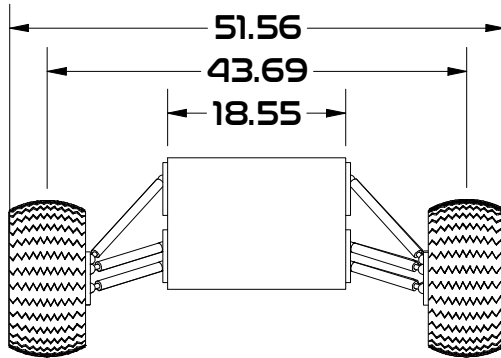
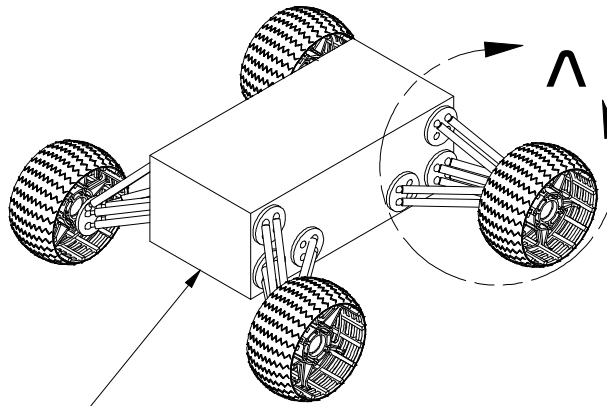


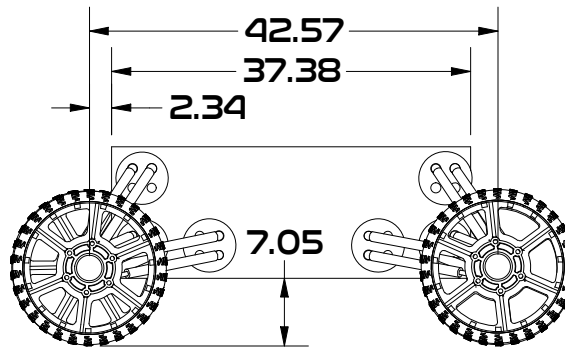
TOP



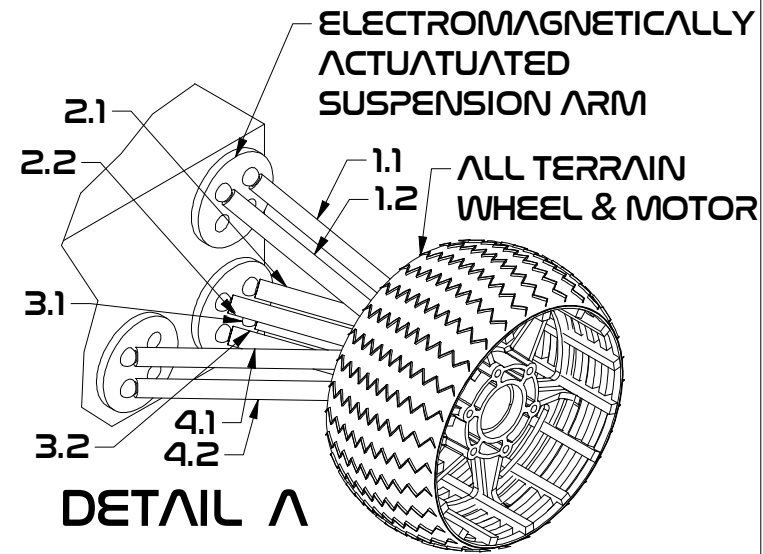
FRONT



- CHASSIS
- POWER SYSTEM
- ELECTRONICS
- WIRING
- FEEDBACK & CONTROL SYSTEMS




SIDE

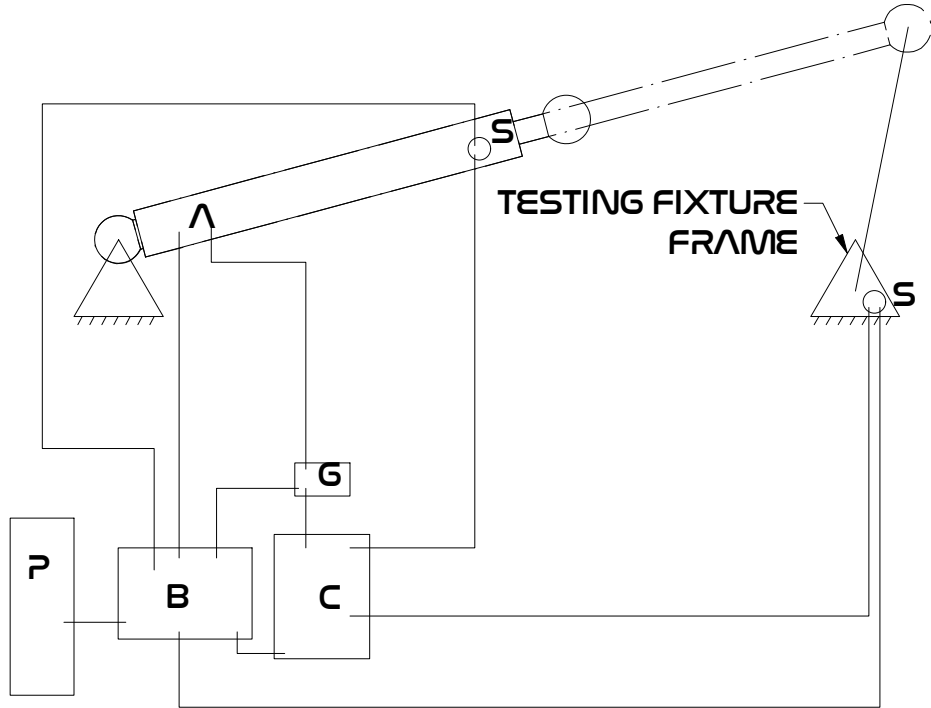


DETAIL A

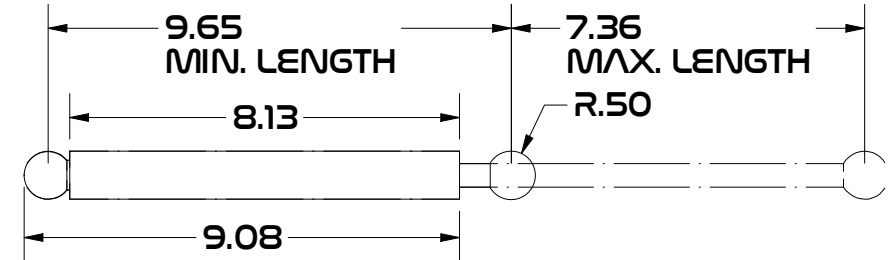
- NOTES:**
1. DIMENSIONS SHOWN ARE TO BE DETERMINED DURING PROTOTYPING.
 2. ALL WHEEL MOVEMENTS ARE ELECTROMAGNETICALLY ACTUATED IN PAIRS.
 3. ACTUATORS 1.1 & 1.2 ACT AS SHOCK ABSORBERS WHILE DRIVING, AND RAISE THE WHEEL WHILE WALKING.
 4. ACTUATORS 4.1 & 4.2 ARE LOCKED WHILE DRIVING, BUT PUSH AND PULL THE WHEEL WHILE WALKING.
 5. WHEN ACTUATORS 2.1 & 2.2 ARE PUSHED OR PULLED SIMULTANEOUSLY WHILST ACTUATORS 3.1 & 3.2 ARE LOCKED, THEY ACTUATE WHEEL CAMBER.
 6. WHEN ACTUATORS 2.1 & 3.1 ARE PUSHED OR PULLED SIMULTANEOUSLY WHILST ACTUATORS 2.2 & 3.2 ARE LOCKED, THEY ACTUATE WHEEL STEERING.
 7. WHEN ACTUATORS 2.1 THRU 3.2 ARE PUSHED OR PULLED SIMULTANEOUSLY THEY ACTUATE SUSPENSION ARM LENGTH.
 8. THE COMBINED SEQUENCING OF EACH ACTUATOR AND DRIVE MOTOR PER WHEEL WILL ACTUATE SUSPENSION, WALKING, STEERING, AND OR DRIVING FOR THE ENTIRE SYSTEM.

DRAWN: JF		APPROVED BY:		MATERIAL: NA		PROJECT#: 00012		RESOURCE#: 2200		TASK CODE: DT-LT		RELATIONSHIP CODE: rrc.a.a.d	
DATE: 3/20/2019		APPROVED DATE:		VOLUME: N/A FLAT PATTERN: N/A X N/A		ID#: 00012-2200_DT-LT rrc.a.a.d							
UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES; TOLERANCES: FRACTIONS ± 1/32 ANGLE: MACH ± 0.5° BEND ± 0.004 LINEAR FOOT ± 1/16" 2 DECIMALS ±0.010 3 DECIMALS ±0.050				WEIGHT: N/A LBS		TITLE: ELECTROMAGNETICALLY ACTUATED HYBRID WHEELED-LIMBED SUSPENSION SYSTEM							
				SRF. AREA: N/A									
				FINISH: NA									
				VENDOR: 508 Industries LLC									
				508 INDUSTRIES LLC									
		PROPRIETARY AND CONFIDENTIAL				STATUS: 0		DRAWING #: 000122200					
		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF 508 INDUSTRIES LLC, ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF 508 INDUSTRIES LLC IS PROHIBITED.				REVISION: 0							
						VERSION: 0							
						MANUFACTURING CODE: NA							
						DO NOT SCALE DRAWING							
						SIZE: A							
						SHEET: 1 OF 2							






PROTOTYPING SCHEMATIC



ELECTROMAGNETIC ACTUATOR

- NOTES:
- 1. THE PROPOSED DIMENSIONS ARE TO BE DETERMINED DURING PROTOTYPING.
 - 2. IN THE SCHEMATIC VIEW:
 - A - ACTUATOR
 - S - SENSOR(S)
 - G - GALIL CONTROLLER
 - C - COMPUTER
 - B - BREADBOARD
 - P - POWER SOURCE
 - 3. SOLID LINES CONNECTING INTO THE BREADBOARD REPRESENT POWER.
 - 4. SOLID LINES CONNECTING INTO THE COMPUTER REPRESENT PROGRAMMED INSTRUCTIONS.
 - 5. DURING PROTOTYPING THESE COMPONENTS WILL BE ARRANGED AND CONFIGURED SO AS TO IDENTIFY OPTIMAL PARAMETERS FOR SUSPENSION SYSTEM FUNCTIONS.

DRAWN: JF		APPROVED BY:		MATERIAL: NA		PROJECT#: 00012		RESOURCE#: 2200		TASK CODE: DT-LT		RELATIONSHIP CODE: rrc.a.a.a			
DATE: 3/20/2019		APPROVED DATE:		VOLUME: N/A FLAT PATTERN: N/A X N/A		ID#: 00012-2200_DT-LT rrc.a.a.a									
UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES; TOLERANCES: FRACTIONS ± 1/32 ANGLE: MACH ± 0.5° BEND ± 0.004 LINEAR FOOT ± 1/16" 2 DECIMALS ±0.010 3 DECIMALS ±0.050				WEIGHT: N/A LBS		TITLE: ELECTROMAGNETIC ACTUATOR PROTOTYPING & ELECTRONIC SCHEMATIC									
				SRF. AREA: N/A											
				FINISH: NA											
				VENDOR: 508 Industries LLC											
508 INDUSTRIES LLC				PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF 508 INDUSTRIES LLC, ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF 508 INDUSTRIES LLC IS PROHIBITED.				STATUS: 0		DRAWING #: 000122200					
		REVISION: 0													
		VERSION: 0						MANUFACTURING CODE: NA							
		DO NOT SCALE DRAWING						DIRECTORY:							
												SIZE: A			