

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TR-02	T-Slotted Framing (1 in. x 2 in.)	1
2	TR-01	T-Slotted Framing (2 in. x 2 in.)	2
3	TR-07	Track Bottom Connector	2
4	TR-04	Pop pin track	2
5	TR-06	Track Track Connector (R)	2
6	TR-05	Track Track Connector (L)	2
7	HW-01	Black-Oxide Alloy Steel Socket Head Screw	36
8	HW-03	T-Slotted Framing Fasteners	44
9	HW-02	Low-Strength Steel Thin Nylon-Insert Locknut	12
10	TR-08	High-Strength Grade 5 Titanium Rod	1
11	TR-09	Clamping Two-Piece Shaft Collar	2
12	TR-03	Track End Brace	2
13	HW-06	Black-Oxide Alloy Steel Hex Drive Flat Head Screw	20



UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE

AUTHOR:
Jaden Zhang

STUDENT NO.
1011011815

DATE: 12/2/2025

MATERIAL: Mixed

CLASS: GROUP
MIE 243 #3

PREPARED FOR:
DRAWING PURPOSE

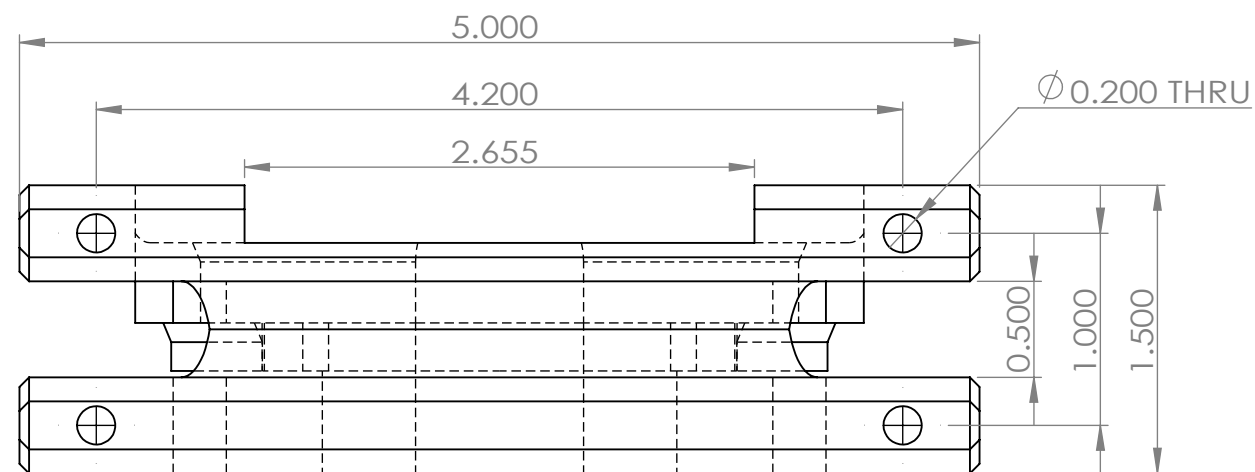
TITLE:
Track Assembly

PART NO. N/A

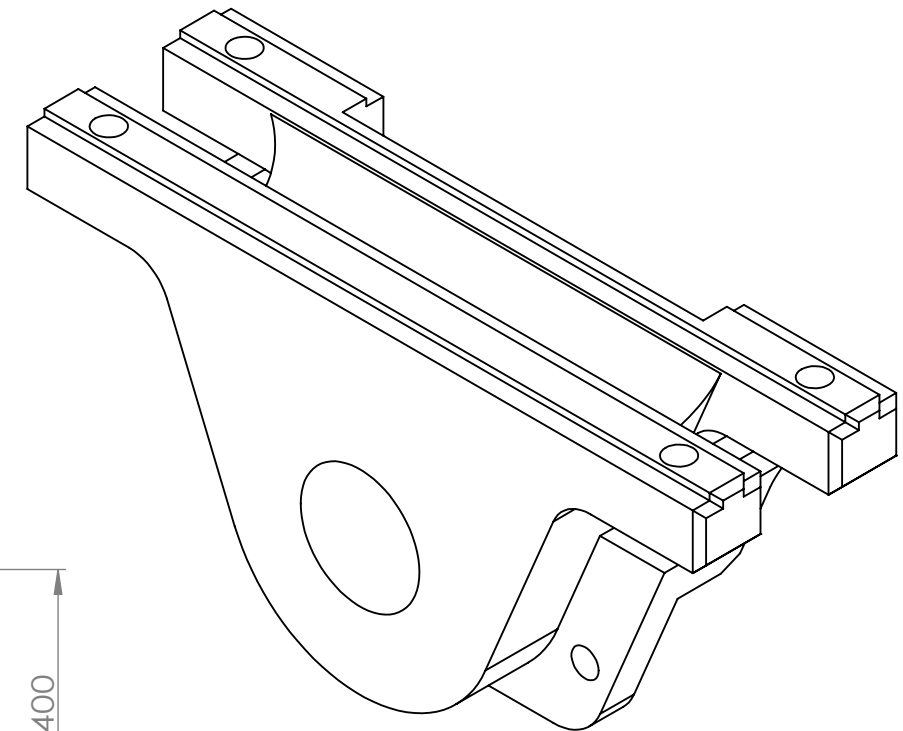
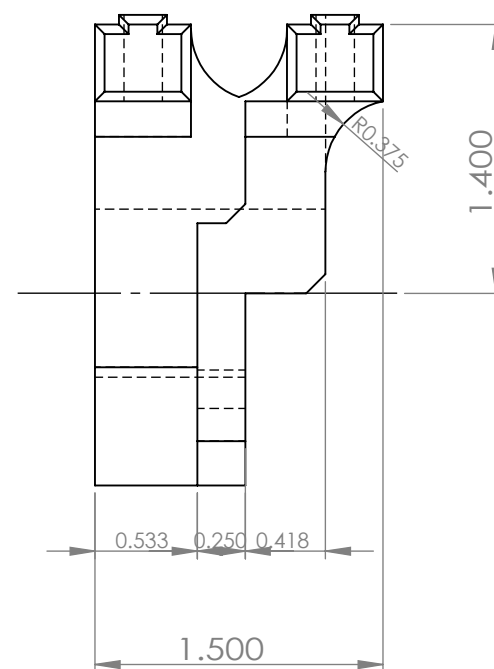
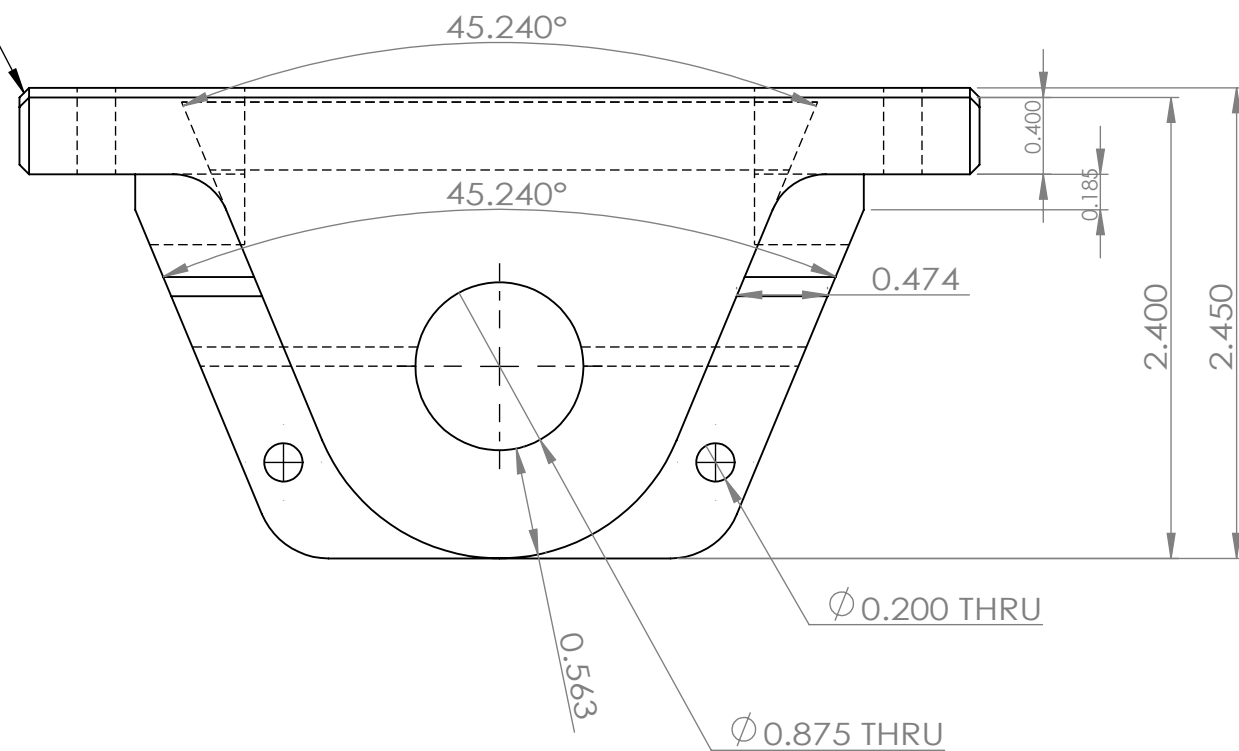
REV. 1



SCALE:1:3

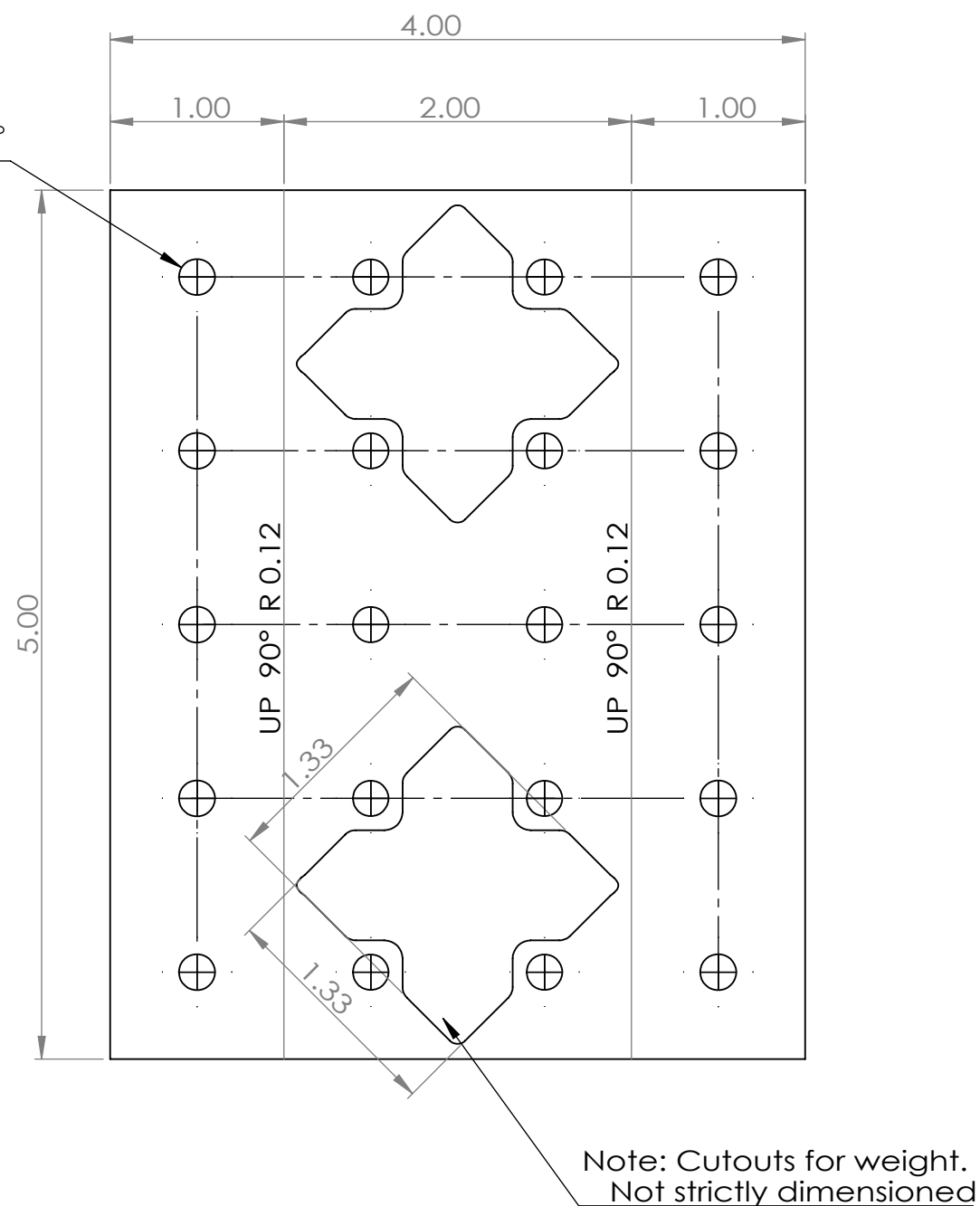
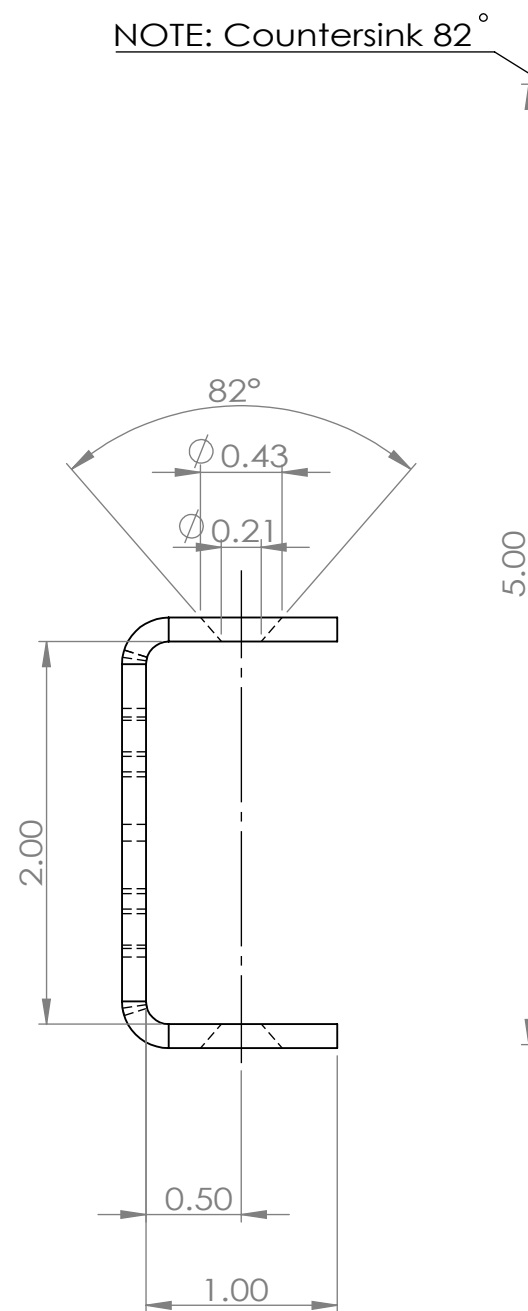
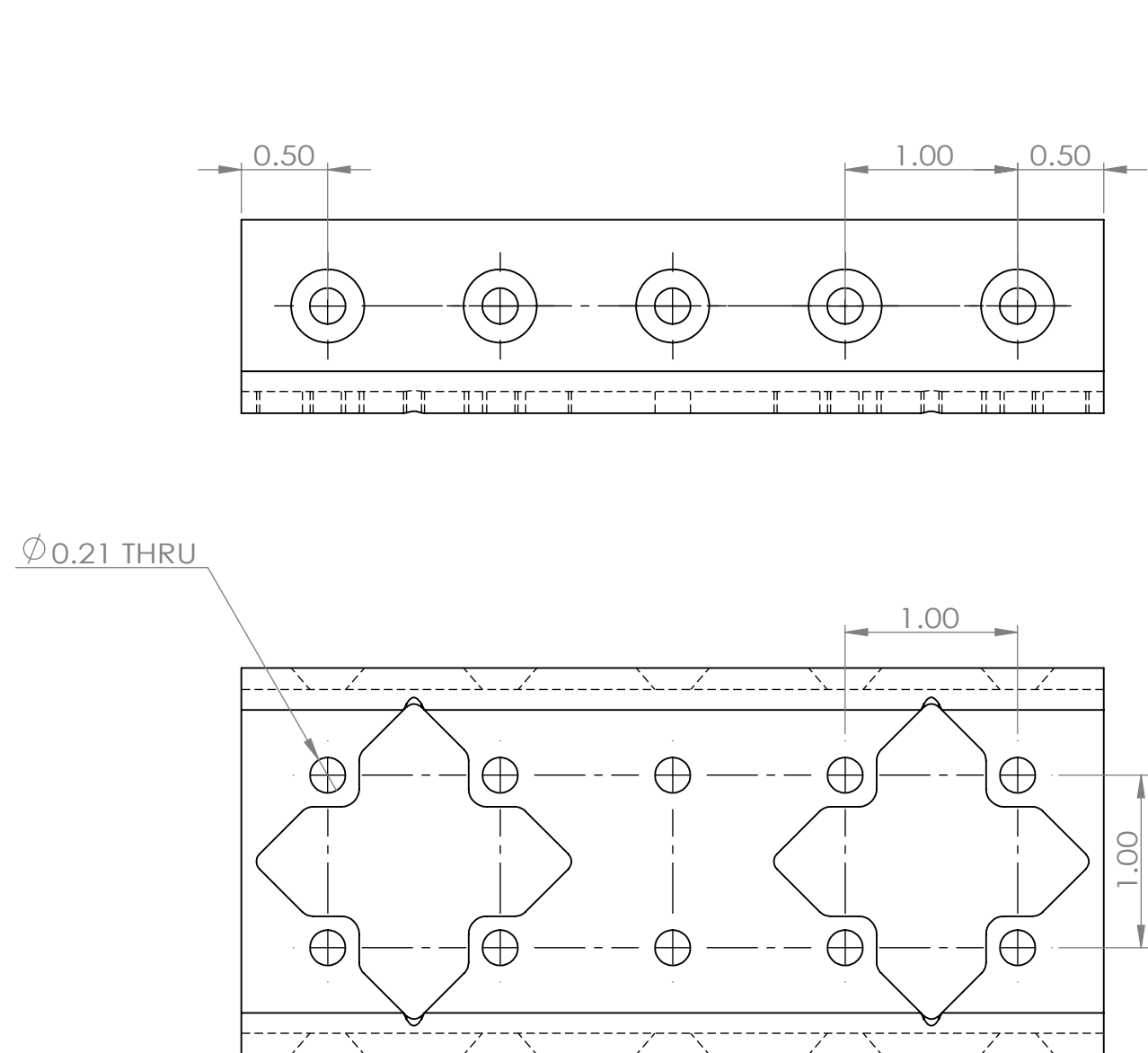
SHEET 1 OF 1





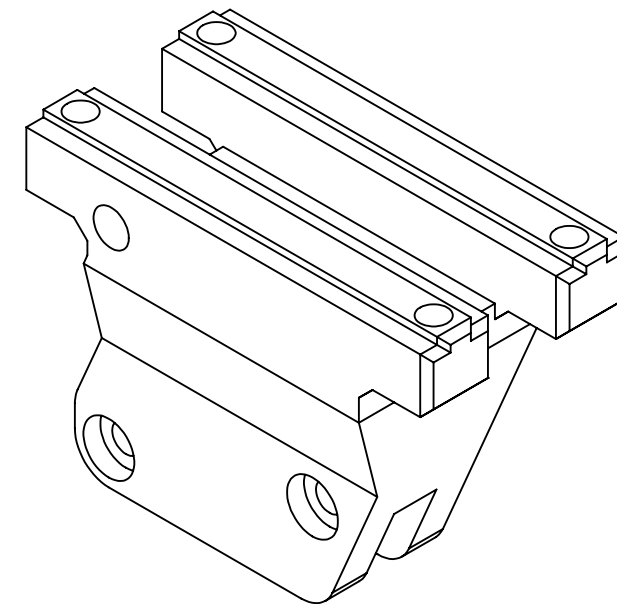
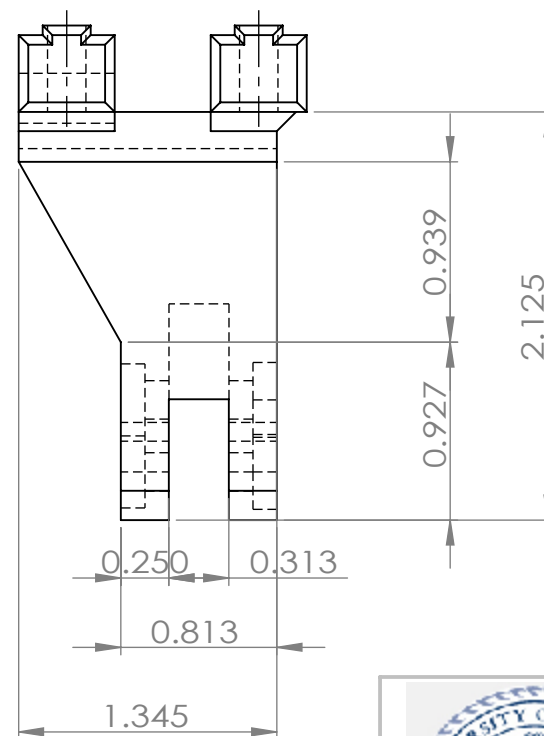
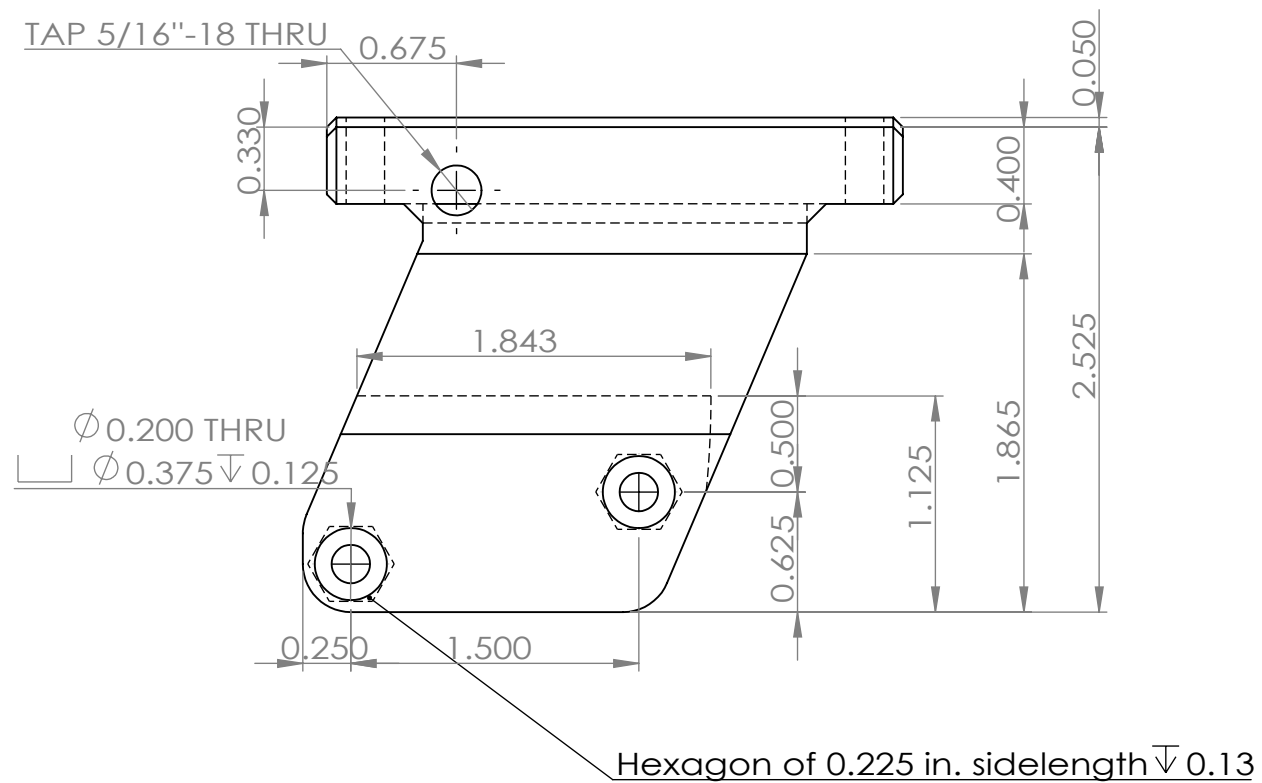
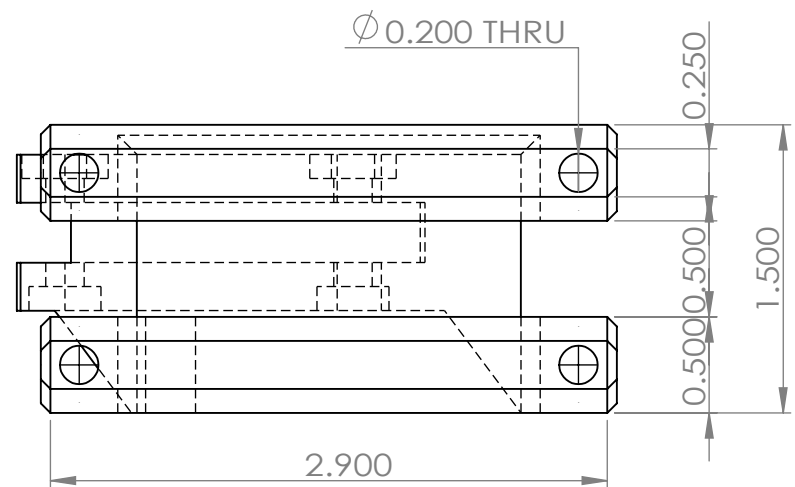
NOTE: Chamfers all 0.05 in. 45 deg.





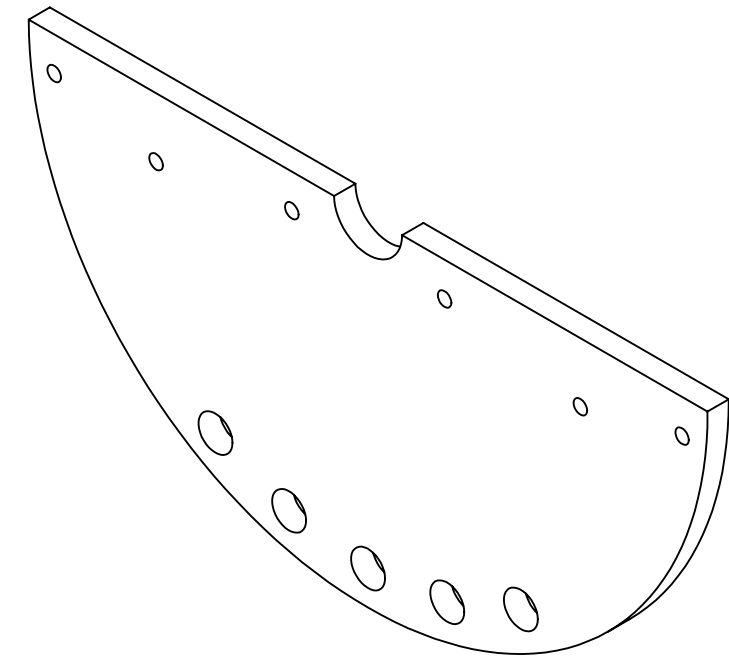
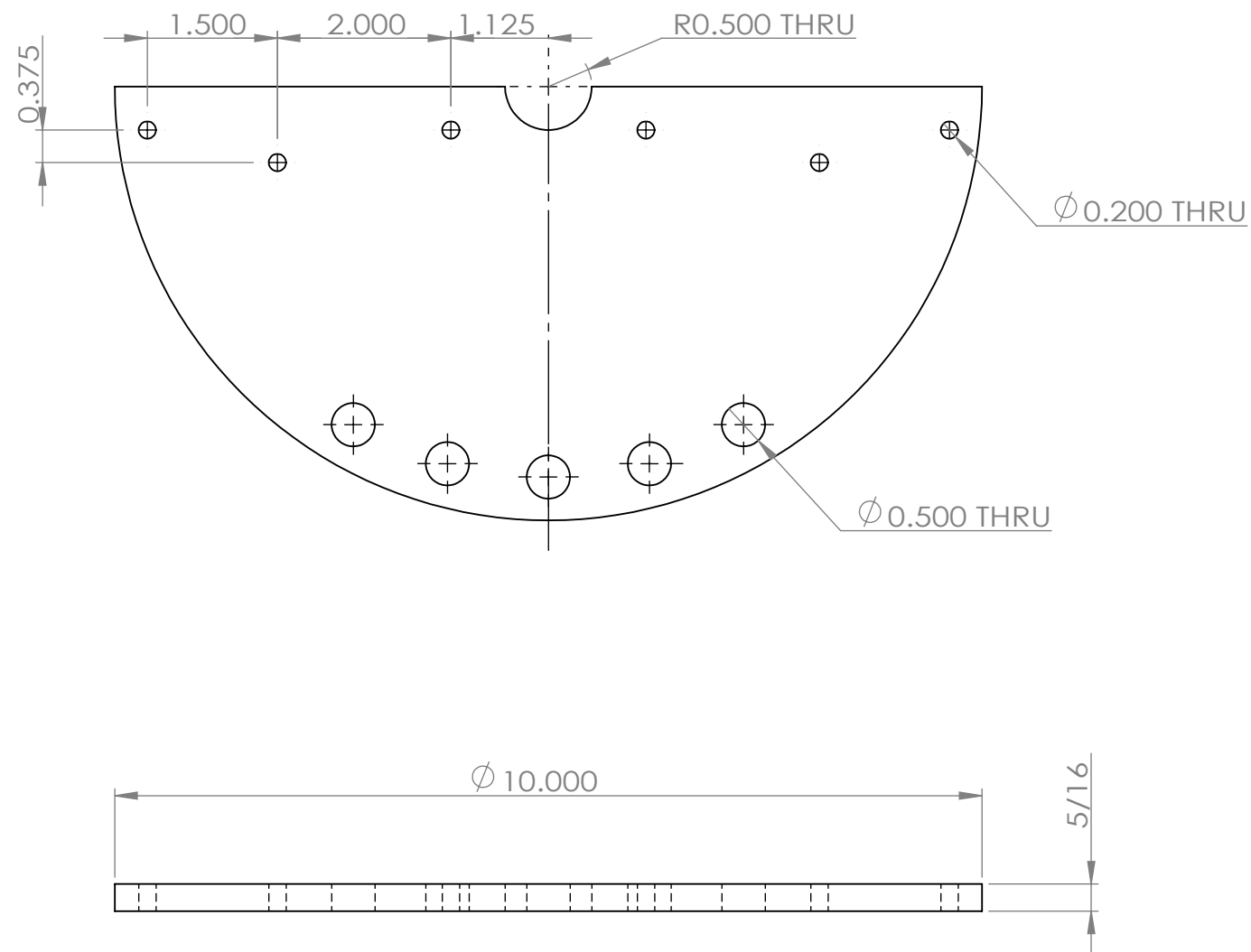
	AUTHOR: Jaden Zhang	CLASS: MIE 243	GROUP #3	PREPARED FOR: DRAWING PURPOSE	
	STUDENT NO. 1011011815	TITLE: Track Bottom Connector			
	DATE: 12/2/2025				
	MATERIAL: 1060 Alloy	PART NO. TR-07		REV. 1	
	UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE		SCALE:1:1		SHEET 1 OF 1





	AUTHOR: Jaden Zhang	CLASS: MIE 243	GROUP #3	PREPARED FOR: DRAWING PURPOSE
	STUDENT NO. 1011011815	TITLE: Track End Brace		
	DATE: 12/2/2025			
	MATERIAL: 6061 Alloy (Sheet)	PART NO. TR-03	REV. 1	
UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE		SCALE:1:1	SHEET 1 OF 1	

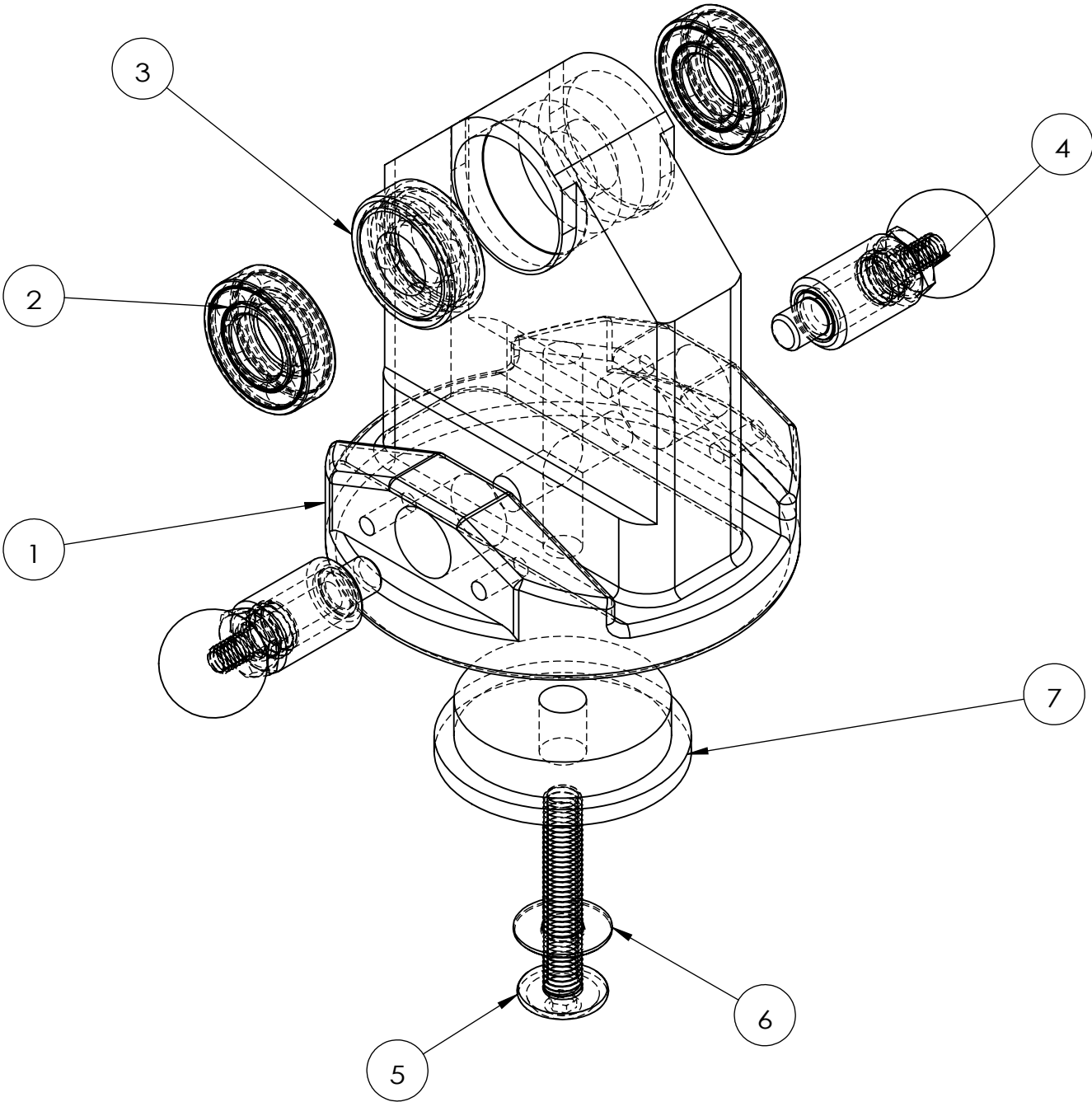


	AUTHOR: Jaden Zhang	CLASS: MIE 243	GROUP #3	PREPARED FOR: DRAWING PURPOSE	
	STUDENT NO. 1011011815	TITLE: Track Side Connector (R)			
	DATE: 12/2/2025				
	MATERIAL: 1060 Alloy	PART NO. TR-06	REV. 1		
	UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE		SCALE:1:1	SHEET 1 OF 1	



	AUTHOR: Jaden Zhang	CLASS: MIE 243 GROUP #3	PREPARED FOR: DRAWING PURPOSE
	STUDENT NO. 1011011815	TITLE: Pop-pin Track	
	DATE: 12/2/2025		
	MATERIAL: 201 Annealed SS (Sheet)	PART NO. TR-04	REV. 1
UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE		SCALE:1:2	SHEET 1 OF 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	PR-01	Pop pin Housing	1
2	PP-04	Permanently Lubricated Stainless Steel Ball Bearing	2
3	PP-05	One-Piece Steel Thrust Ball Bearing	1
4	PP-03	Steel Weld-Mount Retractable Pop - pin	2
5	HW-04	18-8 Stainless Steel Flanged Button Head Screw	1
6	HW-05	316 Stainless Steel Washer	1
7	PP-02	Pop-pin housing Bottom Clamp	1



AUTHOR:
Jaden Zhang

STUDENT NO.
1011011815

DATE: 12/2/2025

MATERIAL: Mixed

CLASS: GROUP
MIE 243 #3

TITLE:
Pop Pin Assembly

PART NO. N/A

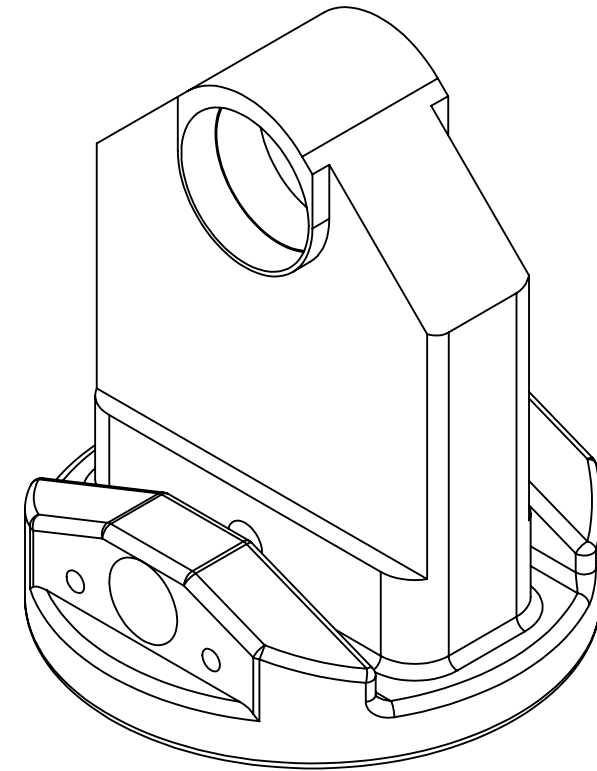
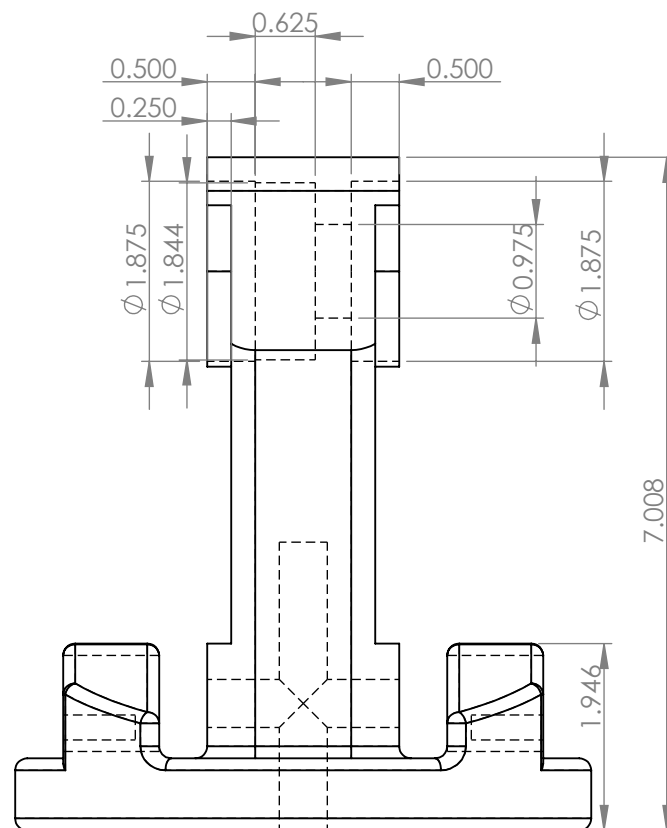
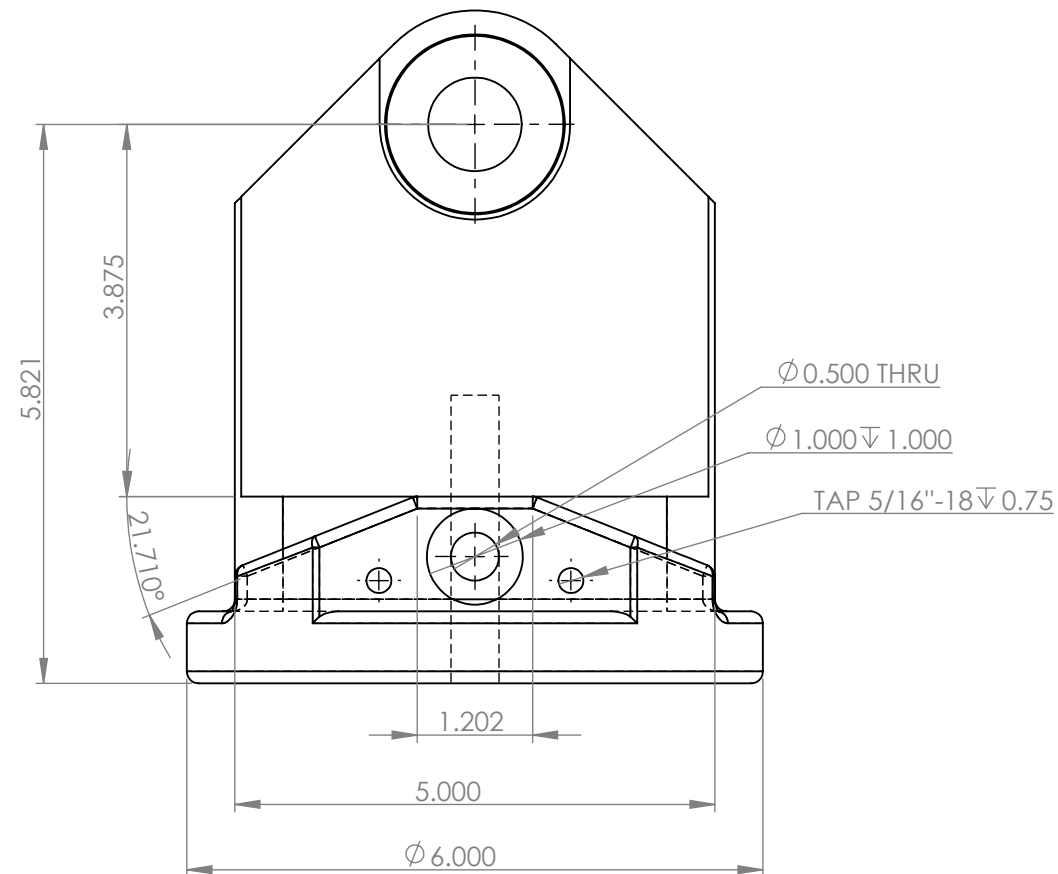
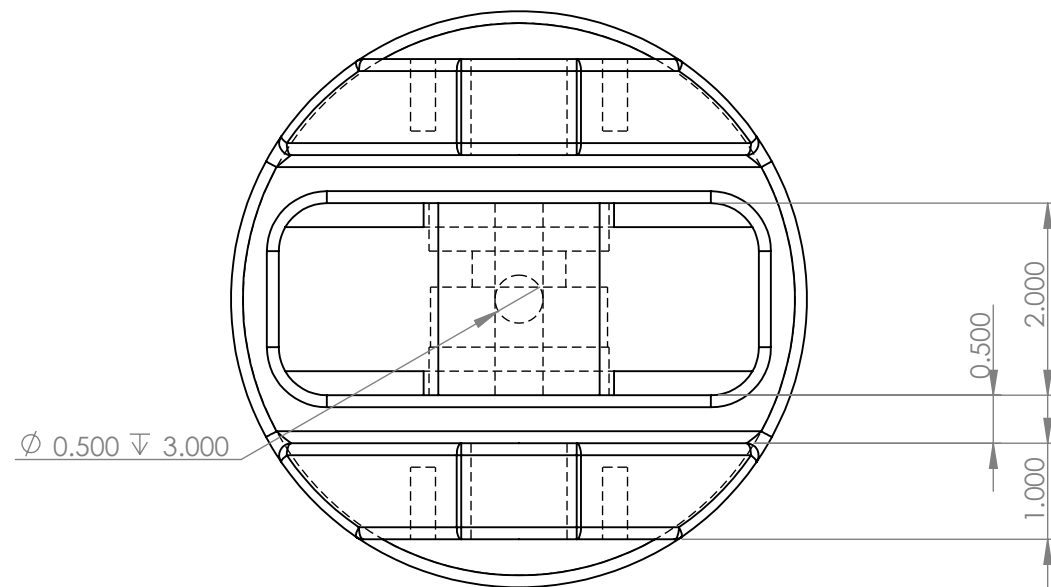
REV. 1



PREPARED FOR:
DRAWING PURPOSE

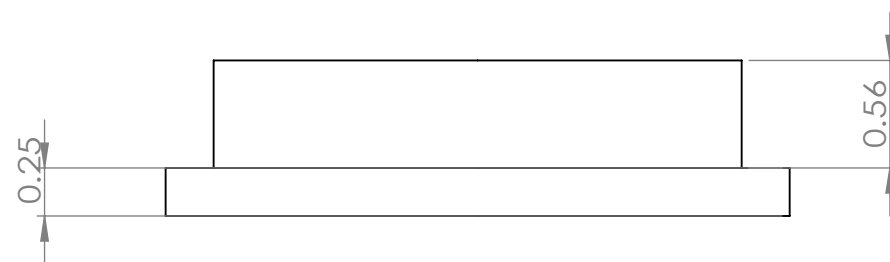
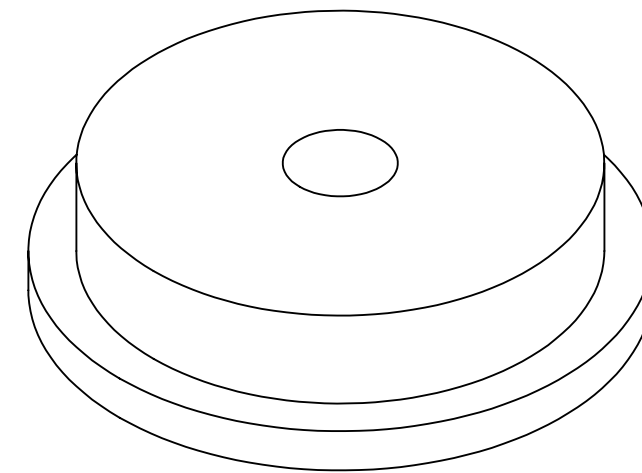
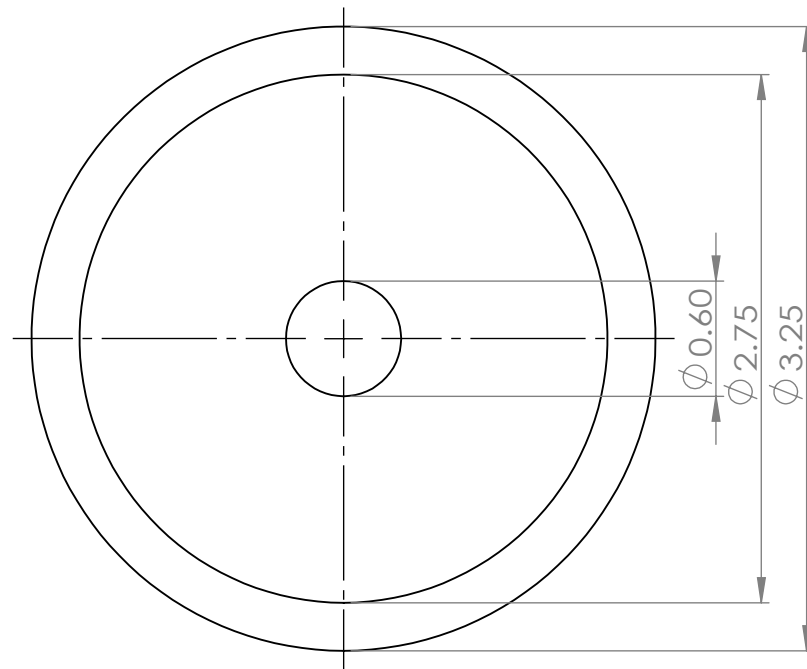
UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE



SCALE:1:2

SHEET 1 OF 1



	AUTHOR: Jaden Zhang	CLASS: MIE 243	GROUP #3	PREPARED FOR: DRAWING PURPOSE
	STUDENT NO. 1011011815	TITLE: <h1>Pop Pin Housing</h1>		
	DATE: 12/1/2025			
	MATERIAL: 6061-T6 (SS)	PART NO. PP-1	REV. 1	
	UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE	SCALE: 1:2	SHEET 1 OF 1	



	AUTHOR: Jaden Zhang	CLASS: MIE 243 GROUP #7	PREPARED FOR: DRAWING PURPOSE	
	STUDENT NO. 1011011815	TITLE: Pop-pin Housing Bottom Clamp		
	DATE: 12/2/2025			
	MATERIAL: 6061-T6(SS)	PART NO. PP-2	REV. 1	
	UNLESS OTHERWISE SPECIFIED, UNITS: INCHES, DEGREE		SCALE:1:1	SHEET 1 OF 1