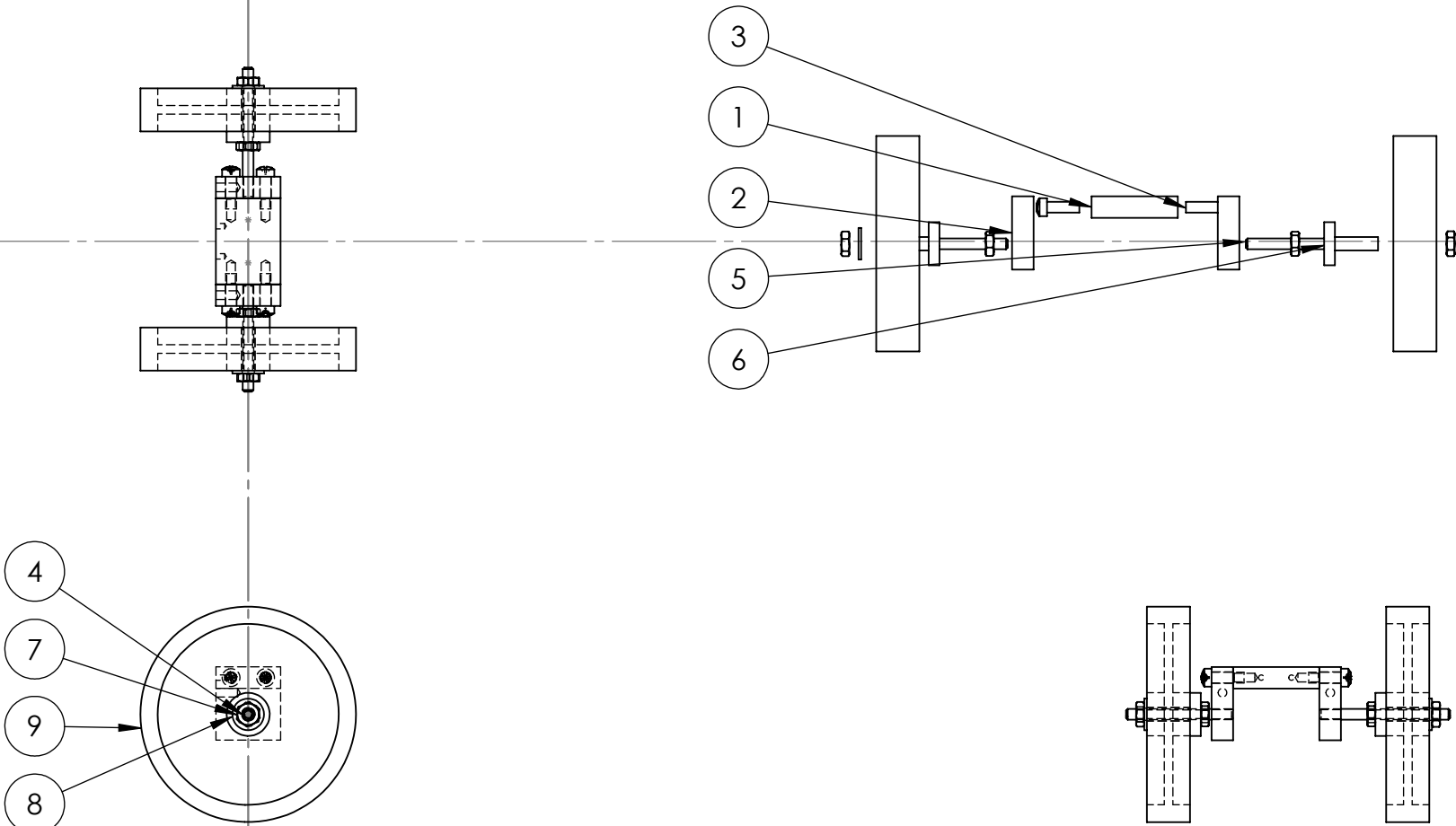


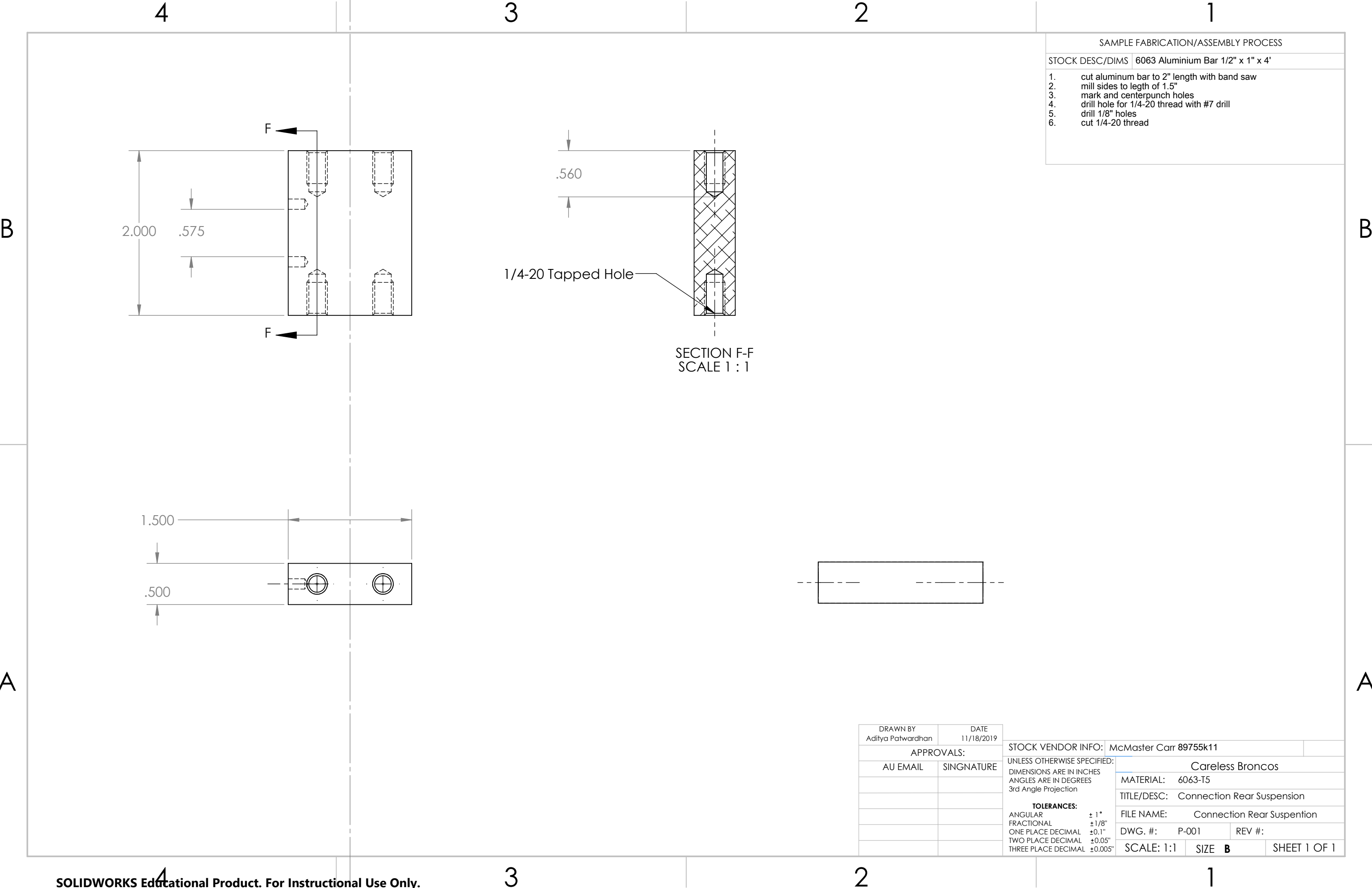
SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	SEE BOM
1.	First, screw in the threaded rods to the wheels and fix them using the hex nuts
2.	Next, attach the muffles to both wheels
3.	Next, attach the rear suspension to the connections using the 1/4-20" bolts
4.	Finally, screw the other end of the threaded rods into the suspension to complete the assembly of the rear axle



ITEM NO.	PART NUMBER	DRAWING NUMBER	QTY.
1	Connection Rear Suspension	P-001	1
2	suspension rear	P-002	2
3	CR-FIMS 0.25-20x0.75x0.75-N		4
4	threaded axle rear left	P-004	1
5	threaded axle rear right	P-005	1
6	muffle rear wheels	P-006	2
7	HHJNUT 0.2500-20-D-N		4
8	Regular FW 0.25		2
9	Wheel	P-003	2

DRAWN BY Aditya Patwardhan	DATE 11/21/2019
APPROVALS:	
AU EMAIL	SIGNATURE

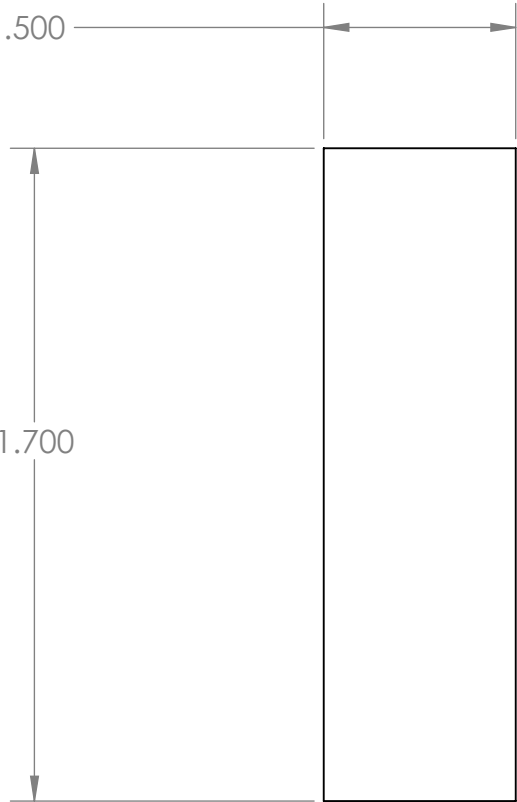
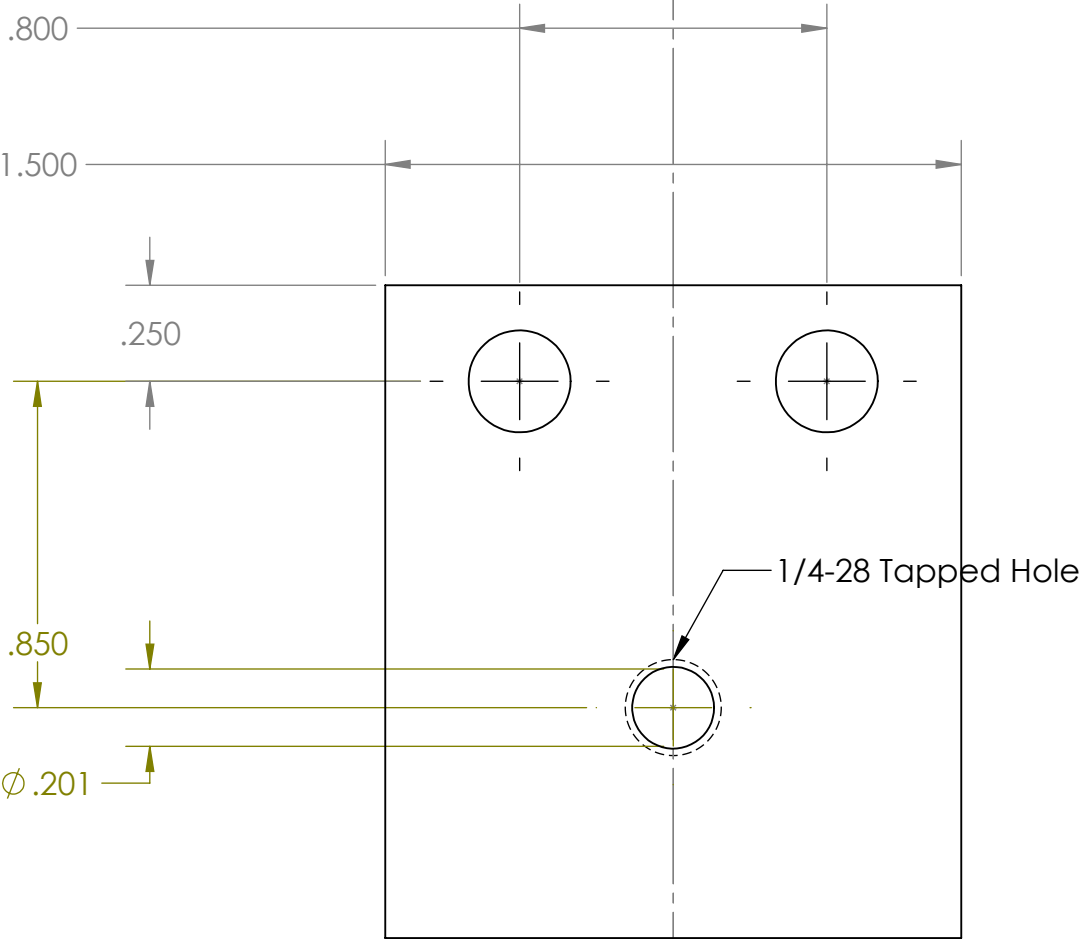
STOCK VENDOR INFO: See BOM	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
TOLERANCES: ANGULAR ± 1° FRACTIONAL ± 1/8" ONE PLACE DECIMAL ± 0.1" TWO PLACE DECIMAL ± 0.05" THREE PLACE DECIMAL ± 0.005"	
Careless Broncos	
MATERIAL: See BOM	
TITLE/DESC: Rear Axle Assembly	
FILE NAME: rear axle assembly	
DWG. #: P-007	REV #:
SCALE: 1:4	SIZE B
SHEET 1 OF 1	



SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	6063 Aluminium Bar 1/2" x 1" x 4'
1. cut aluminum bar to 2" length with band saw	
2. mill sides to legth of 1.5"	
3. mark and centerpunch holes	
4. drill hole for 1/4-20 thread with #7 drill	
5. drill 1/8" holes	
6. cut 1/4-20 thread	

DRAWN BY Aditya Patwardhan		DATE 11/18/2019	
APPROVALS:			
AU EMAIL		SINGNATURE	

SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	Architectural 6063 Aluminum Bar 1/2" Thick, 2" Wide
1.	Mill the 2" wide bar to 1.70" wide.
2.	Drill and thread the 1/4-20 holes at given location.
3.	Drill the two 17/64 holes at given location.



DRAWN BY Aditya Patwardhan	DATE 11/18/2019	STOCK VENDOR INFO: McMaster Carr 89755K14	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SIGNATURE	Careless Broncos	
		MATERIAL: 6063-T5	
		TITLE/DESC: Front Suspension	
		FILE NAME: suspension rear	
		DWG. #:	REV #:
		SCALE: 2:1	SHEET 1 OF 1

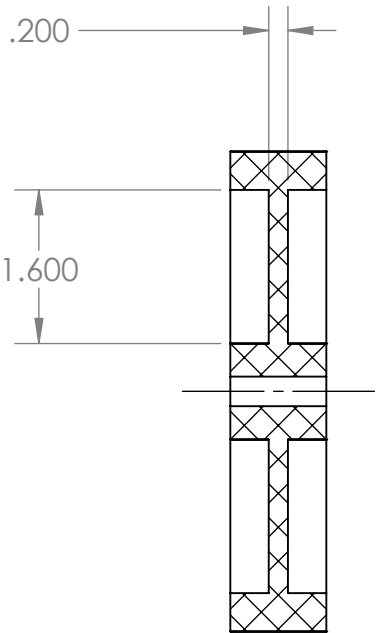
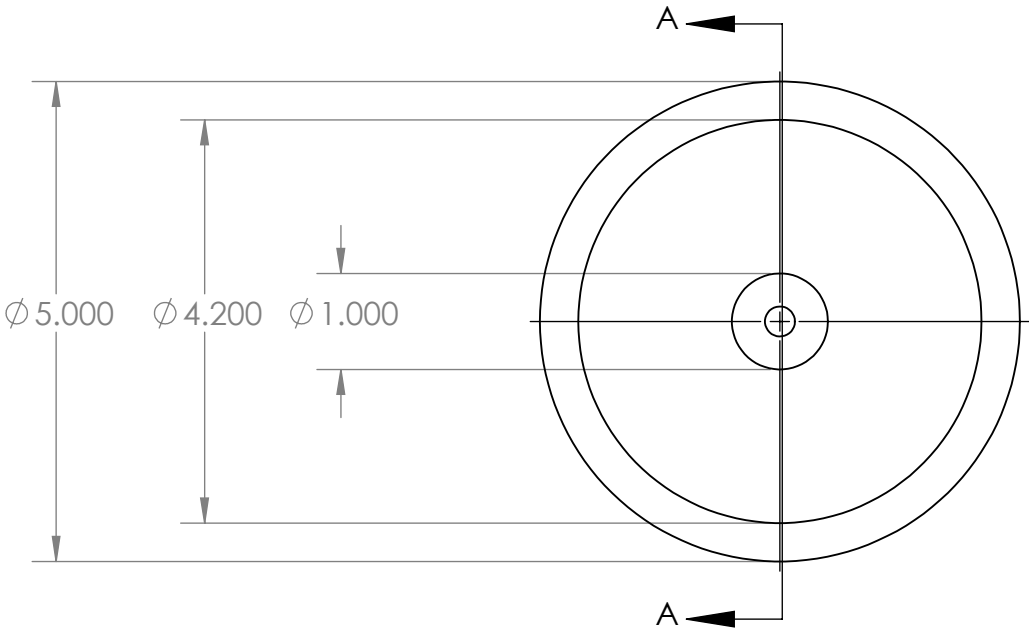
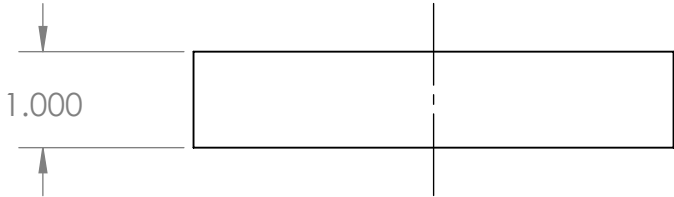
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3

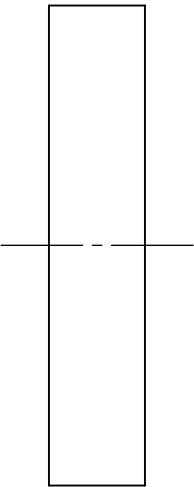
2

1

SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	Polypropylene Wheel without Bearing, 5" Diameter x 1-1/4" Wide
1.	add step 1 here
2.	add step 2 here
3.	...
4.	



SECTION A-A
SCALE 1 : 2



DRAWN BY Aditya Patwardhan	DATE 11/18/2019	STOCK VENDOR INFO: McMaster Carr 2781T98	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SIGNATURE	Careless Broncos	
		MATERIAL: PP Copolymer	
		TITLE/DESC: Rear Wheel	
		FILE NAME: Rear Wheels	
		DWG. #: P-003	REV #:
		SCALE: 1:2	SIZE B
			SHEET 1 OF 1

4

3

2

1

4

3

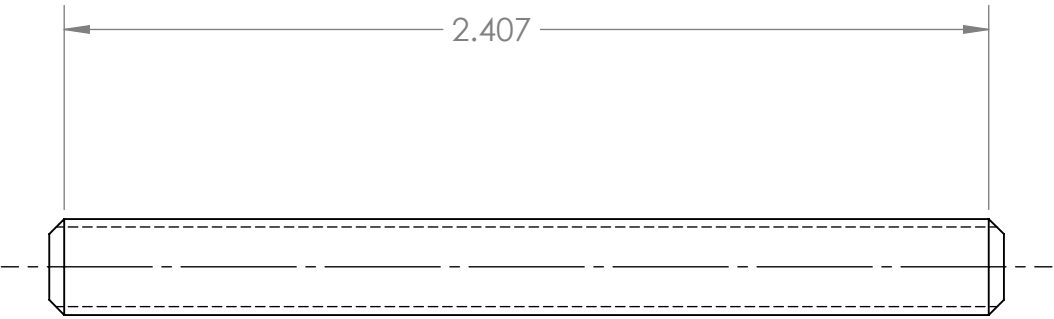
2

1

SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	Threaded Rod 1/4-20 x 3'
1.	Cut threaded rod to a length of 2.677
2.	Chamfer the edges with a belt grinder

1/4-28 Machine Threads

Ø .250



DRAWN BY Aditya Patwardhan	DATE 11/18/2019	STOCK VENDOR INFO: McMaster-Carr 3313N11	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SINGNATURE	Careless Broncos	
		MATERIAL: AISI 1020	
		TITLE/DESC: Threaded Axle	
		FILE NAME: threaded axle rear left	
		DWG. #: P-004	REV #:
		SCALE: 2:1	SIZE B SHEET 1 OF 1
		TOLERANCES: ANGULAR ± 1° FRACTIONAL ± 1/8" ONE PLACE DECIMAL ± 0.1" TWO PLACE DECIMAL ± 0.05" THREE PLACE DECIMAL ± 0.005"	

3

2

1

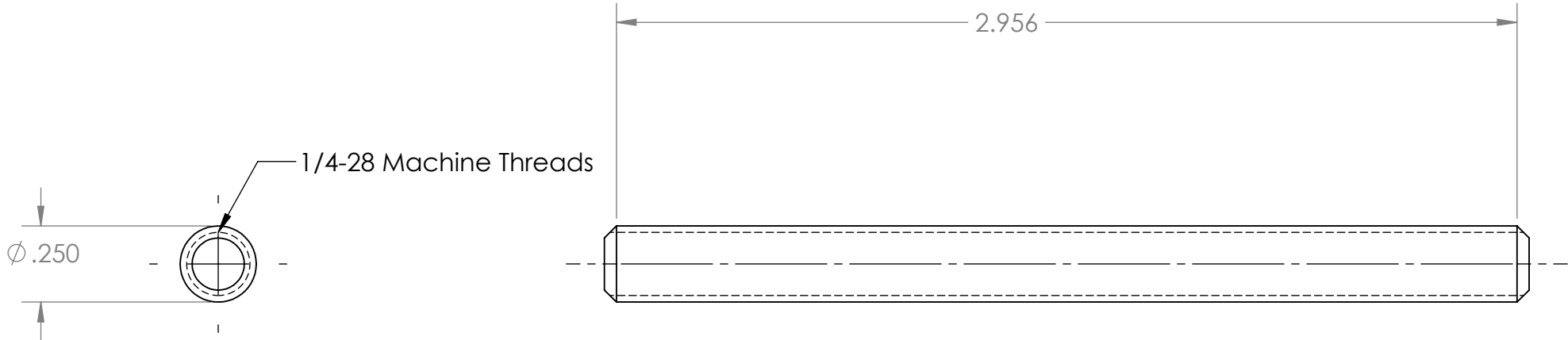
4

3

2

1

SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	Threaded Rod 1/4-20 x 3'
1.	Cut threaded rod to a length of 3.366
2.	Chamfer the edges with a belt grinder



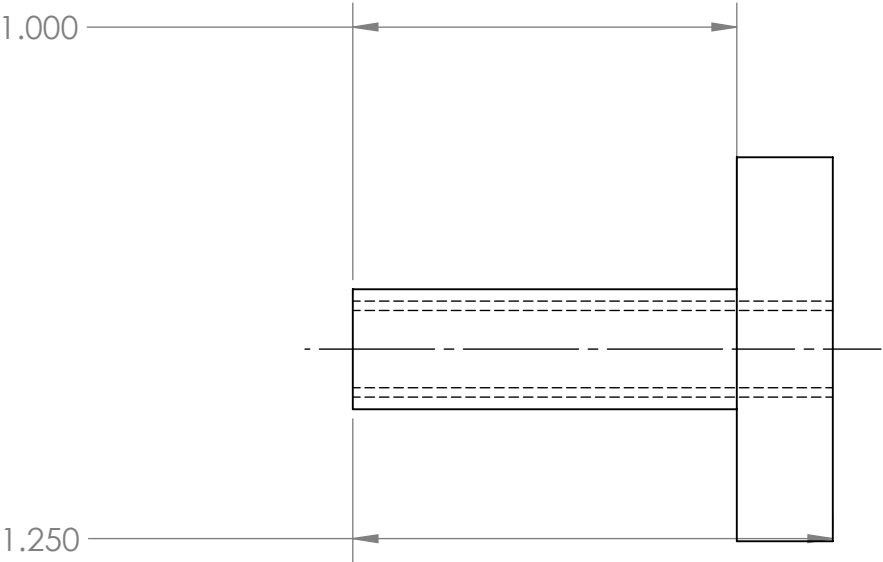
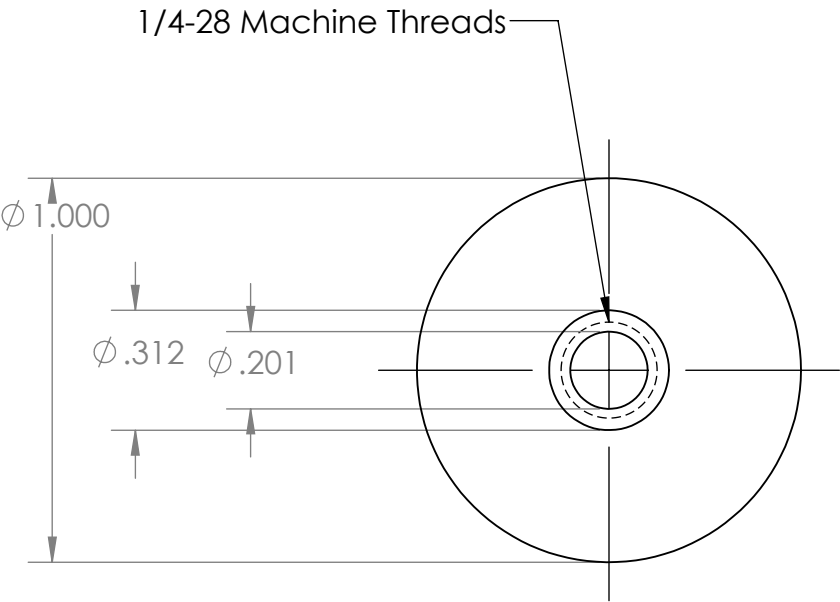
DRAWN BY Aditya Patwardhan	DATE 11/18/2019	STOCK VENDOR INFO: McMaster-Carr 3313N11	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SIGNATURE	Careless Broncos	
		MATERIAL: AISI 1020	
		TITLE/DESC: Threaded Axle	
		TOLERANCES: ANGULAR $\pm 1^\circ$ FRACTIONAL $\pm 1/8"$ ONE PLACE DECIMAL $\pm 0.1"$ TWO PLACE DECIMAL $\pm 0.05"$ THREE PLACE DECIMAL $\pm 0.005"$	
		FILE NAME:	threaded axle rear right
		DWG. #:	P-005
		REV #:	
		SCALE: 2:1	SIZE B
		SHEET 1 OF 1	

3

2

1

SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	Low-Carbon Steel Rod 1" Diameter
1.	Off the 1' steel rod, cut two parts 1.5" each for both muffles
2.	Lathe one end down to given dimensions.
3.	Drill and tap 1/4-20" holes in the center of both rods.



DRAWN BY Aditya Patwardhan	DATE 11/18/2019	STOCK VENDOR INFO: McMaster Carr 8920K231	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SIGNATURE	Careless Broncos	
		MATERIAL: AISI 1020	
		TITLE/DESC: Muffle	
		FILE NAME: muffle rear wheels	
		DWG. #: P-006	REV #:
		SCALE: 2:1	SIZE B SHEET 1 OF 1
		TOLERANCES: ANGULAR $\pm 1^\circ$ FRACTIONAL $\pm 1/8"$ ONE PLACE DECIMAL $\pm 0.1"$ TWO PLACE DECIMAL $\pm 0.05"$ THREE PLACE DECIMAL $\pm 0.005"$	