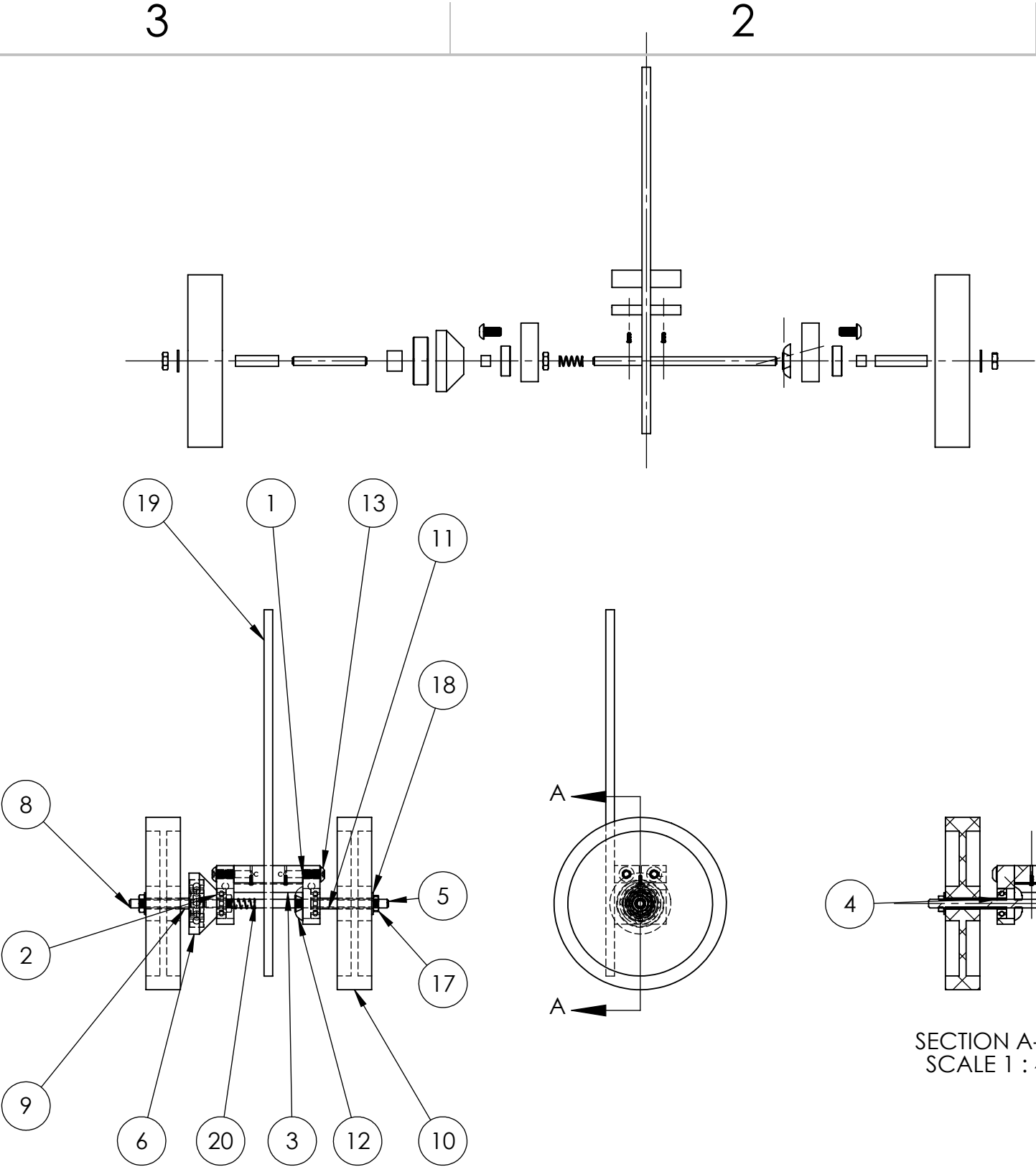


4			
ITEM NO.	PART	Drawig Number	QTY.
1	Connection Front Suspension	P-002	1
2	Suspension Front	P-001	2
3	Slide Wing Nut	P-004	1
4	Muffle Bearing	P-006	2
5	Threaded Axle Front Left	P-003	1
6	Adapter One-Way-Bearing	P-008	1
7	Muffle One-Way-Bearing	P-007	1
8	Threaded Axle Front Right	P-009	1
9	Muffle Wheel Right	P-011	1
10	Wheel	P-005	2
11	Muffle Wheel Left	P-010	1
12	Wingnut	P-012	1
13	Button Head Hex Drive Screw 1-4-20	P-015	4
14	Button Head Hex Drive Screw 1-64	P-017	2
15	608 Ball Bearing	P-018	2
16	One-Way-Bearing	P-014	1
17	Stainless Steel Thin Hex Nut 1-4-28	P-016	3
18	316 Stainless Steel Washer	P-019	2
19	Wooden Rod	P-013	1
20	Compression Spring Break	P-046	1



SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	SEE BOM
1.	screw together Connection Front Suspension(1) and Suspension Front(2) using screws(13)
2.	push in bearings (15)
3.	screw in Slide Wing Nut(3) with screws(14)
4.	push in Muffle Bearing(4) in bearings(25)
5.	put Wingnut(12), nut(17) and Compression Spring Break (20) on Threaded Axle Front Left(5)
6.	while putting axle throught Muffle Bearing(4)
7.	put Wheel(10) on Muffle Wheel Left(11), put them on Threaded Axle Front Left(5) and fix them in place with nut(17) and washer(18)
8.	screw Adapter One-Way-Bearing(6) on the right side of the Threaded Axle Front Left, and push One-Way-Bearing(16) in
9.	push in Muffle One-Way-Bearing(7) in One-Way-Bearing(16) and screw Threaded Axle Front Right(8) in
10.	push Wheel(10) on muffle Wheel Right(9), glue it together and screw it on Threaded Axle Front Right(8)
11.	fix Wheel in place with nut(17) and washer(18)
12.	Glue Wooden Rod in middle of ConnectionFront Suspesion about 1cm over ground

SECTION A-A
SCALE 1 : 4

DRAWN BY Felix Lasch	DATE 12/5/2019	STOCK VENDOR INFO: SEE PARTS LIST	
APPROVALS:		Careless Broncos	
AU EMAIL	SINGNATURE	MATERIAL: SEE PARTS LIST	
		TITLE/DESC: Fromt Axle Assembly	
		FILE NAME: Front Axle Assembly	
		DWG. #: A-001	REV #: A
		SCALE: 1:4	SIZE B SHEET 1 OF 1

B

A

B

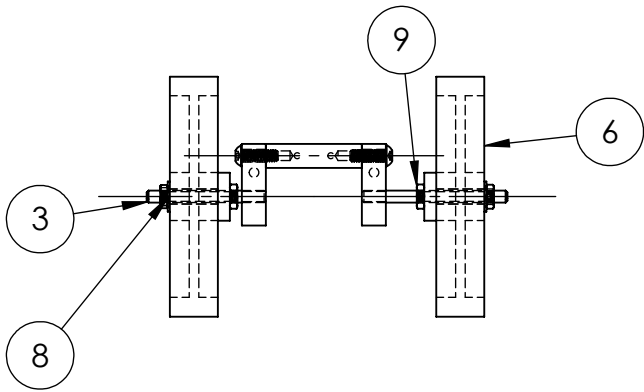
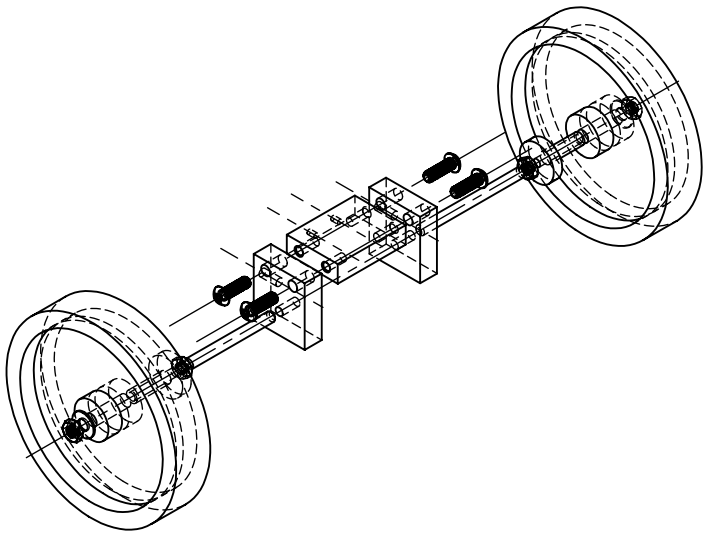
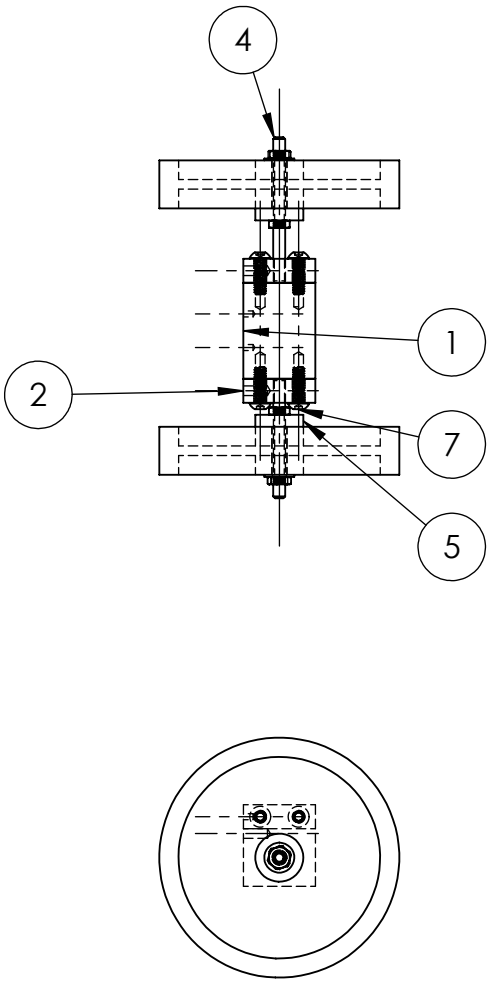
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SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK	DESC/DIMS SEE BOM
1.	Screw Suspension Rear(2) to Connection Rear Suspesion(1) with screws(9)
2.	screw threaded axle rear left(3) and right(4) into suspension rear
3.	screw on one nut(9) on every side
4.	screw on both muffle rear wheels(5) on rear axle
5.	put Wheels(6) on rear muffles
6.	put washers(8) and nuts(9) on rear axle and tighten the nuts to fix muffles in place

ITEM NO.	PART NUMBER	DRAWING NUMBER	QTY.
1	Connection Rear Suspention	P-020	1
2	suspension rear	P-021	2
3	threaded axle rear left	P-024	1
4	threaded axle rear right	P-023	1
5	muffle rear wheels	P-022	2
6	Wheel	P-005	2
7	Button Head Hex Drive Screw 1-4-28	P-015	4
8	316 Stainless Steel Washer	P-019	2
9	Stainless Steel Thin Hex Nut 1-4-28	P-016	4

DRAWN BY Aditya Patwardhan	DATE 11/21/2019	STOCK VENDOR INFO: See BOM	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SINGNATURE	Careless Broncos	
		MATERIAL: See BOM	
		TITLE/DESC: Rear Axle Assembly	
		FILE NAME: Rear Axle Assembly	
		DWG. #: A-002	REV #: A
		SCALE: 1:4	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"	

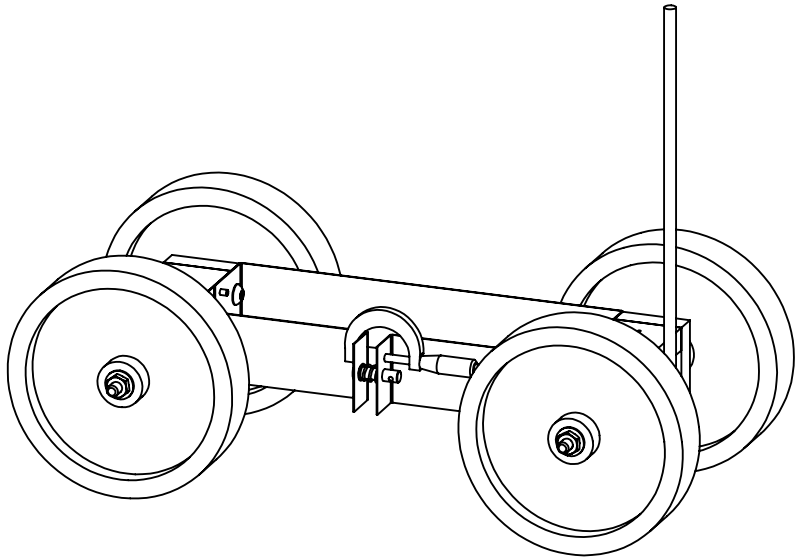
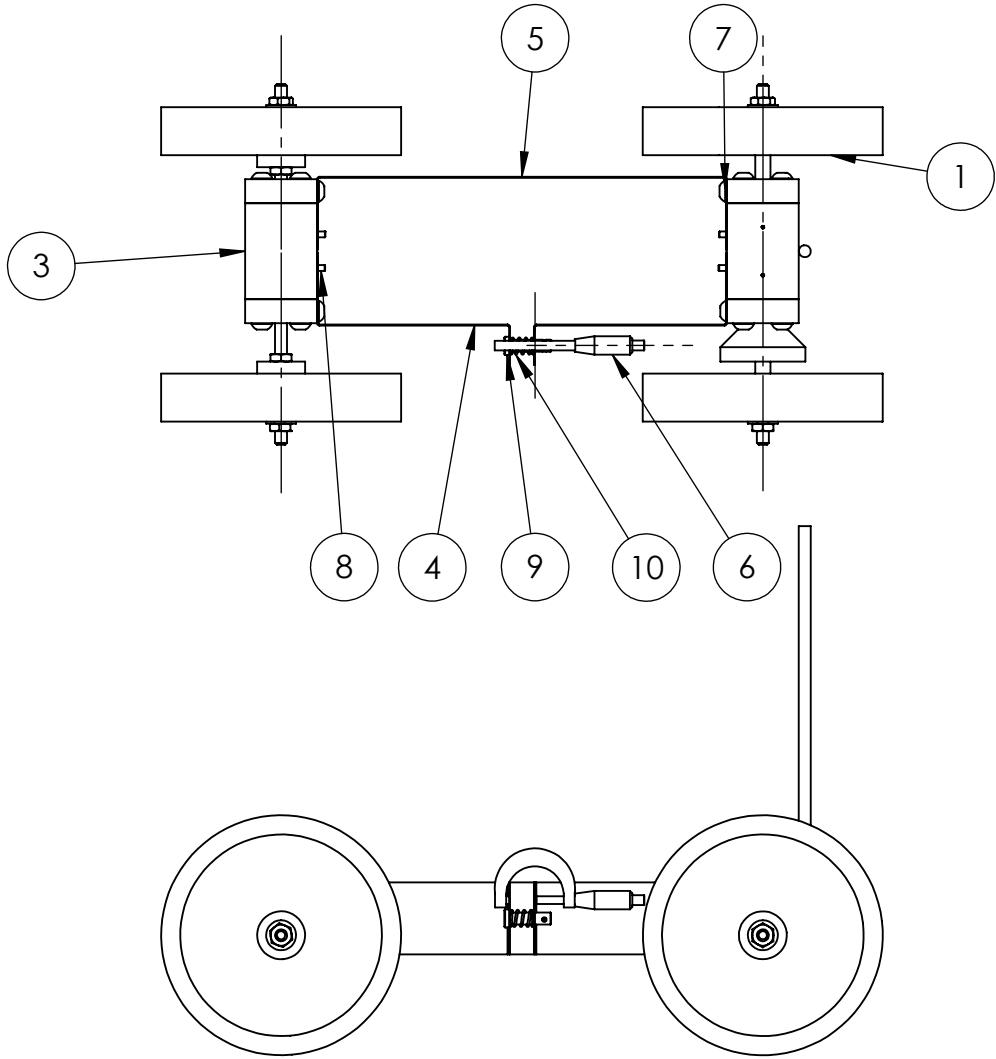
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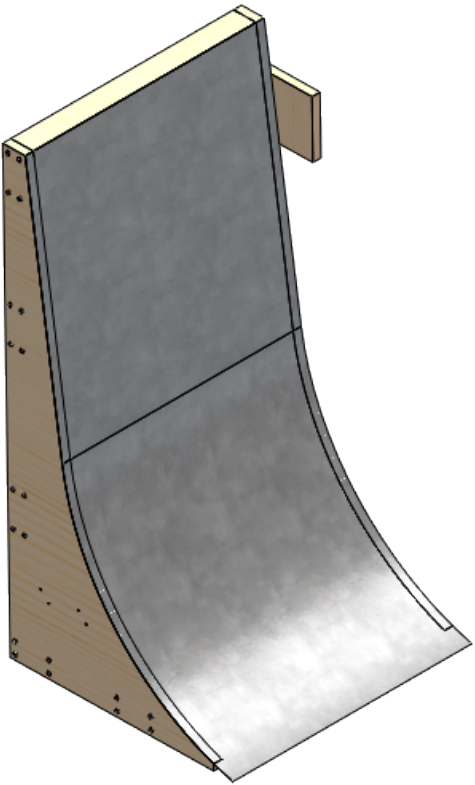
A

4				3				2				1			
ITEM NO.	PART	Drawing Number	QTY.									SAMPLE FABRICATION/ASSEMBLY PROCESS			
1	Front Axle Assembly	A001	1									STOCK DESC/DIMS	SEE BOM		
2	Frame 1 Front	P-028	1									1.	Weld the base of the head of the 0.25-Clevis Pin(9) to the frame 1 rear(4)		
3	rear axle assembly	A-002	1									2.	Insert the 2022N161_MIL. SPEC. compression spring(10) concentric to the Clevis Pin		
4	Frame 1 Rear	P-029	1									3.	Insert the the tip of the Clevis Pin in frame 1 front(2)		
5	Frame 2	P-30	1									4.	Weld the micrometer(6) to both frame 1 rear and frame 2 front above the pin		
6	micrometer	P-031	1									5.	Using screws(7) and Dovel Pins(8) to attach both frame 1 front, frame 1 rear and frame 2 to the front axle assembly and to the rear axle assembly		
7	Button Head Hex Drive Screw	P-025	4												
8	Dovel Pin	P-027	4												
9	Clevis Pin	P-026	1												
10	Compression Spring	P-32	1												



DRAWN BY Giampietro Nigro		DATE 11/21/2019		STOCK VENDOR INFO: SEE PARTS LIST			
APPROVALS:				UNLESS OTHERWISE SPECIFIED:			
AU EMAIL		SINGNATURE		Careless Broncos			
				MATERIAL: SEE PARTS LIST			
				TITLE/DESC: Gravity Car Assembly			
				FILE NAME: Gravity car assembly (Split frame)			
				DWG. #:		A-003	REV #: A
				SCALE: 1:4		SIZE B	SHEET 1 OF 1
				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"			

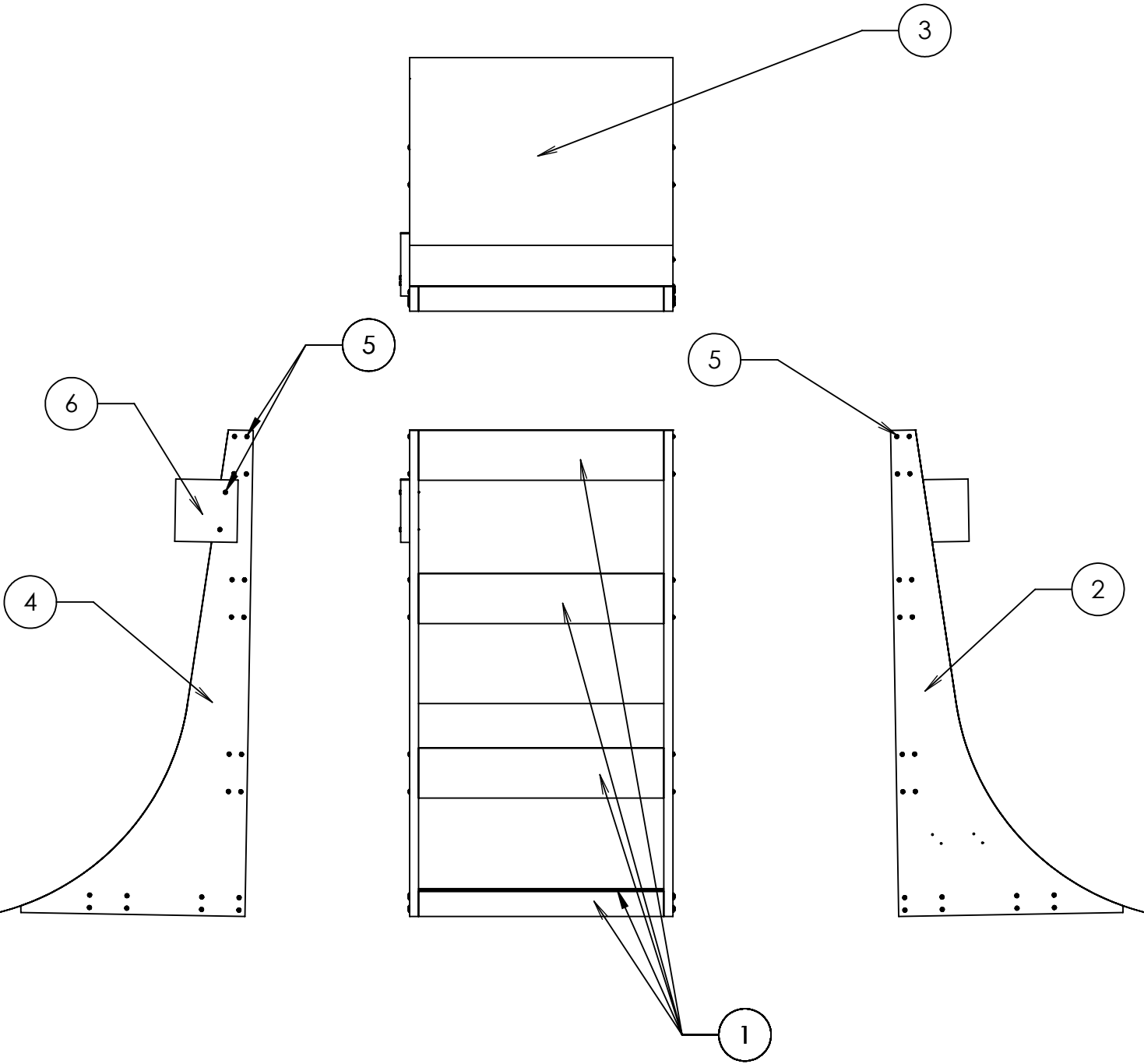
SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	SEE BOM
1.	ATTACH ITEM 6 TO ITEM 4 USING ITEM 5. SCREWS SHOULD BE INSERTED INTO THE PILOT HOLES ON THE APPROPRIATE SIDE OF THE WOOD AS INDICATED BY THE DRAWING.
2.	ATTACH THE FIVE QUANTITIES OF ITEM 1 TO THE OTHER SIDE OF ITEM TWO USING ITEM 5. SCREWS SHOULD BE INSERTED INTO THE CORRECT PILOT HOLES AS INDICATED BY THE DRAWING.
3.	ATTACH ITEM 2 TO THE FIVE QUANTITIES OF ITEM 1 USING ITEM 5. SCREWS SHOULD BE INSERTED INTO THE CORRECT PILOT HOLES AS INDICATED BY THE DRAWING.
4.	ATTACH ITEM 3 TO THE TOP OF THE TOP OF THE CREATED STRUCTURE USING ITEM 7. WARP ITEM 3 UNTIL IT IS FLUSH WITH THE TOP OF THE STRUCTURE.



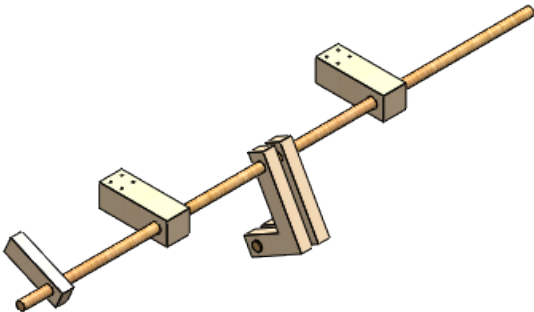
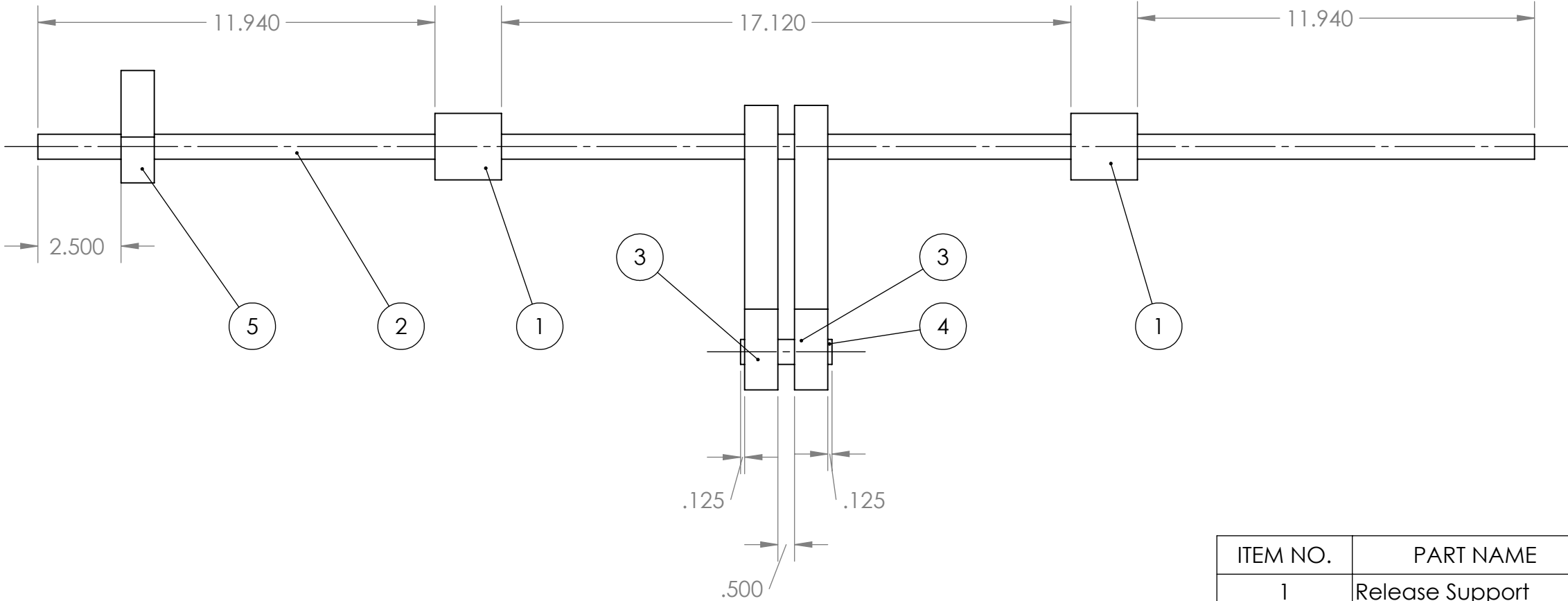
ISOMETRIC VIEW
FOR REFERENCE ONLY
SCALE 1:12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	P-035	Ramp Support	5
2	P-034	Ramp Right Side	1
3	P-036	Ramp Top	1
4	P-033	Ramp Left Side	1
5	P-037	Wood Screw No. 8 Size, 1-1/2" Long	42
6	P-038	Position Marker	1
7	-	Gorilla Glue 9oz Heavy Duty Construction Adhesive	AR

DRAWN BY Andrew Weir	DATE 12/5/2019	STOCK VENDOR INFO: SEE PARTS LIST	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SINGNATURE	Careless Broncos	
		MATERIAL: SEE PARTS LIST	
		TITLE/DESC: Ramp	
		FILE NAME: Ramp	
		DWG. #: A-004	REV #: A
		SCALE: 1:12	SHEET 1 OF 1
		SIZE B	



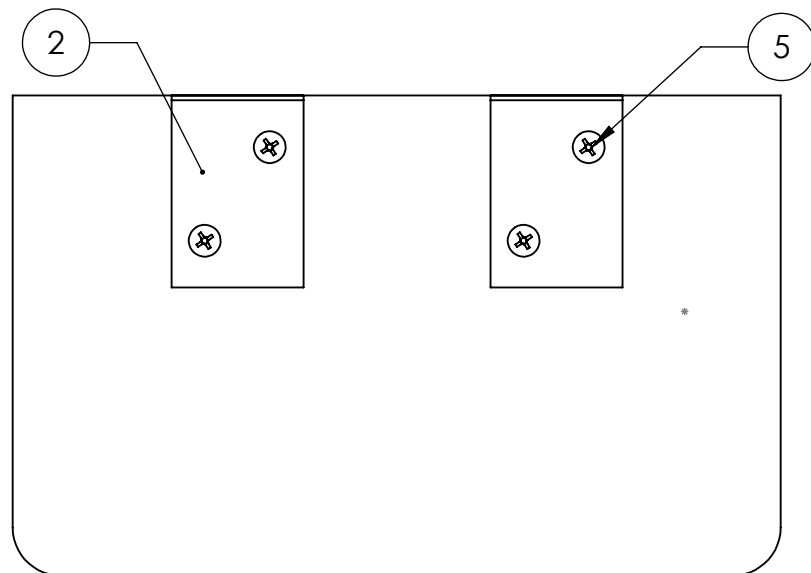
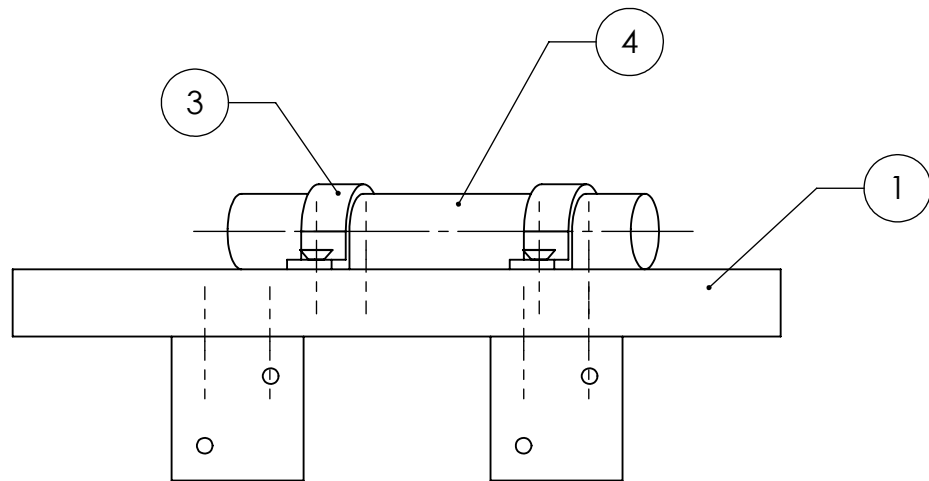
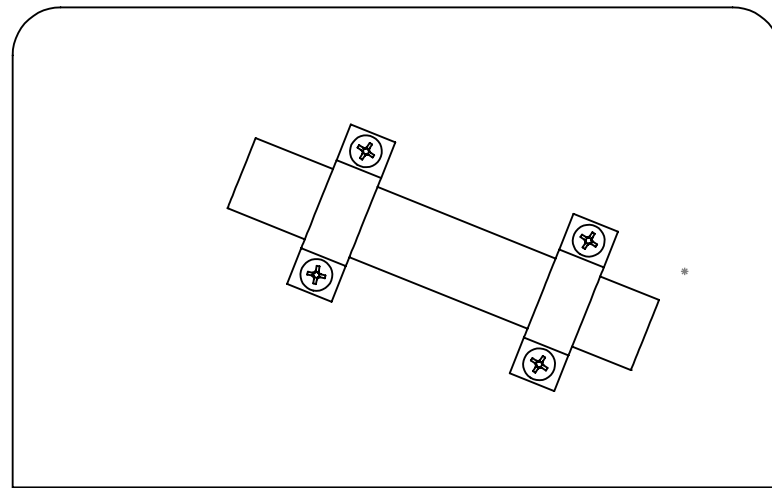
SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	SEE BOM
1.	CONNECT ITEM 5 TO ITEM 2 AT LOCATION SHOWN. DEPENDING ON TOLERANCES THIS MAY REQUIRE HAMMERING ITEM 5 INTO POSITION. USE ITEM 6 TO GLUE ITEM 5 UNTIL IT IS SECURED IN THE APPROPRIATE POSITION.
2.	ATTACH ITEM 1 TO THE ITEM 2 AT LOCATION SHOWN. ITEM 1 SHOULD BE LOOSE AND CAN MOVE ALONG ITEM 2.
3.	ATTACH THE TWO QUANTITIES OF ITEM 3 TO ITEM 4 AT APPROXIMATE LOCATIONS SHOWN. DEPENDING ON TOLERANCES THIS MAY REQUIRE HAMMERING THE ITEM 3 PARTS INTO POSTION. USE ITEM 6 TO FIRMLY GLUE THE ITEM 3 PARTS INTO PLACE.
4.	ATTACH THE HOOK MADE IN STEP THREE TO ITEM 2 IN THE LOCATION SHOWN. DEPENDING ON TOLERANCES THE HOOK MAY NEED TO BE HAMMERED INTO LOCATION. USE ITEM 6 TO FIRMLY GLUE THE HOOK INTO PLACE.
5.	ATTACH ANOTHER ITEM 1 TO ITEM 2 AT THE LOCATION SHOWN. THE ITEM 1 SHOULD BE LOOSE AND CAN FREELY SLIDE DOWN ITEM 2.



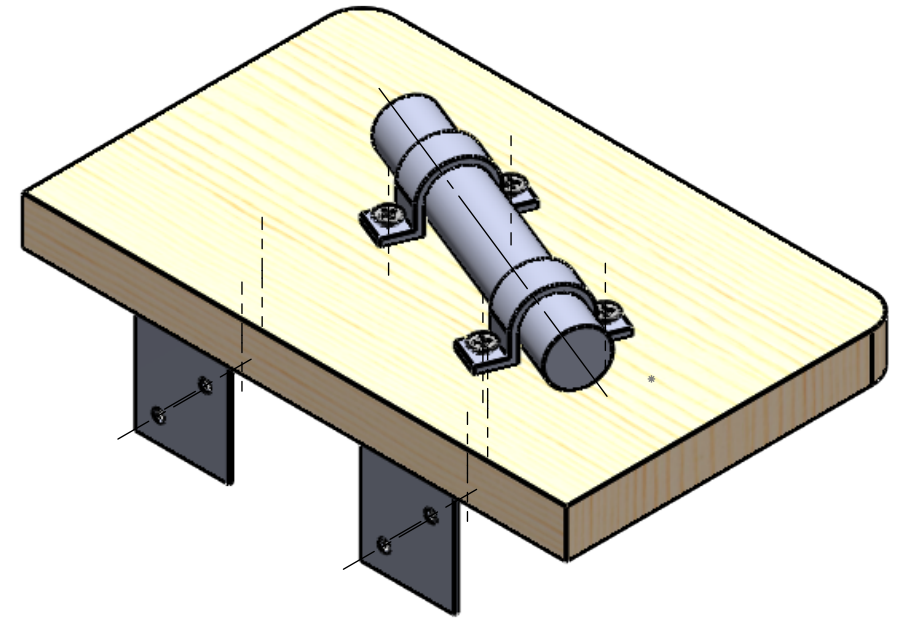
ISOMETRIC VIEW
FOR REFERENCE ONLY
SCALE 1:12

ITEM NO.	PART NAME	PART NUMBER	QTY.
1	Release Support	P-041	2
2	Release Dowel	P-040	1
3	Release Hook	P-042	2
4	Hook Dowel	P-043	1
5	Release Lever	P-039	1
6	Gorilla4 fl. oz. Wood Glue	-	AR

DRAWN BY ANDREW WEIR	DATE 11/21/2019	STOCK VENDOR INFO: SEE PARTS LIST	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SINGNATURE	CARELESS BRNCOS	
		MATERIAL: SEE PARTS LIST	
		TITLE/DESC: Release Mechanism	
		FILE NAME: Release Mechanism	
		DWG. #: A-005	REV #: B
		SCALE: 1:4	SHEET 1 OF 1
		SIZE B	



SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	SEE BOM
1.	Use item #5 to screw item #2 and #1 together as shown
2.	use item #4 to position item #3 as shown
3.	Use item #5 to screw Items # 4 and #1 together as shown

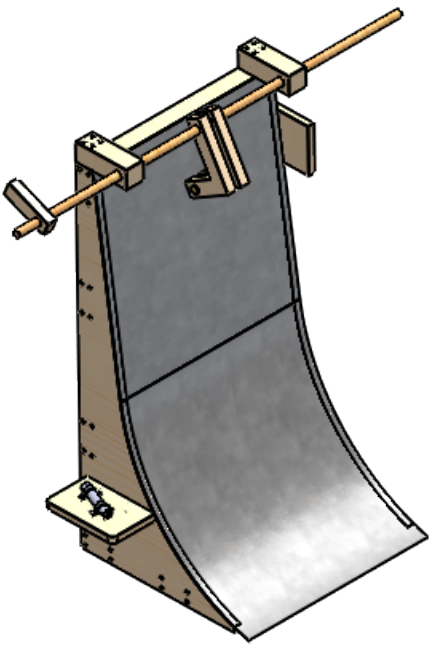
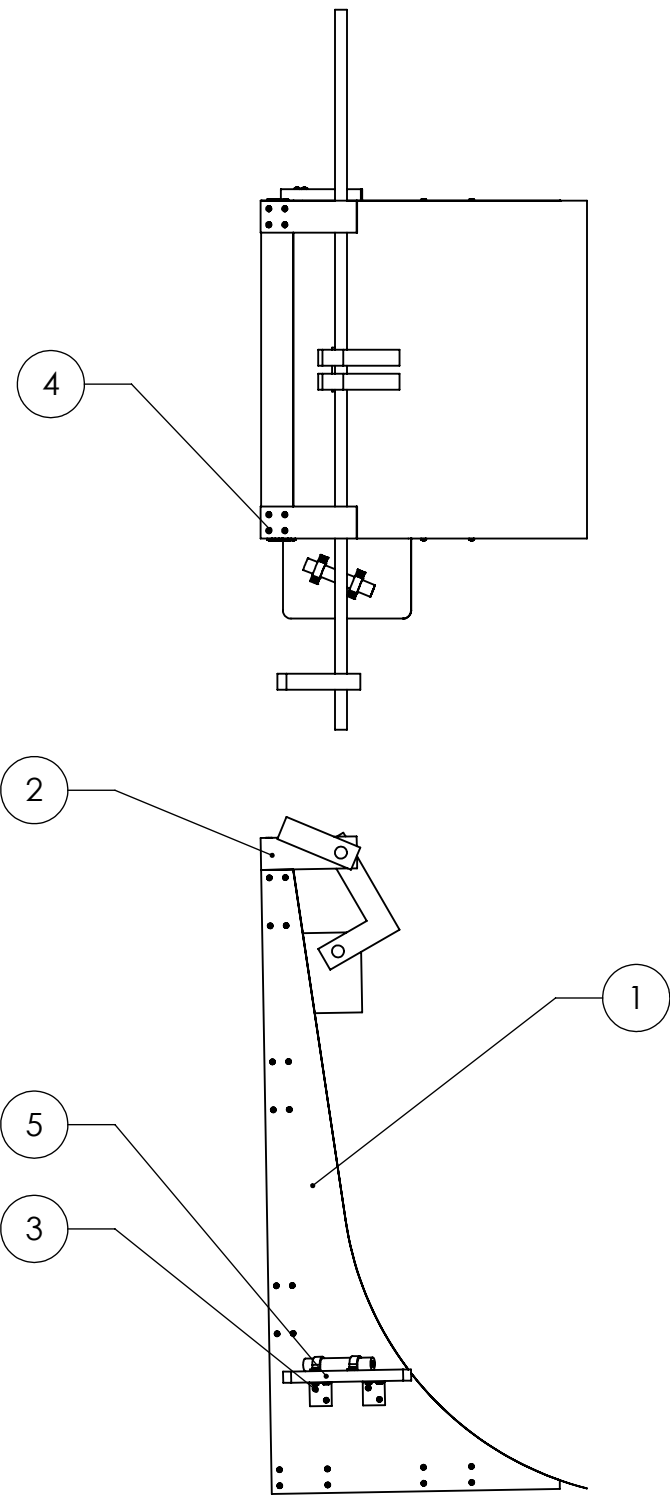


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	P-0045	RampSight	1
2	P-0046	screwangle	2
3	P-0047	LaserStrap	2
4	P-0048	laserpointer	1
5	P-0044	Sightscrew	8

DRAWN BY Joe Ragan	DATE 12/5/2019
APPROVALS:	
AU EMAIL	SINGNATURE

STOCK VENDOR INFO:		SEE PARTS LIST		
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 PARTS LIST	
		TITLE/DESC:	Sight Assembly	
		FILE NAME:	Assemsight	
		DWG. #:	A-006	REV #: A
		SCALE: 1:2	SIZE B	SHEET 1 OF 1

SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	SEE BOM
1.	ATTACH ITEM 2 TO ITEM 1 USING ITEM 4. THE SCREWS SHOULD BE PUT INTO APPROPRIATE PILOT HOLES AS SHOWN IN DRAWING.
2.	ATTACH ITEM 5 TO ITEM 1 USING ITEM 3. THE SCREWS SHOULD BE PUT INTO APPROPRIATE PILOT HOLES AS SHOWN IN DRAWING.



ISOMETRIC VIEW
FOR REFERENCE ONLY
SCALE 1:16

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	A-004	Ramp	1
2	A-005	Release Mechanism	1
3	P-037	Wood Screw No. 8 Size, 1-1/2" Long	4
4	P-049	Wood Screw Number 8 Size, 3" Long	8
5	A-006	Sighting System	1

DRAWN BY Andrew Weir	DATE 12/5/2019	STOCK VENDOR INFO: SEE PARTS LIST	
APPROVALS:		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ARE IN DEGREES 3rd Angle Projection	
AU EMAIL	SIGNATURE	Careless Broncos	
		MATERIAL: SEE PARTS LIST	
		TITLE/DESC: Assembly of all Ramp Components	
		FILE NAME: Ramp System	
		DWG. #: A-007	REV #: A
		SCALE: 1:16	SHEET 1 OF 1
		SIZE B	

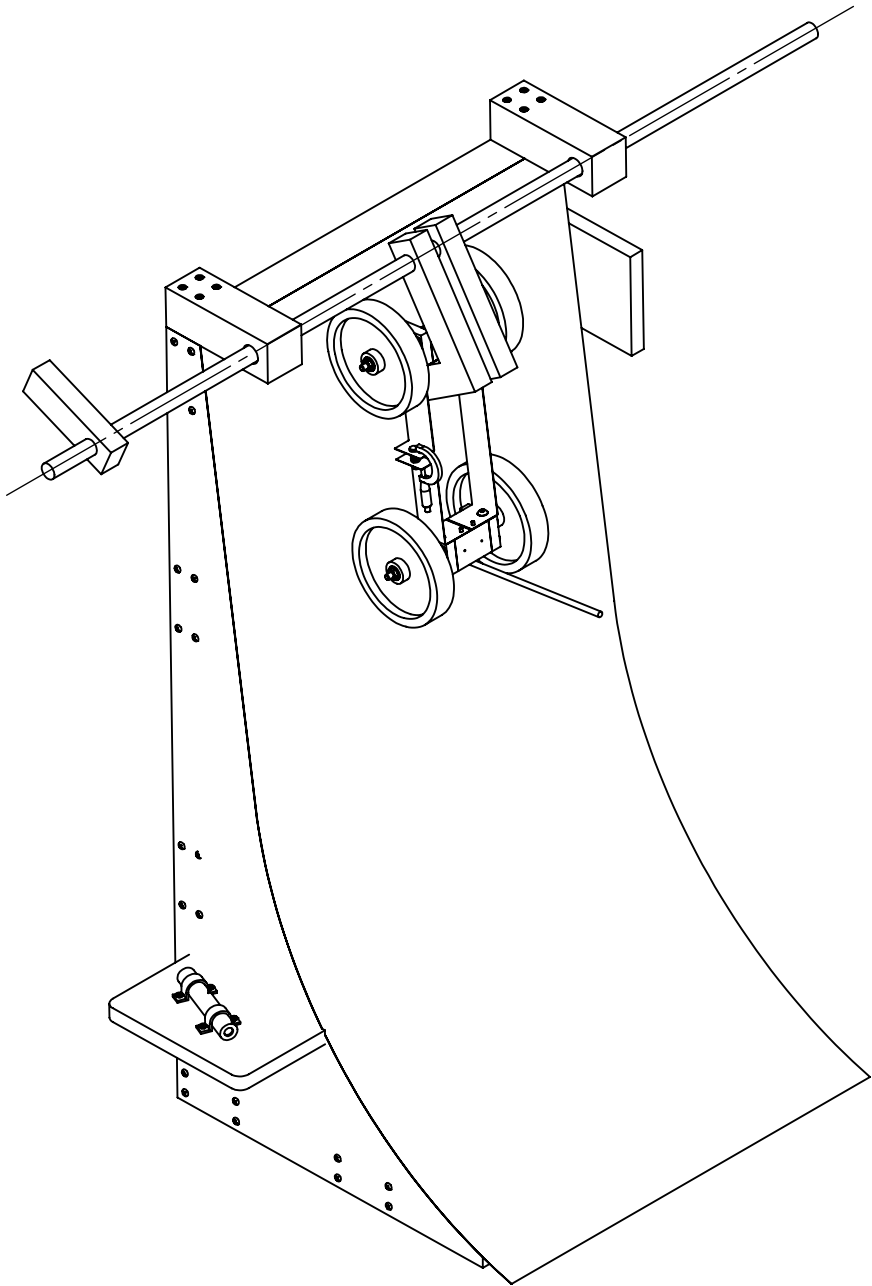
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SAMPLE FABRICATION/ASSEMBLY PROCESS	
STOCK DESC/DIMS	SEE BOM



ITEM NO.	PART	Part Number	QTY.
1	Ramp System	A-007	1
2	Gravity car assembly (Split frame)	A-004	1

DRAWN BY Felix Lasch	DATE 12/5/2019	STOCK VENDOR INFO: SEE PARTS LIST	
APPROVALS:		UNLESS OTHERWISE SPECIFIED:	
AU EMAIL	SINGNATURE	CARELESS BRONCOS	
		MATERIAL: SEE PARTS LIST	
		TITLE/DESC: Car on Ramp	
		FILE NAME: Ramp and Car	
		DWG. #: A-008	REV #:
		SCALE: 1:16	SIZE B SHEET 1 OF 1

ANGULAR
FRACTIONAL
ONE PLACE DECIMAL
TWO PLACE DECIMAL
THREE PLACE DECIMAL

± 1°
± 1/8"
± 0.1"
± 0.05"
± 0.005"