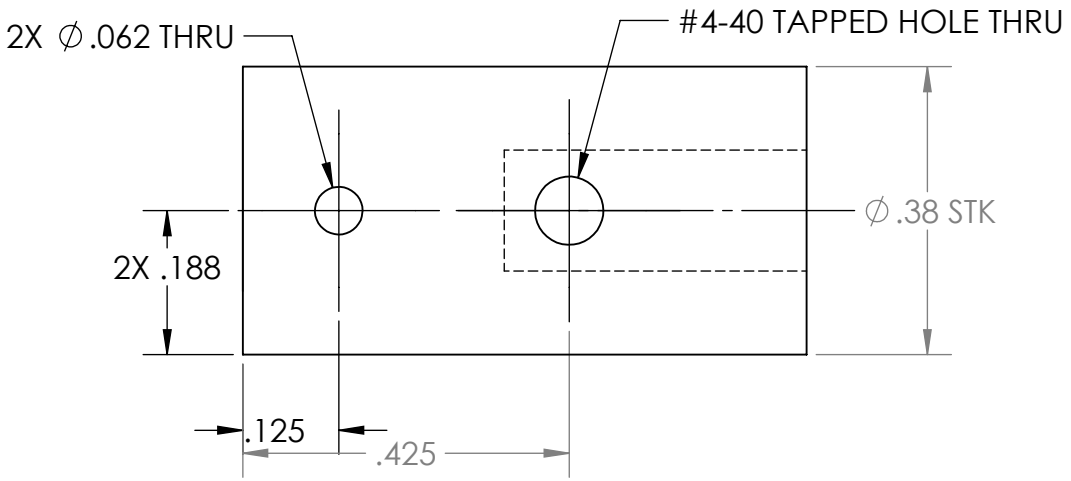

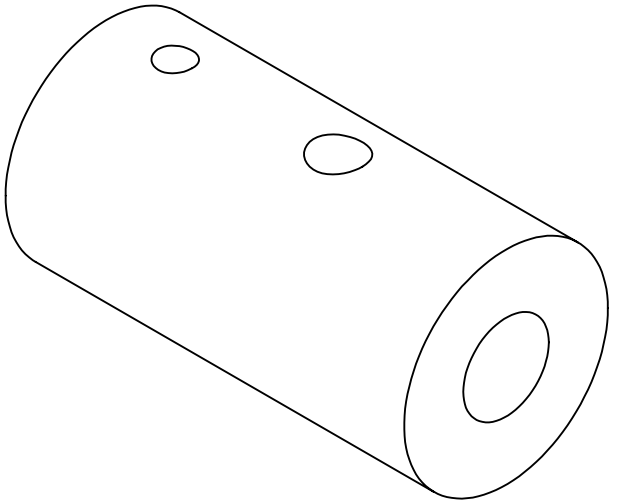

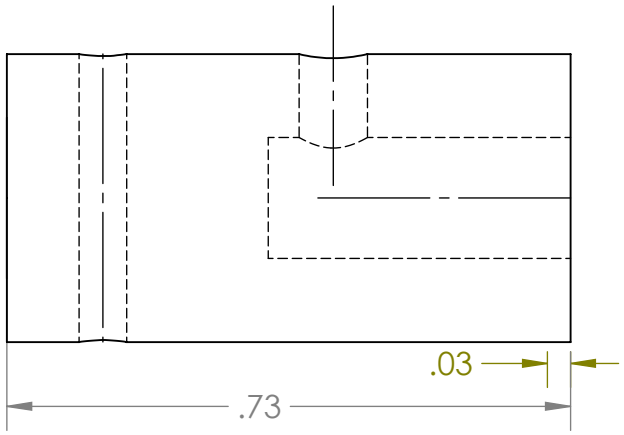

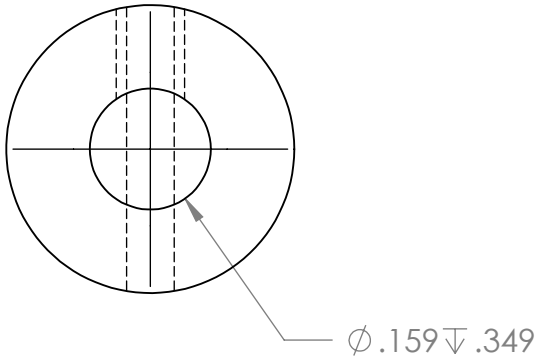

REV 1	Initial Release	UNLESS OTHERWISE SPECIFIED:		NAME	DATE
REV 2	Edit Dimetnions	DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	abirnb	10/24
REV 3	Formating of sheet		CHECKED	abirnb	10/27
REV 4	Editing Manufacting plan		ENG APPR.		
REV 5	Chanigng to set screw	INTERPRET GEOMETRIC TOLERANCING PER:	MFG APPR.		
		MATERIAL 3/8" round Aluminum	Q.A.		
NEXT ASSY	USED ON	FINISH Burr Free	COMMENTS: Quantity = 1		
APPLICATION		DO NOT SCALE DRAWING			

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

ME 250 TEAM 103

TITLE:

Lever Motor Arm Axel

SIZE	DWG. NO.	REV
A	P103_09	5

SCALE: 4:1 | WEIGHT: | SHEET 1 OF 2

SOLIDWORKS Educational Product. For Instructional Use Only.

MANUFACTURING PLAN

RAW MATERIAL STOCK: **Aluminum Round Stock, 3/8" thick**

STEP	PROCESS DESCRIPTION	MACHINE	FIXTURE	TOOL(S)	SPEED (RPM)
1	Cut part to .8"	Band Saw			300 ft/min
2	Deburr	FIle		File	
3	Secure Part In lathe	Lathe	Collet		
4	Lathe both ends of part to provide fully machined ends	Lathe	Collet	Cutting Tool	700
5	0 the x direction. Move tool towards part the thickness of the groove tool in the x direction and rezero the x direction. Move lathe distance to the groove in x and touch off in the z direction Move lathe an additional 0.03" in z direction to cut the groove	Lathe	Collet	Cutting Tool	700
6	Deburr	File		File	
7	Make center hole for drilling	Lathe	Collet	Centerdrill with drill chuck	700
8	Touch Off will drill bit head	Lathe	Collet	Cutting Tool	700
9	drill hole	Lathe	Collet	size 21 drill with drill chuck	700
10	Deburr	file		file	
11	place flat ends agianst ends of vice in mill with 1.375" parallels	mill	vise 1.375" parallels		
12	find X Y datums of part of part	mill	vise 1.375" parallels	edge finder will drill chuck	1000
13	Drill center hole	mill	vise 1.375" parallels	centerdrill with drill chuck	700
14	drill .062 hole spring pin	mill	vise 1.375" parallels	1/16" drill bit with drill chuck	700
15	Use center drill Drill a thru hole .300" in from the thick end of the shaft with a major diameter of .089"	MIll	Vise 1	#43 Drill with drill chuck	1600
16	Drill a thru hole .425" off the thin end with a .062" diameter	MIll	Vise 1	1/16 Drill with drill chuck	1600
17	Tap 4-40 thread	Mill	Vise 1	4-40 Tap drill chuck, drill chuck tap fixture	-

SOLIDWORKS Educational Product. For Instructional Use Only.