALE: 1:1	WEIGHT:
				SHEET 3 OF 7	


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OPERATIONS LIST

1	Emery cloth	Polish shaft
2	Bridgeport Mill	Mill .250 square flats
3	Trak Mill	Machine blade shape/trim end/Engrave
4	Torch/casenite	Heat treat and temper blade
5	Emery cloth	Polish blade faces

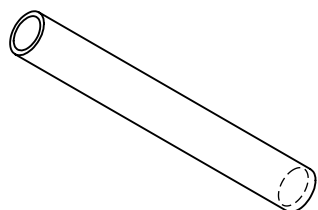
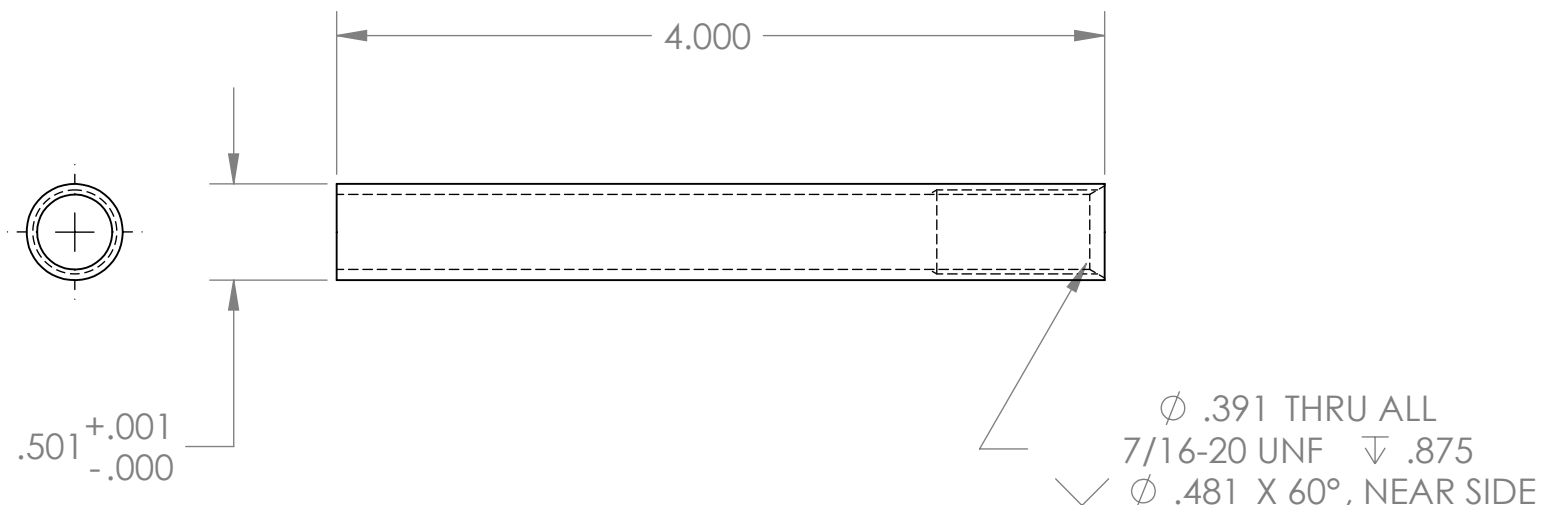


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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 SMITH COLLEGE	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/32"$ ANGULAR: MACH $\pm .5$ BEND \pm TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$		DRAWN EJJ	7/16/09		
INTERPRET DRAWING PER: ASME Y14.5-1994		CHECKED D&E	9/5/12	<h2>Finished Blade Shaft</h2>	
MATERIAL Steel		ENG APPR.			
FINISH		MFG APPR.			
REMOVE ALL SHARP EDGES AND BURRS		QUAL APPR.			
		COMMENTS:		SIZE A	Part
				PART REV	DOC REV 5
				SCALE: 1:1	WEIGHT:
				SHEET 4 OF 7	

OPERATIONS LIST

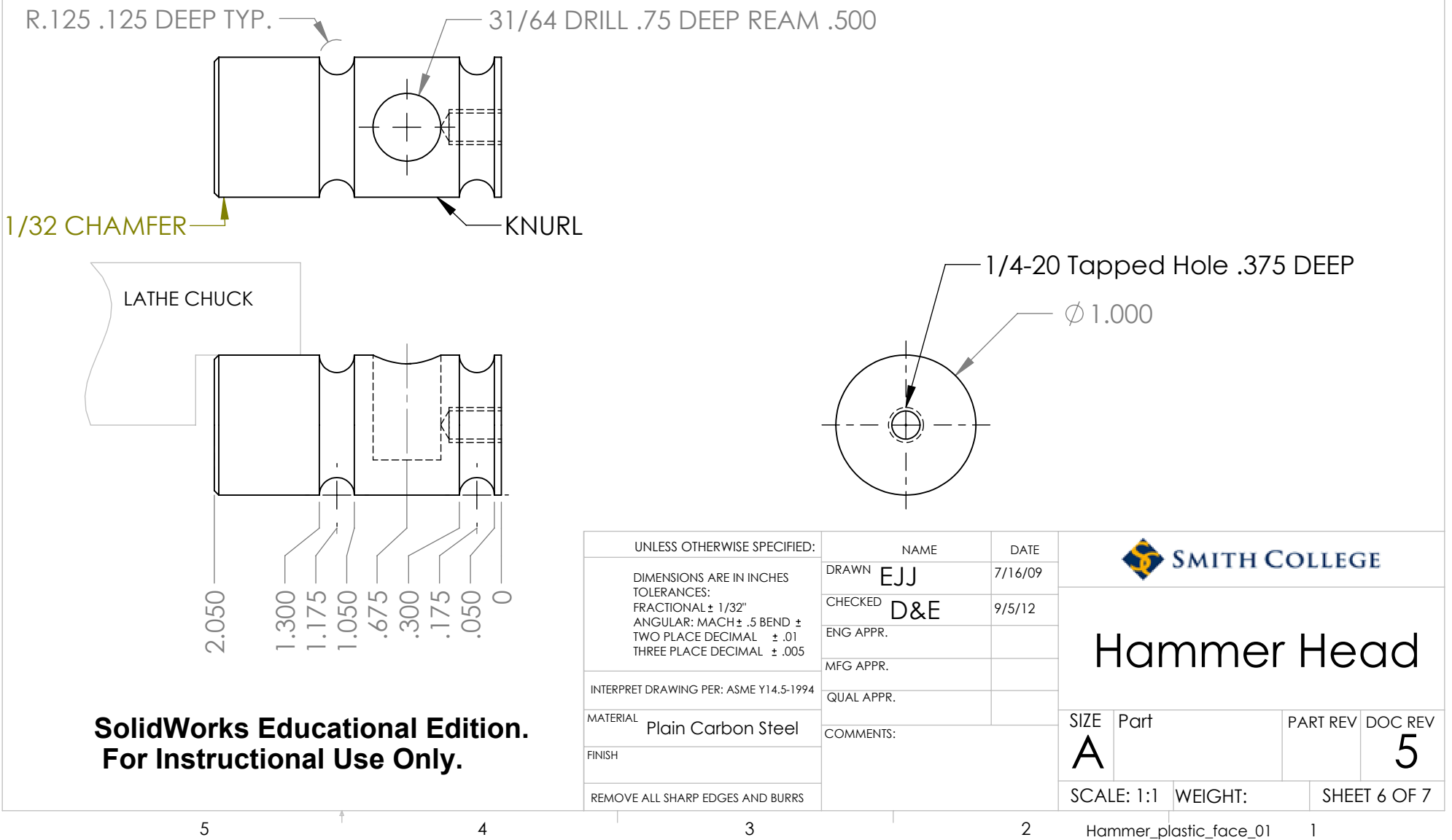
1	Saw	Cut stock to 4-1/8 inch length
2	Engine Lathe	Face end/Countersink
3	Engine Lathe	Drill
4	Engine Lathe	Tap (Use tap guide, tailstock)
5	Engine Lathe	Turn Diameter



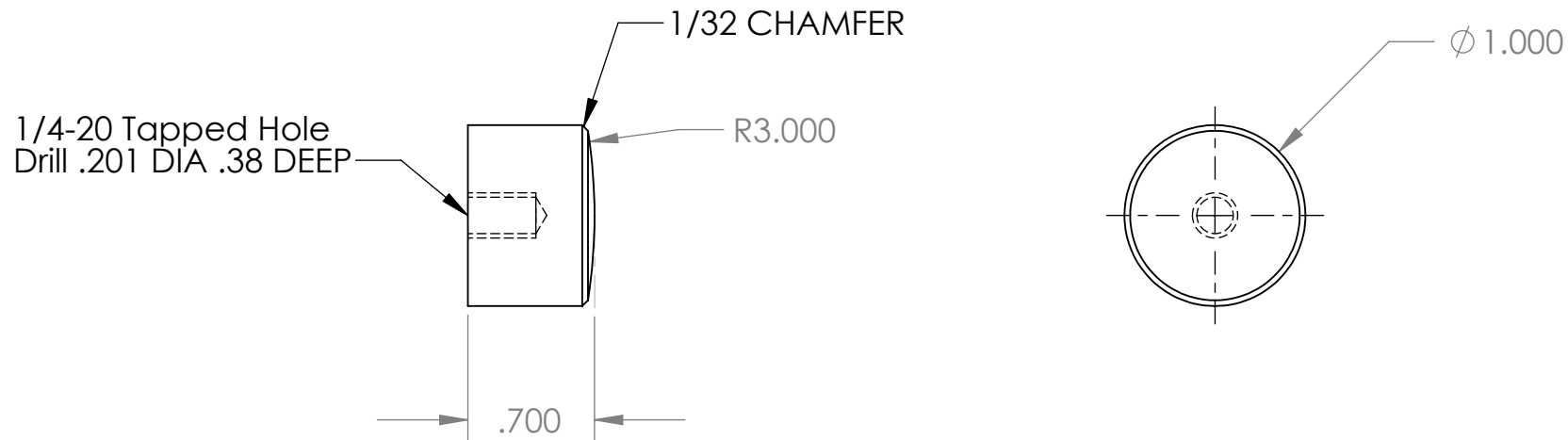
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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 SMITH COLLEGE	
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/32"$ ANGULAR: MACH $\pm .5$ BEND \pm TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$		DRAWN EJJ	7/16/09		
INTERPRET DRAWING PER: ASME Y14.5-1994		CHECKED D&E	9/5/12	<div>Tube</div>	
		ENG APPR.			
		MFG APPR.			
MATERIAL Black Water Pipe		QUAL APPR.		SIZE A Part Part PART REV 5 DOC REV 5	
FINISH		COMMENTS:		SCALE: 1:1 WEIGHT: SHEET 5 OF 7	
REMOVE ALL SHARP EDGES AND BURRS				Hammer_plastic_face_01 1	


OPERATIONS LIST		
1	Saw	Cutoff 2-1/8 inch length
2	Engine Lathe	Face/ Chamfer Hammer face
2	Engine Lathe	Turn part around/Face/Turn to 2.05 length
3	Engine Lathe	Turn Grooves - regrip for each groove
4	Engine Lathe	Knurl
4	Engine Lathe	Centerdrill/Drill/Tap 1/4-20
6	Bridgeport	Drill/Ream (use fixture block to locate centers)



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DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/32" ANGULAR: MACH ± .5 BEND ± TWO PLACE DECIMAL ± .01 THREE PLACE DECIMAL ± .005		DRAWN EJJ	7/16/09	<h1>Plastic Face</h1>			
		CHECKED D&E	9/5/12				
		ENG APPR.					
		MFG APPR.					
INTERPRET DRAWING PER: ASME Y14.5-1994		QUAL APPR.					
MATERIAL	ABS Plastic	COMMENTS:		SIZE	Part	PART REV	DOC REV
FINISH				A			5
REMOVE ALL SHARP EDGES AND BURRS				SCALE: 1:1		WEIGHT:	SHEET 7 OF 7