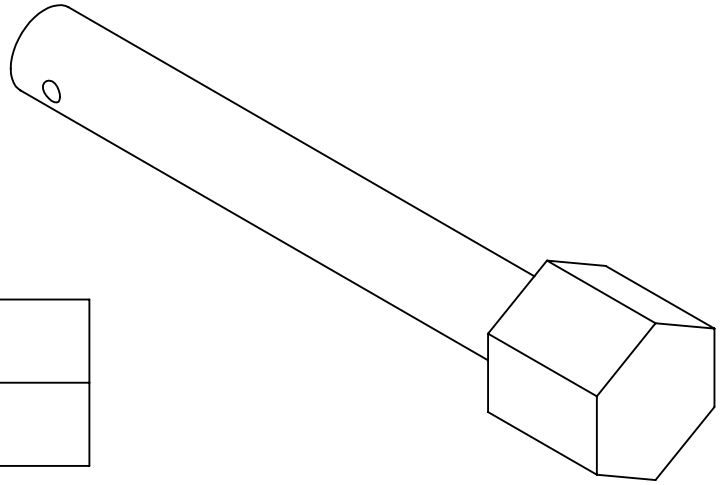

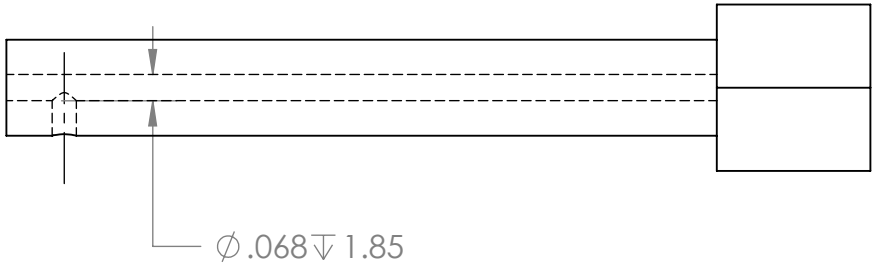

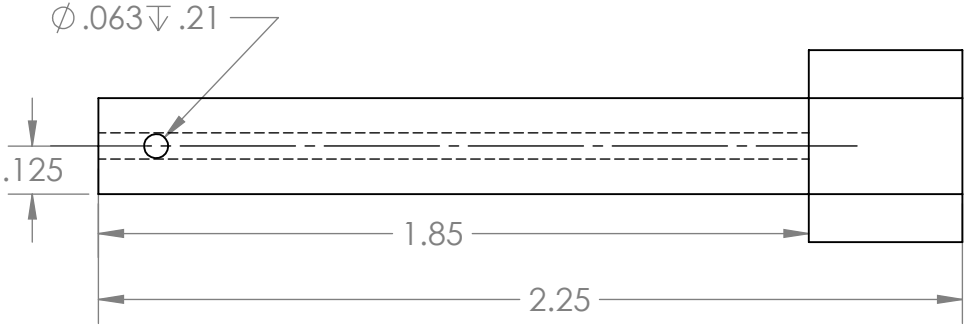

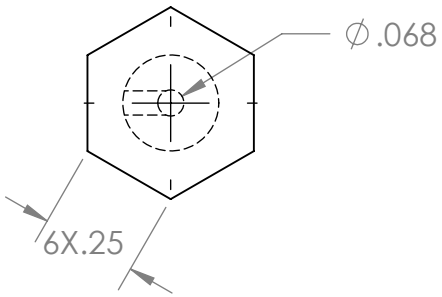

DRAWING & MANUF. PLAN CHECKS:
- PART FULLY DIMENSIONED
- APPROPRIATE DATUM LINES
- TOLERANCES SPECIFIED
- MATERIAL/QUANTITY SPECIFIED
- IF APPLICABLE, REAMER CALLED OUT
- APPROPRIATE TOOL SPEEDS
- APPROPRIATE DRILL/TAP SIZES
- SPECIFIED ALL NECESSARY TOOLS/SIZES NECESSARY
- RAW STOCK CUT OVERSIZED
- STEPS TO GET ALL ALL MACHINED/STOCK SURFACES

REV	
1	INITIAL RELEASE

REVISION BLOCK

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:
MACHINED ANGULAR: ± 1°
BENT ANGULAR: ± 3°
TWO PLACE DECIMAL: ± 0.01
THREE PLACE DECIMAL: ± 0.005

INTERPRET GEOMETRIC TOLERANCES PER: ASME Y14.5-2009

MATERIAL
ALUMINUM

FINISH
BURR FREE

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	ABIRNB	11/5/21
CHECKED	ABIRNB	11/5/21
GSI/IA APPR.		
SHOP APPR.		
INSPECTED		

COMMENTS:

ME 250 TEAM XX

TITLE:

DOUBLE GEAR BOX ADAPTER SHAFT

SIZE	DWG. NO.	REV
A	P103_22	01

SCALE: 2:1 | QUANTITY: X | SHEET 1 OF 2

MANUFACTURING PLAN

RAW MATERIAL STOCK: **1/2" Aluminum Hex**

STEP	PROCESS DESCRIPTION	MACHINE	FIXTURE	TOOL(S)	SPEED (RPM)
1	Cut down to 2.5"	Band Saw	-	-	300 ft/min
2	Deburr the ends of the surfaces	Lathe	-	FIle	-
3	Place in lathe and face off to get a machined surface	Lathe	Collet	-	
4	Deburr the part	-	Collet	File	750
5	Remove part from lathe and flip	-	-	-	-
6	Repeat steps 3 and 4	Callipers	-	-	-
7	Remove part from lathe and measure with callipers	Lathe	-	-	-
8	touch off with parting tool and zero x. Cut to length taking passes of 0.050" or less	Lathe	Collet	Parting Tool	750
9	Trim down to 2.25"	Lathe	Collet	Parting Tool	750
10	Mill down 1.85" to a diameter of .25"	Lathe	Collet	Cutting Tool	
11	Centerdill	Lathe	Collet	Denter Drill with Drill chuck	100
12	Drill .068" drill to depth of 1.85;;	Lathe	Collet	Drill with Drill chuck	700
13	Deburr the part	File	-	File	-
14	Use edgefinder to locate X and Y coordinates of edges	Mill	-	Edge FInder	1000
15	Use center drill Drill a thru hole .26" in from the thick end of the shaft with a major diameter of .089"	Mill	Vise 1.375"	#43 Drill	1000
16	Drill a thru hole .15" off the thin end with a .063" diameter	Mill	Vise 1.375"	1/16 Drill	1000