

2

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Catapult Project

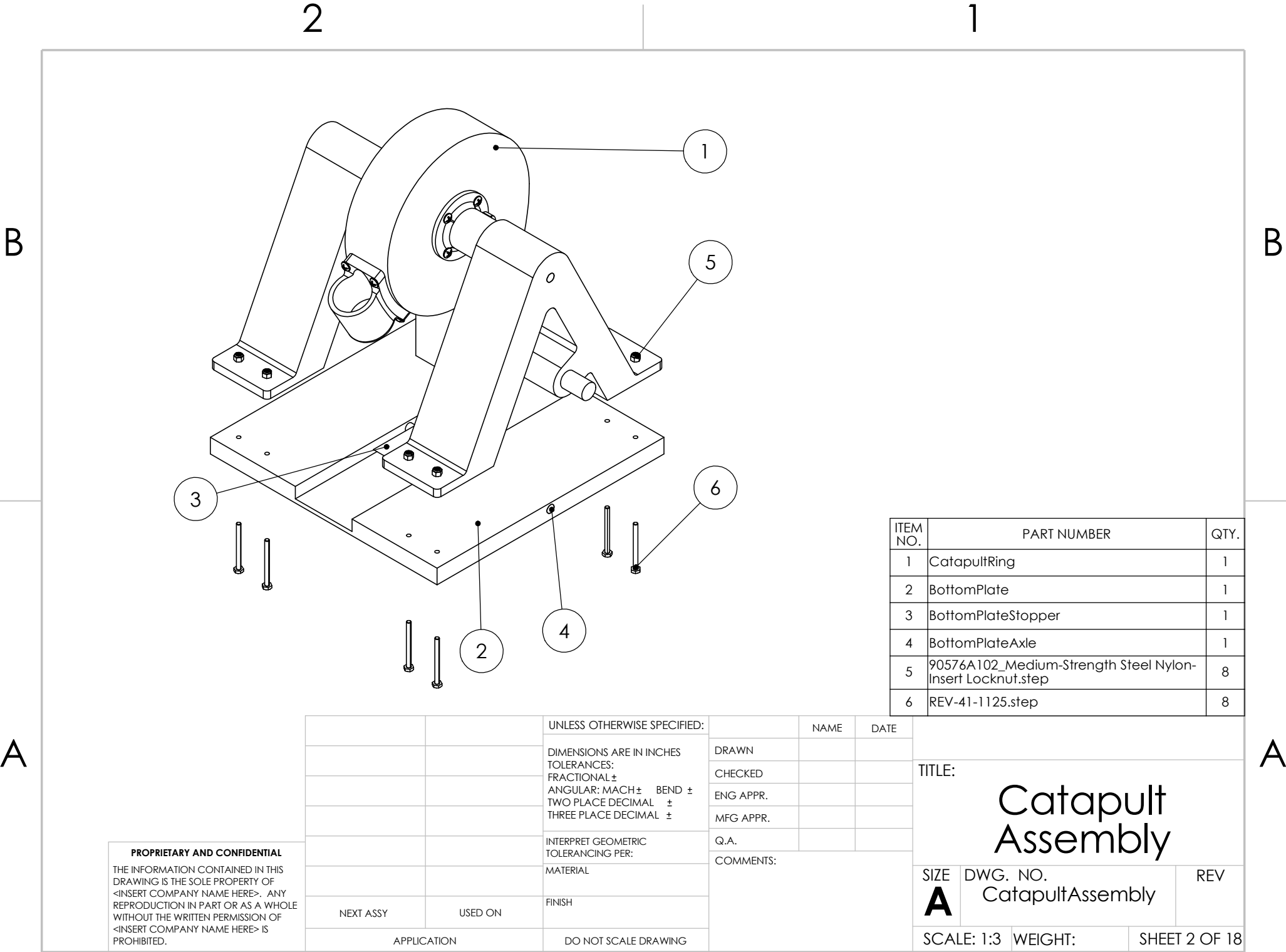
Team India:

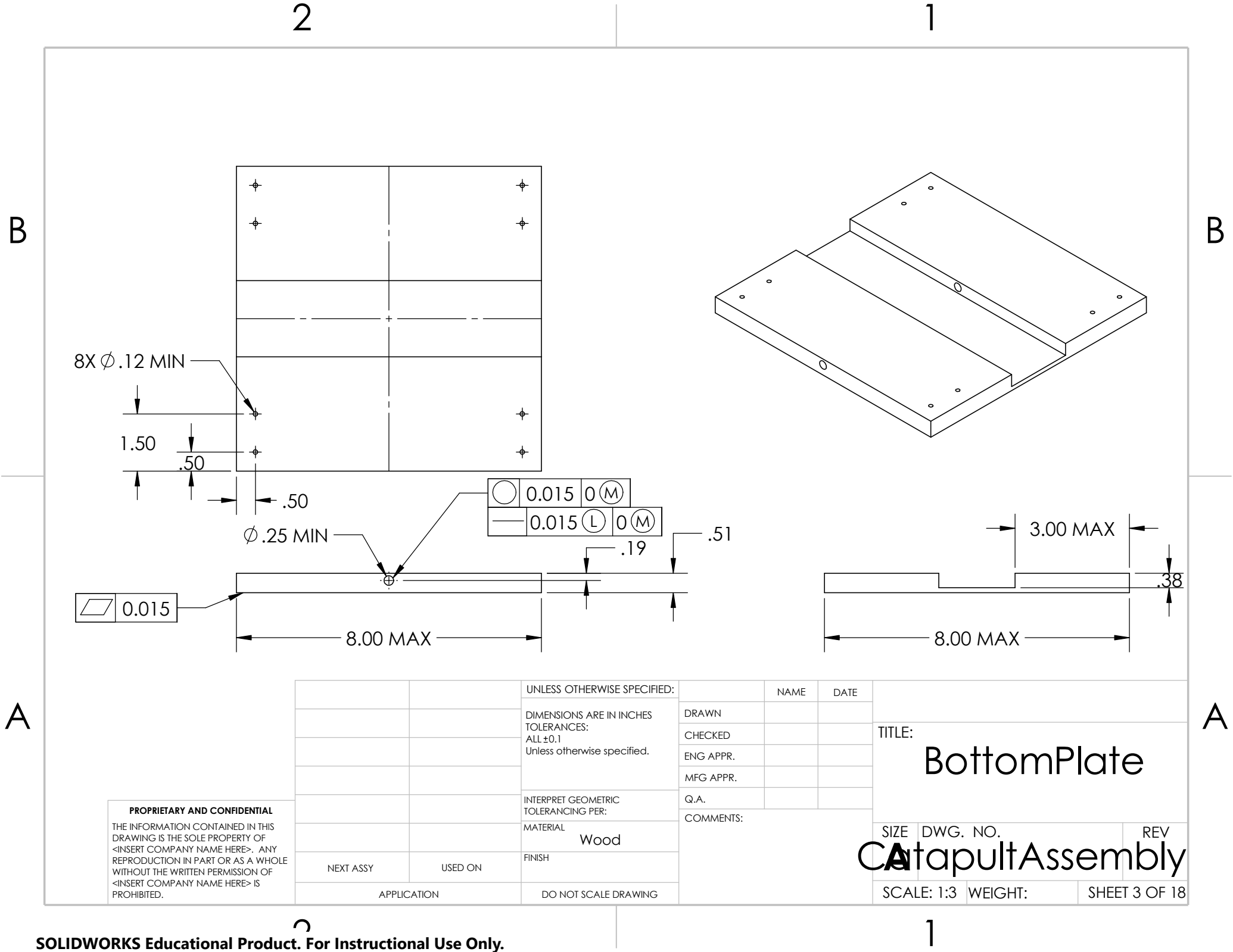
Russell Williams, Jacob Best, Leonid Flaharty, Joshua
Hammel

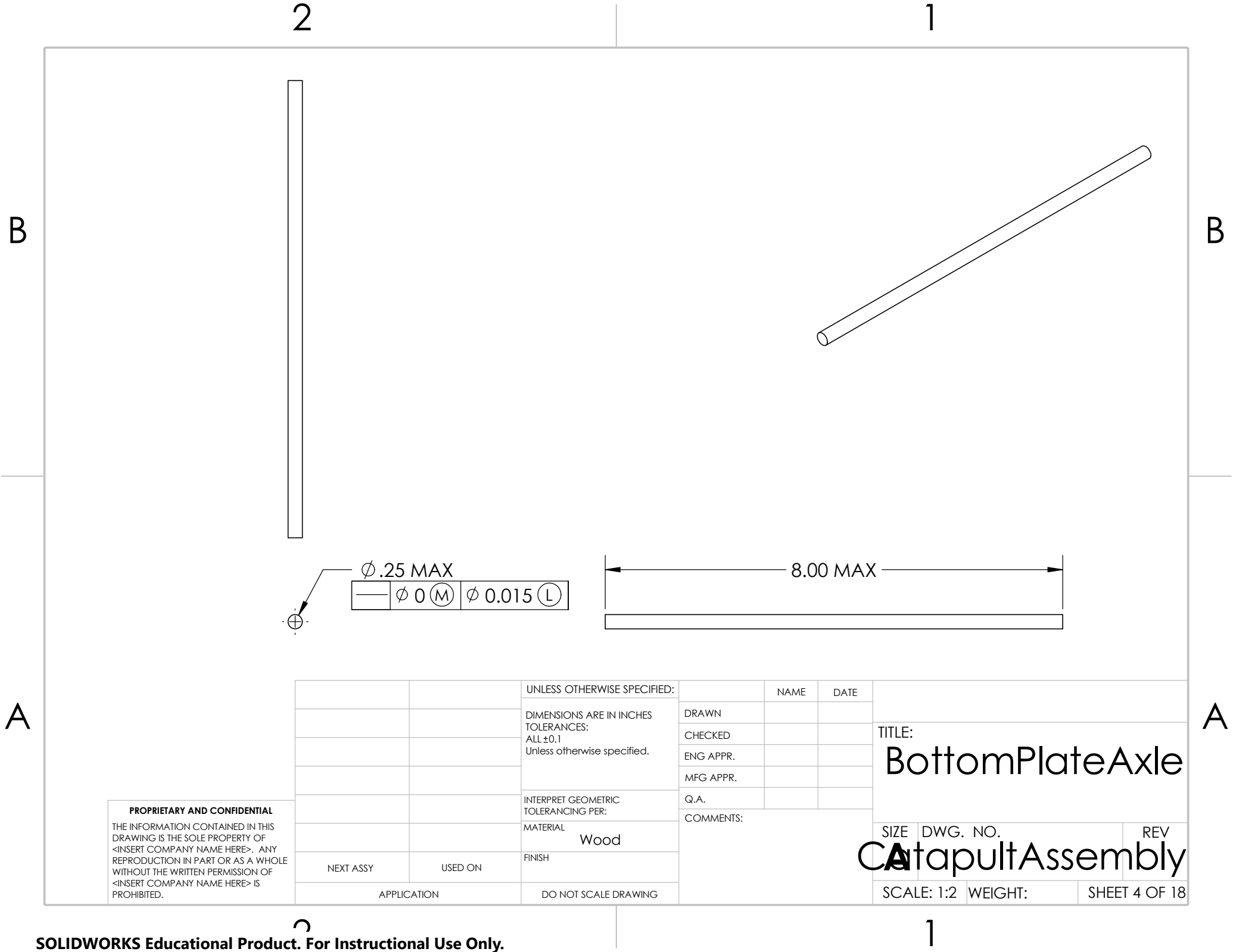
4/28/22

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		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL Wood
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

TITLE:
BottomPlateAxle

SIZE DWG. NO. REV
CatapultAssembly

SCALE: 1:2 WEIGHT: SHEET 4 OF 18

B

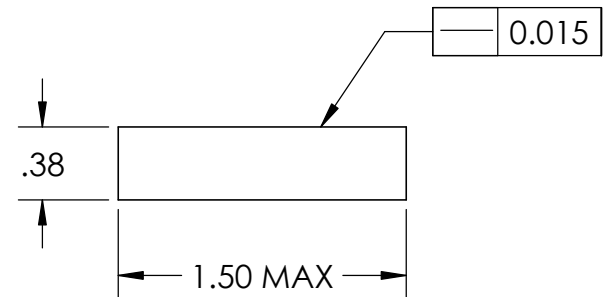
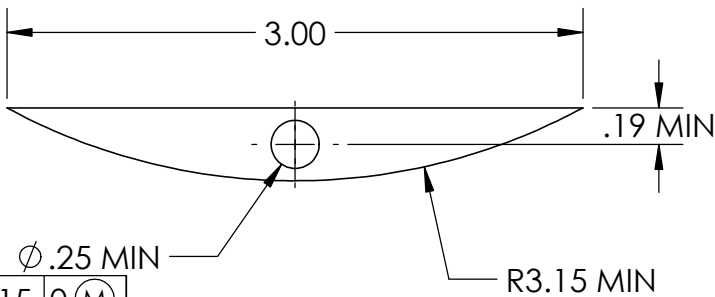
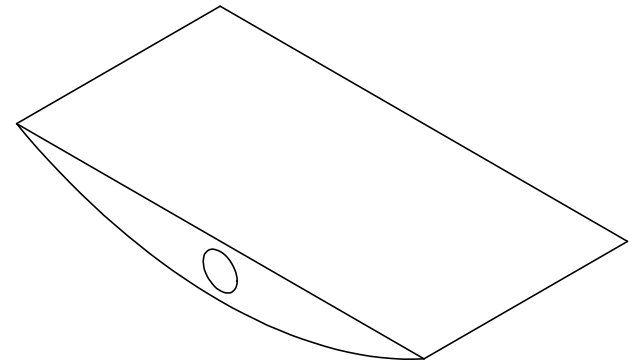
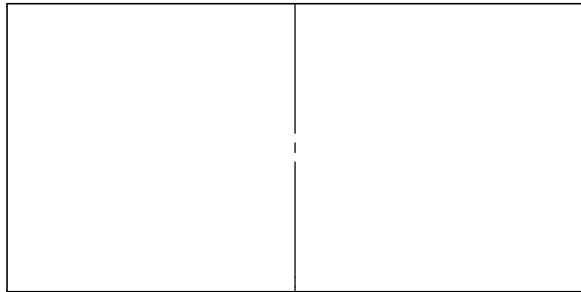
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	0.015	(L)	0 (M)

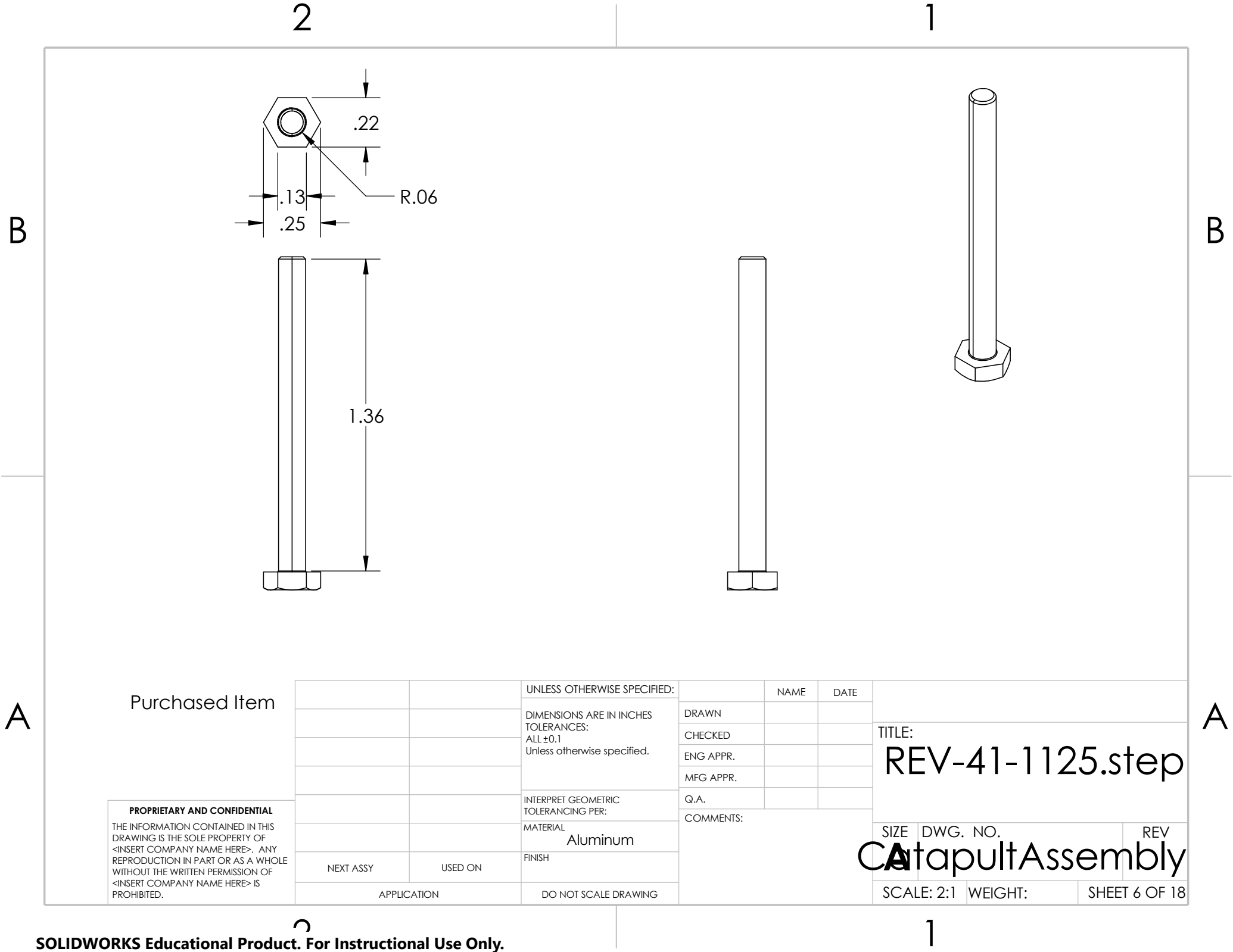
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		MATERIAL Wood
		FINISH
NEXT ASSY	USED ON	
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

TITLE: BottomPlateStop per CatapultAssembly		
SIZE	DWG. NO.	REV
SCALE: 1:1	WEIGHT:	SHEET 5 OF 18

1



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Purchased Item

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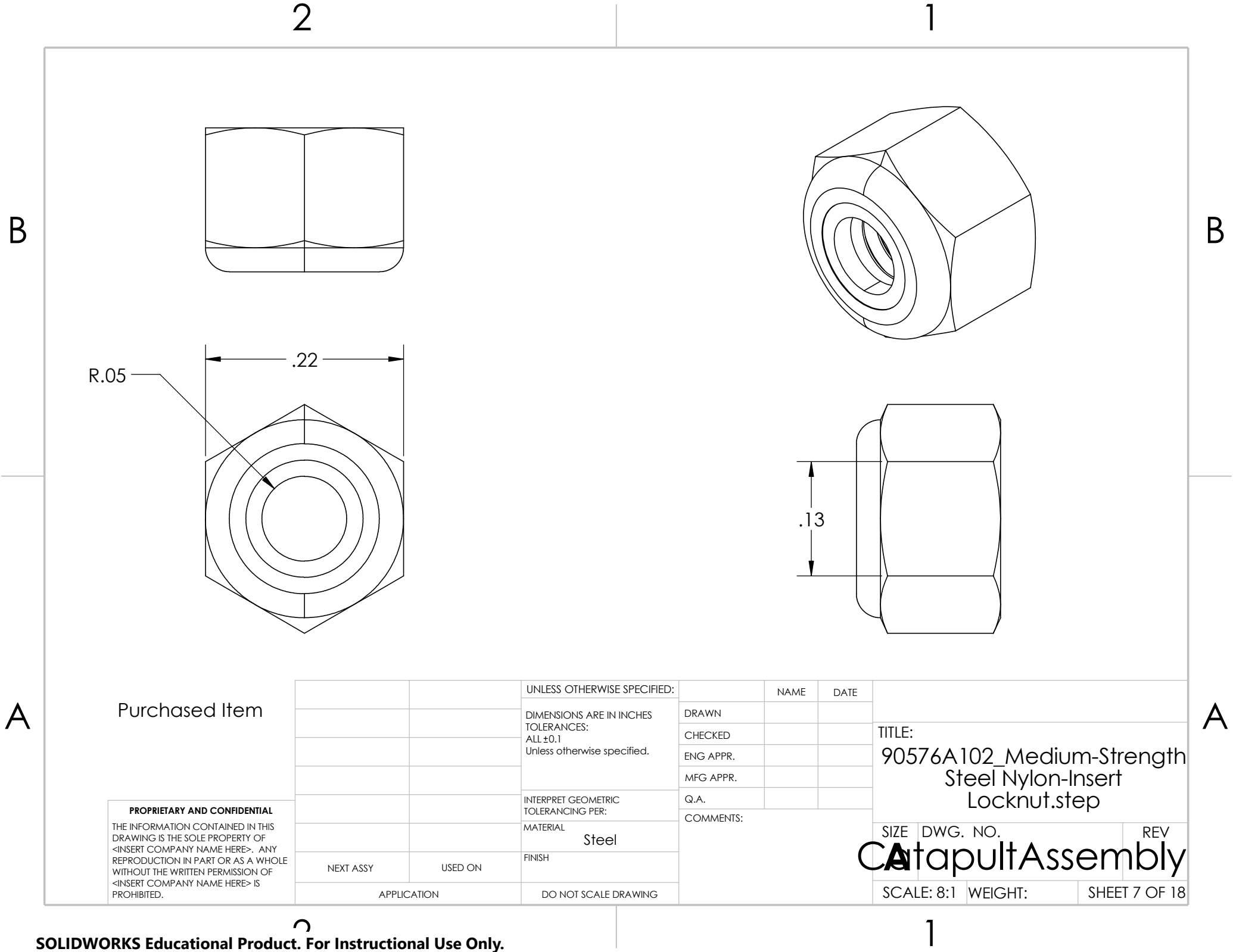
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		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL Aluminum
		FINISH
NEXT ASSY	USED ON	
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

TITLE:
REV-41-1125.step

SIZE	DWG. NO.	REV
Catapult Assembly		
SCALE: 2:1	WEIGHT:	SHEET 6 OF 18



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		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL Steel
		FINISH
NEXT ASSY	USED ON	
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

TITLE:
90576A102_Medium-Strength
Steel Nylon-Insert
Locknut.step

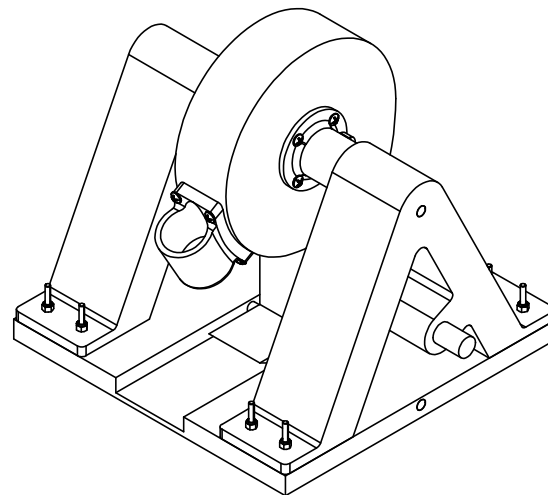
SIZE	DWG. NO.	REV
Catapult Assembly		
SCALE: 8:1	WEIGHT:	SHEET 7 OF 18

2

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		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL ±
		ANGULAR: MACH ± BEND ±
		TWO PLACE DECIMAL ±
		THREE PLACE DECIMAL ±
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

TITLE:

CatpultTopAsse
mbly

SIZE	DWG. NO.	REV
CatapultAssembly		
SCALE: 1:4	WEIGHT:	SHEET 8 OF 18

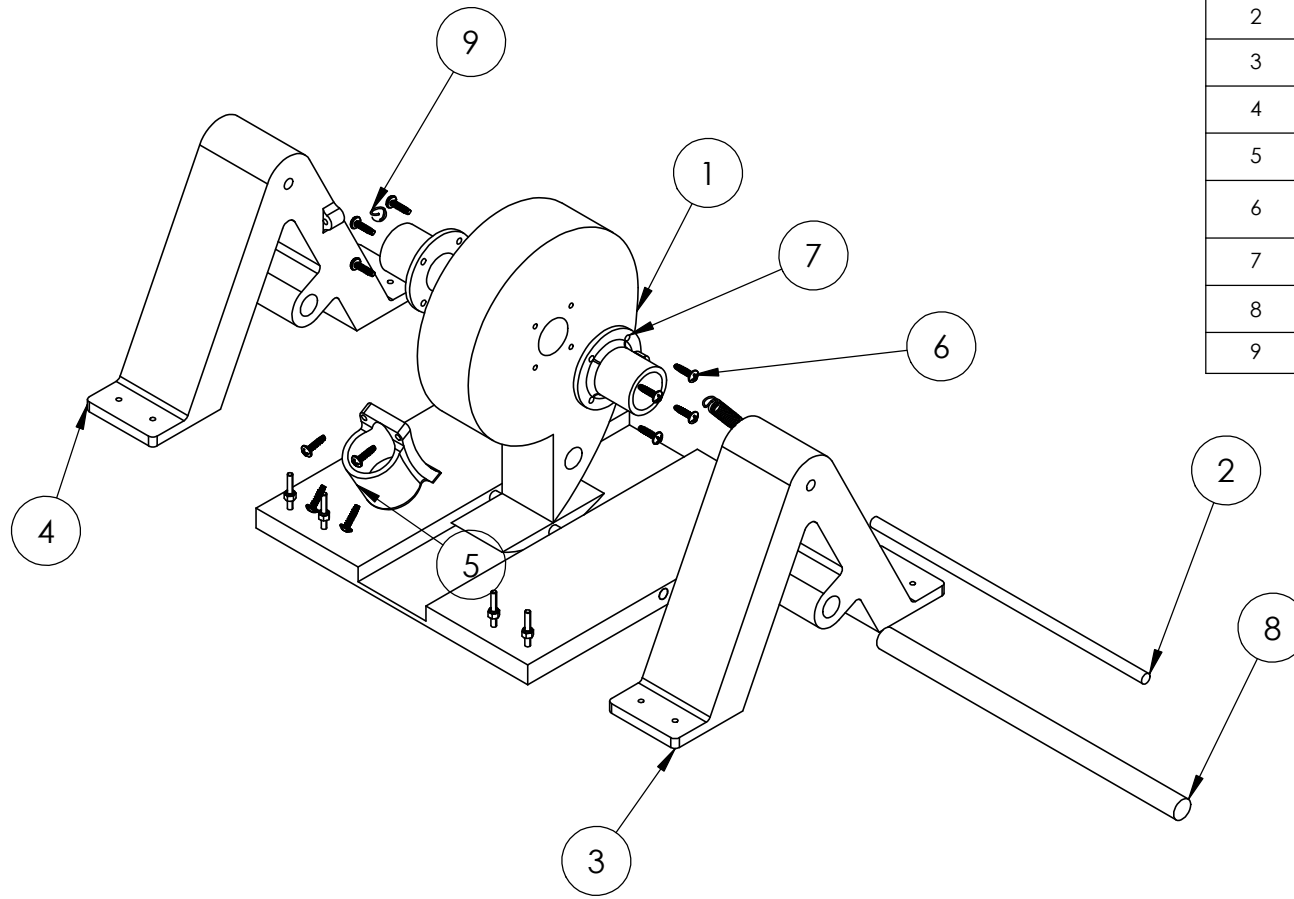
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ITEM NO.	PART NUMBER	QTY.
1	CatapultRing	1
2	Axle	1
3	CatapultUprightArm	1
4	CatapultUprightArmMirrored	1
5	CatapultArm	1
6	90417A126_Phillips Rounded Head Thread-Forming Screws.step	12
7	CatapultRingSupports	2
8	Pin	1
9	SteelExtensionSpring	2

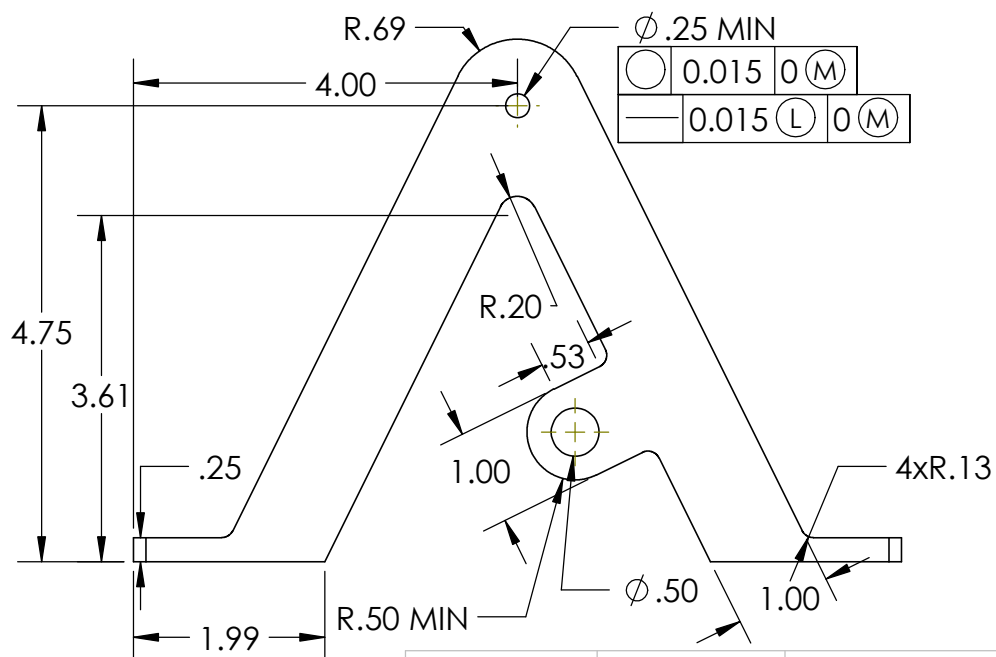
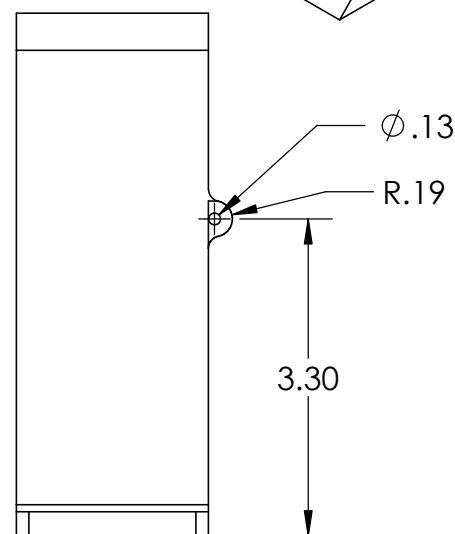
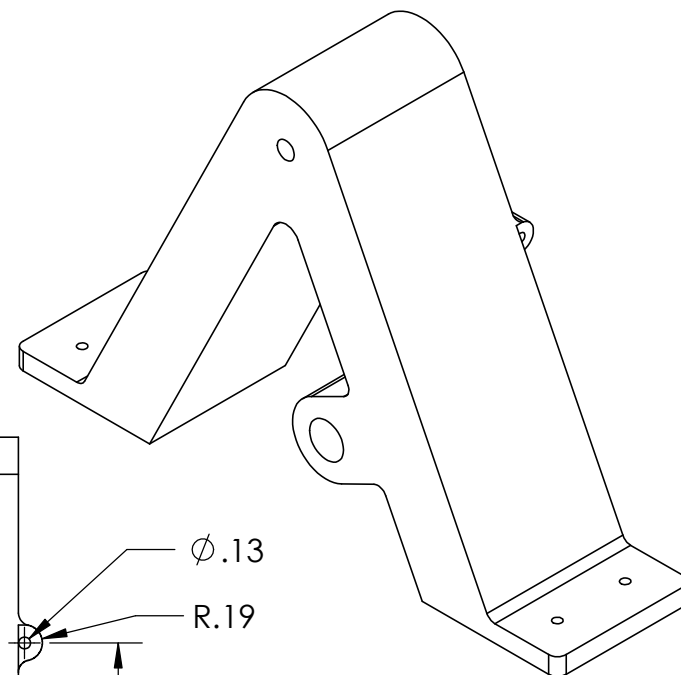
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		DIMENSIONS ARE IN INCHES		DRAWN	
		TOLERANCES:		CHECKED	
		FRACTIONAL ±		ENG APPR.	
		ANGULAR: MACH ± BEND ±		MFG APPR.	
		TWO PLACE DECIMAL ±		Q.A.	
		THREE PLACE DECIMAL ±		COMMENTS:	
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

TITLE:
**CatapultTopAss
embly**

SIZE	DWG. NO.	REV
CatapultAssembly		
SCALE: 1:4	WEIGHT:	SHEET 9 OF 18

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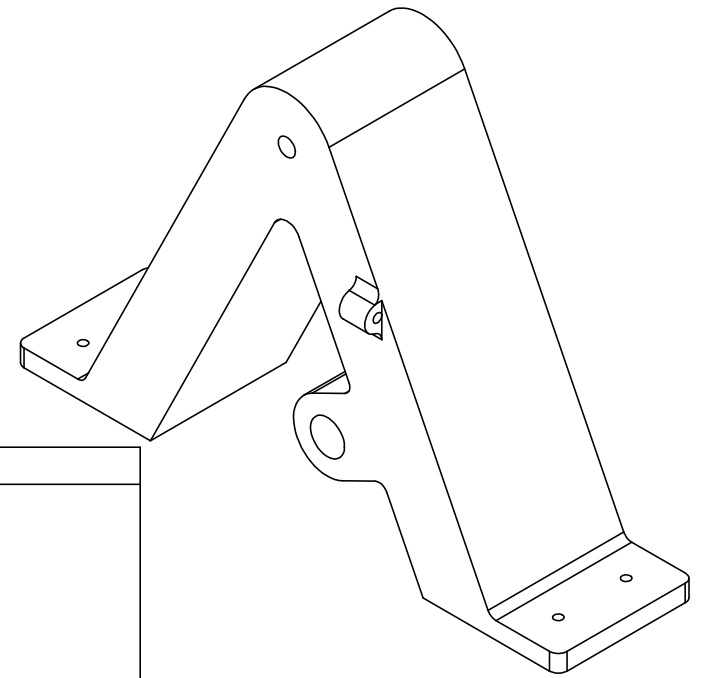
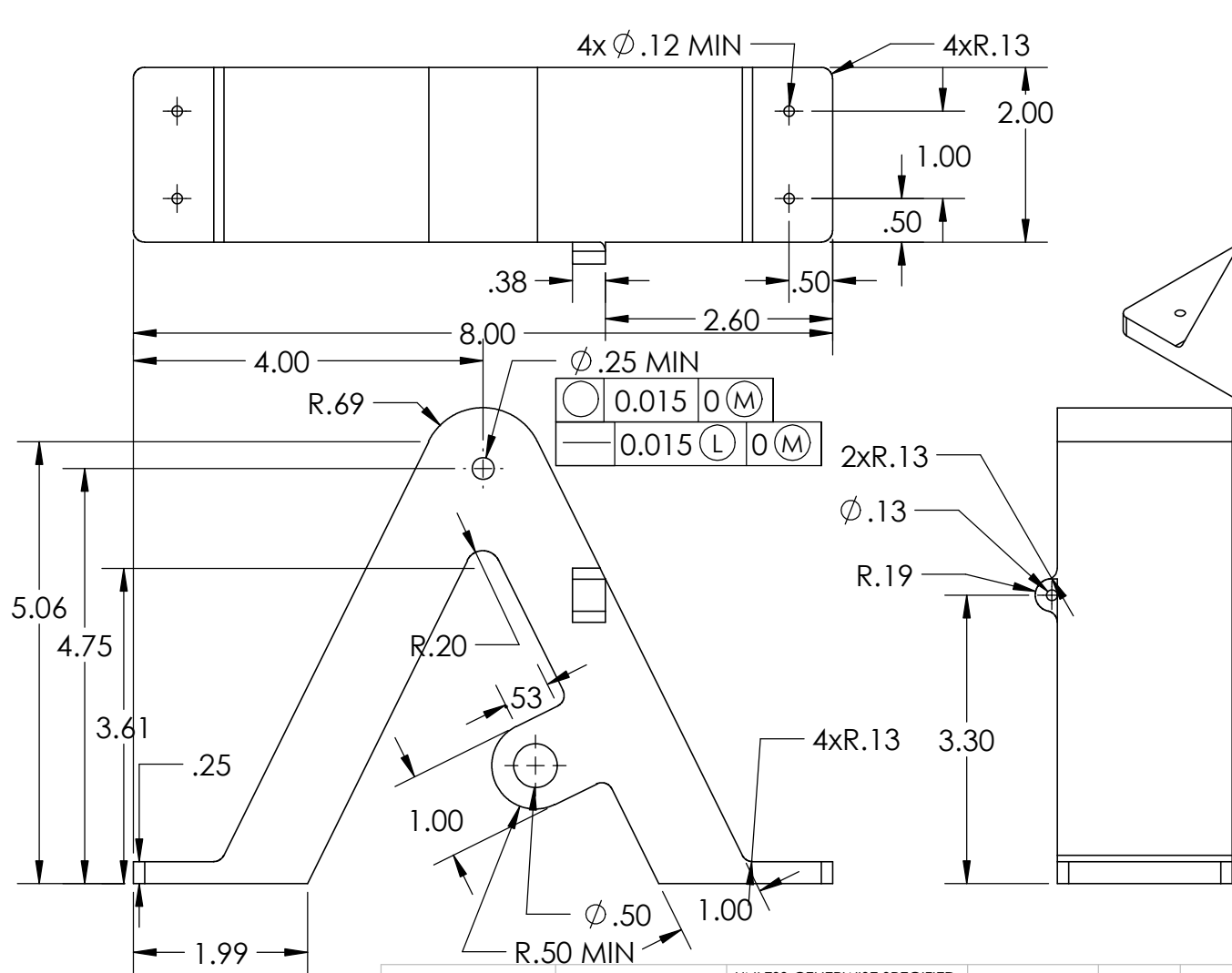
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		DIMENSIONS ARE IN INCHES		DRAWN	
		TOLERANCES:		CHECKED	
		ALL ±0.1		ENG APPR.	
		Unless otherwise specified.		MFG APPR.	
		INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.	
		MATERIAL		COMMENTS:	
		PLA Plastic			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

CatapultUpright ArmMirrored

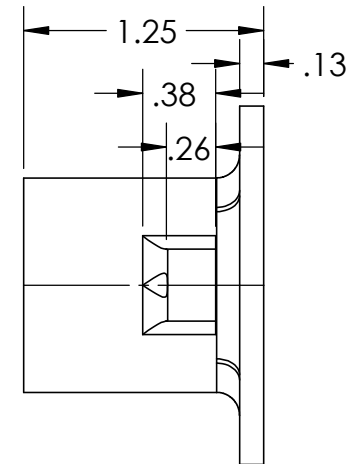
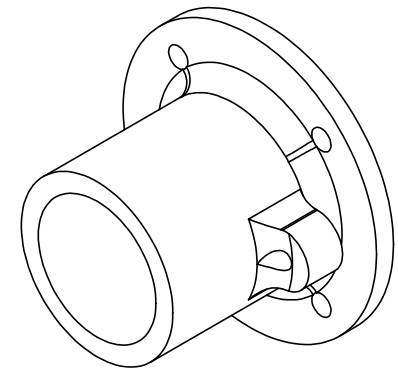
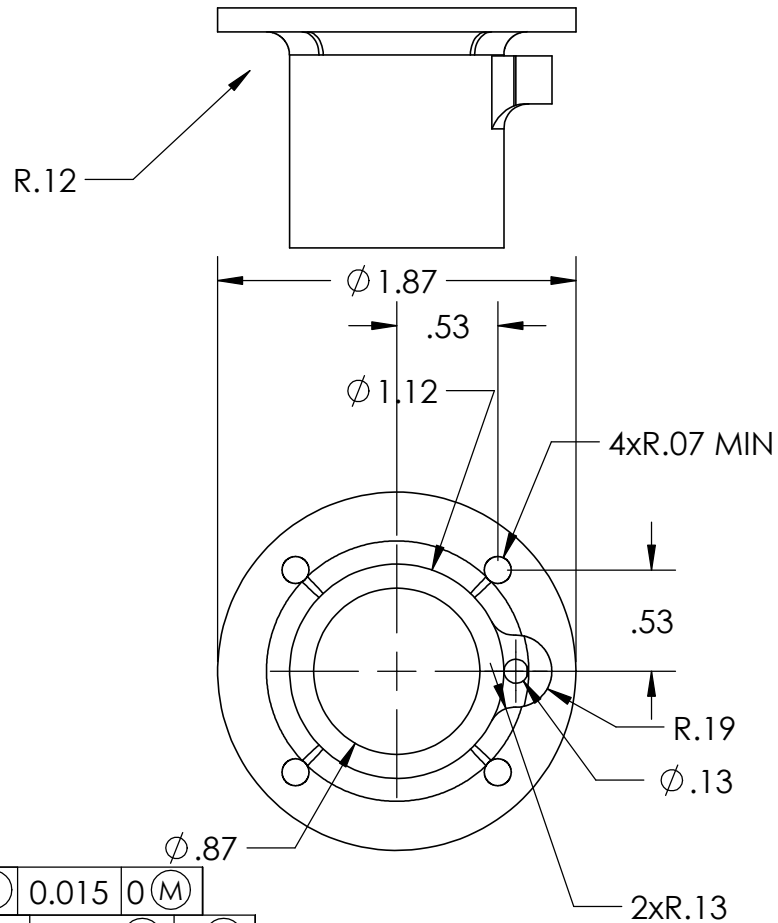
SIZE DWG. NO. REV
CatapultAssembly

SCALE: 1:2 WEIGHT:

SHEET 11 OF 18

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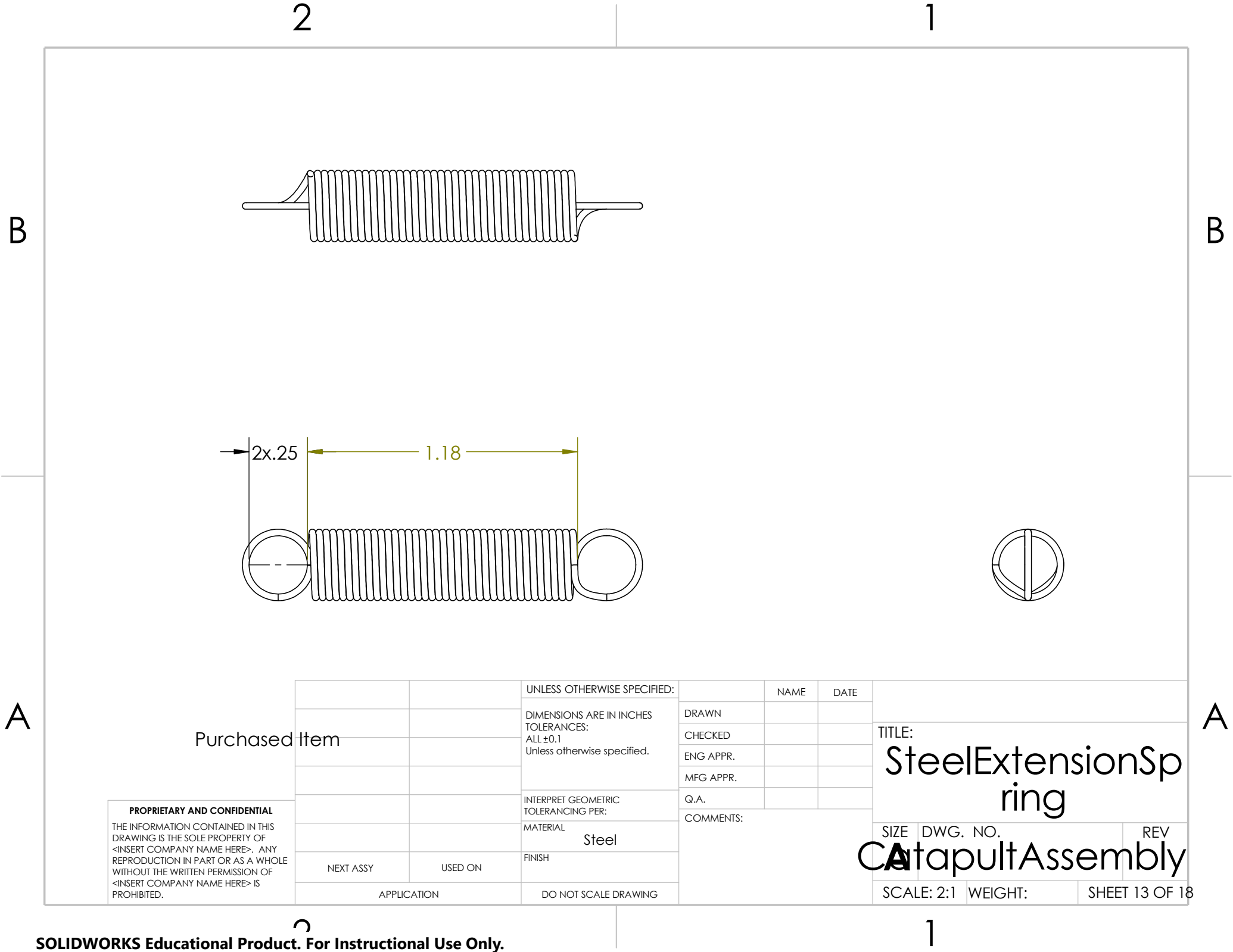
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		ALL ±0.1		ENG APPR.	
		Unless otherwise specified.		MFG APPR.	
		INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.	
		MATERIAL		COMMENTS:	
		PLA Plastic			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

TITLE:
**CatapultRingSup
ports**

SIZE DWG. NO. REV
CatapultAssembly

SCALE: 1:1 WEIGHT: SHEET 12 OF 18



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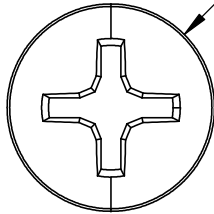
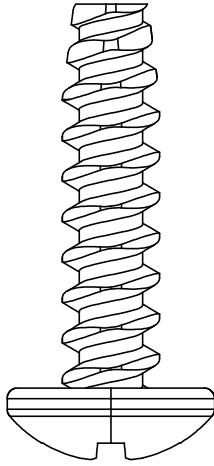
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES TOLERANCES: ALL ±0.1 Unless otherwise specified.
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL Steel
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

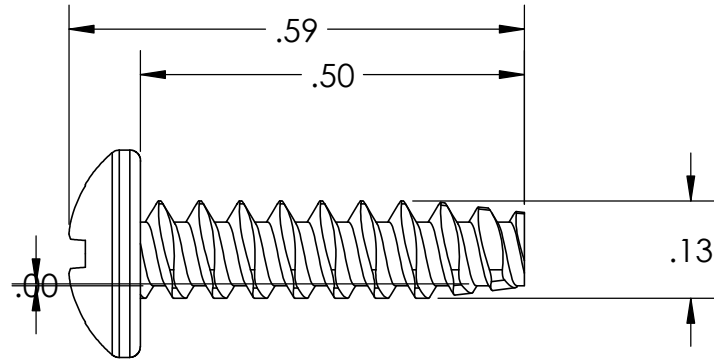
TITLE:
Steel Extension Spring

SIZE DWG. NO. REV
Catapult Assembly

SCALE: 2:1 WEIGHT: SHEET 13 OF 18



R.14

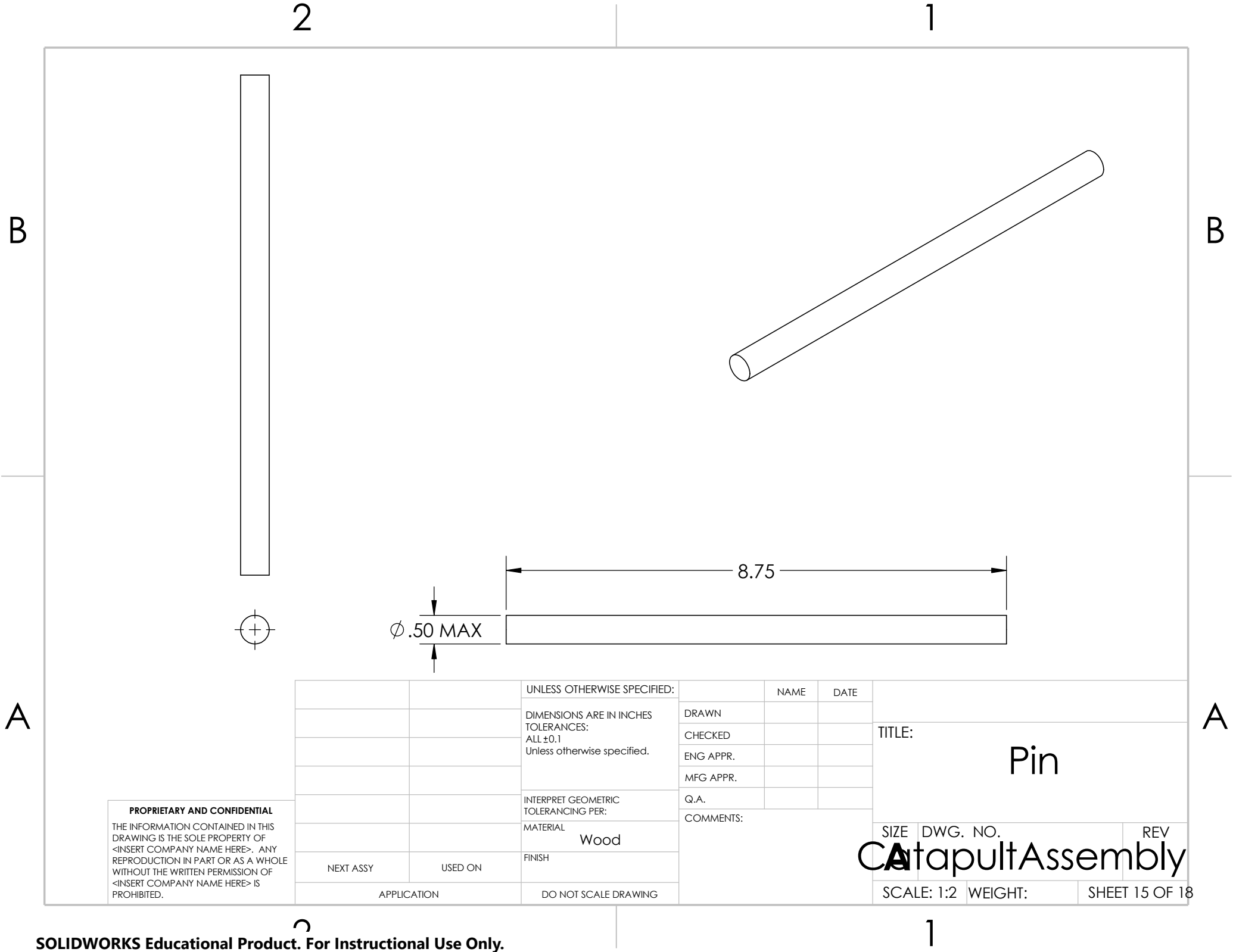


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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE: 90417A126_Phillips Rounded Head Thread-Forming Screws.step		
		DIMENSIONS ARE IN INCHES TOLERANCES: ALL ±0.1 Unless otherwise specified.	DRAWN					
			CHECKED					
			ENG APPR.					
			MFG APPR.					
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			Catapult Assembly		
		MATERIAL	COMMENTS:					
		Steel						
NEXT ASSY	USED ON	FINISH				SIZE	DWG. NO.	REV
APPLICATION		DO NOT SCALE DRAWING				Catapult Assembly		
						SCALE: 4:1	WEIGHT:	SHEET 14 OF 18



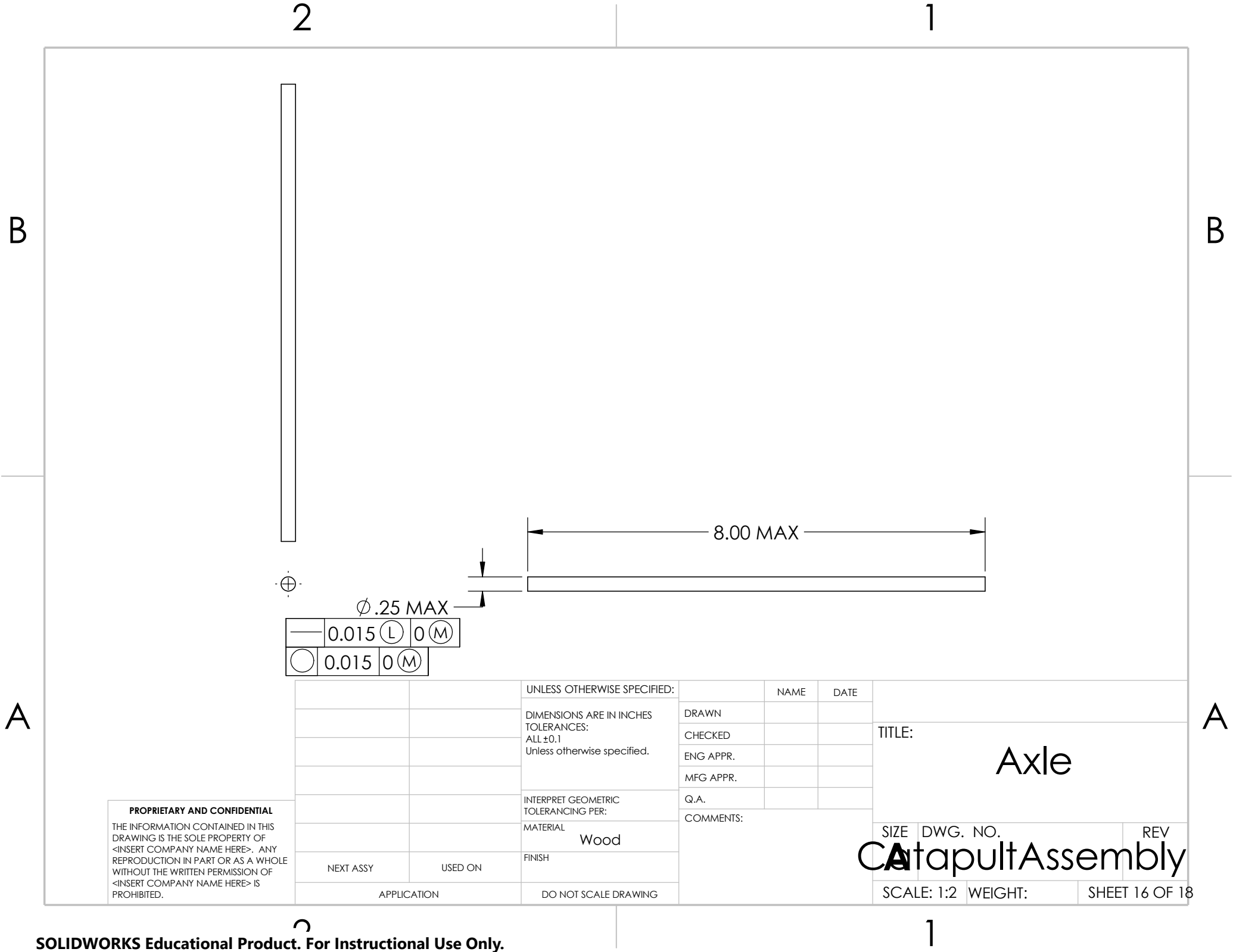
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			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
		Wood			
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:			Pin		
SIZE	DWG. NO.		REV		
Catapult Assembly					
SCALE: 1:2		WEIGHT:		SHEET 15 OF 18	



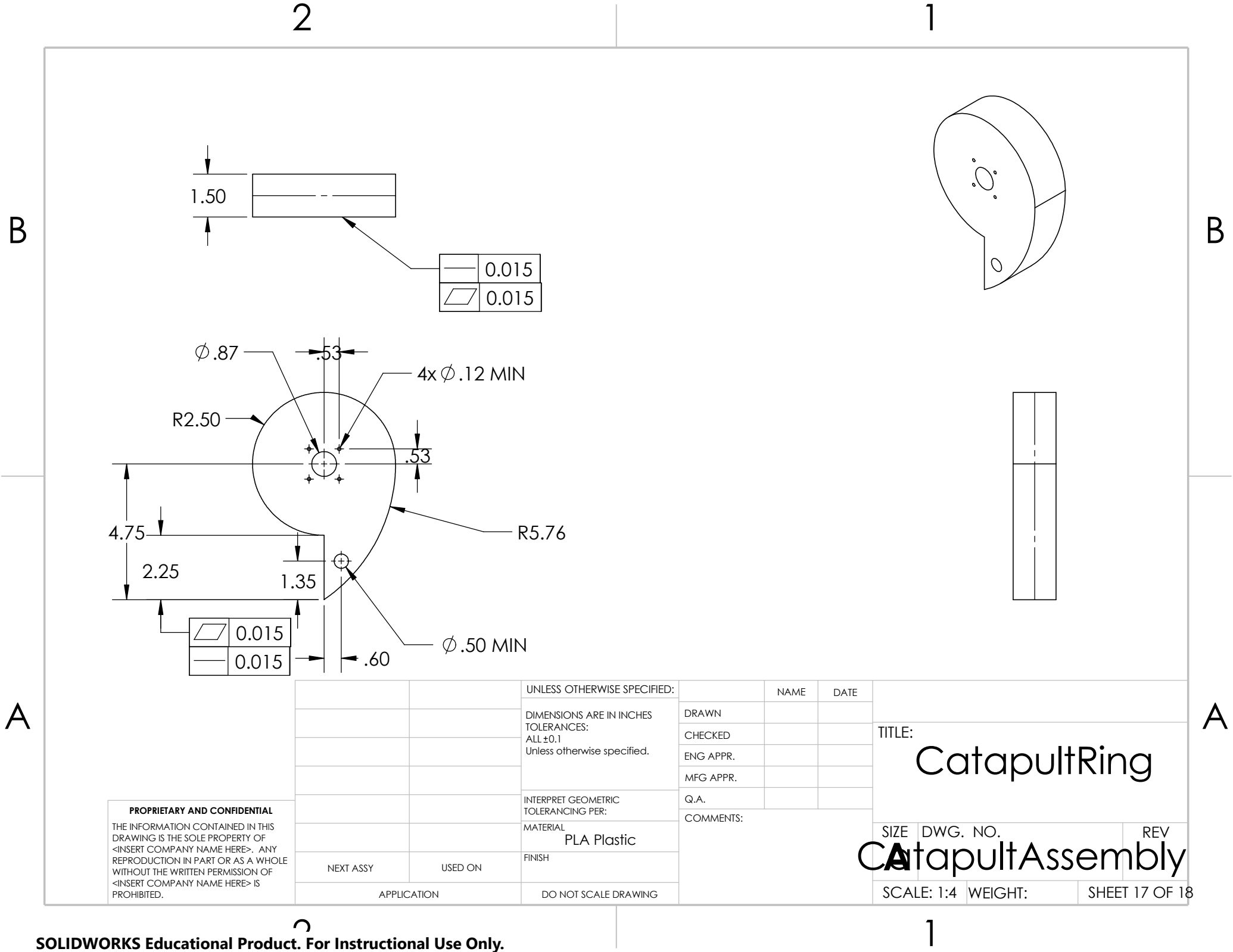
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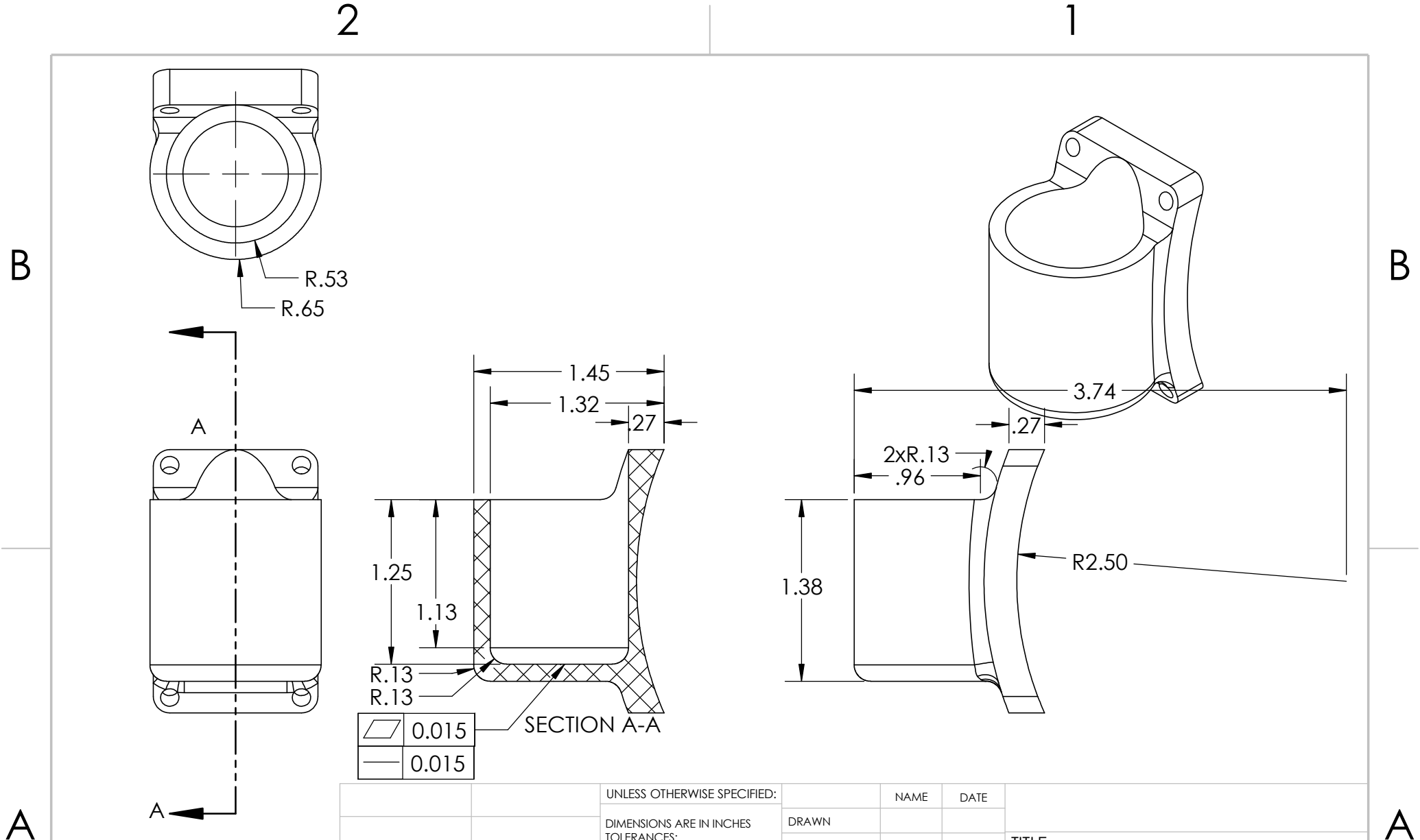
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		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL Wood
		FINISH
NEXT ASSY	USED ON	
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

TITLE: Axle		
SIZE	DWG. NO.	REV
Catapult Assembly		
SCALE: 1:2	WEIGHT:	SHEET 16 OF 18





Goodluck.

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				CHECKED	
				ENG APPR.	
				MFG APPR.	
		INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.	
		MATERIAL PLA Plastic		COMMENTS:	
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

TITLE:
CatapultArm

SIZE	DWG. NO.	REV
CatapultAssembly		
SCALE: 1:1	WEIGHT:	SHEET 18 OF 18