

Prototype Field Test

Design Team: *Dr. D's #1 Prototypers*

Product: *eDragster Proto-1*

Date: *4-6-2022*

1. List each subsystem and test. Did it pass?

	Subsystems	Pass	Notes:
1	<i>Battery Pack</i>	<i>Yes</i> / No	<i>12.3v reading at start</i>
2	<i>Motors</i>	<i>Yes</i> / No	
3	<i>Motor Controller</i>	<i>Yes</i> / No	
4	<i>Wheel/Axle</i>	<i>Yes</i> / No	<i>Front wheel slight wobble</i>
5	<i>Chassis</i>	<i>Yes</i> / No	

2. How is system performance measured?

Performance Indicator(s)	Measured Variables	
	Unit	Instrument
<i>Speed 20m run</i>	<i>Seconds</i>	<i>Track Timer</i>
<i>Damage</i>	<i># count</i>	<i>Observation</i>

3. Collect Data on these specified variables/indicators.

		Measured Variable(s)			
Trial	Date/Time	<i>Time(s)</i>	<i>Damage</i>	3	Change Notes
1	<i>4-6</i>	<i>2.2</i>	<i>0</i>		
2	<i>4-6</i>	<i>2.1</i>	<i>0</i>		
3	<i>4-6</i>	<i>1.8</i>	<i>0</i>		<i>changed increment to .30</i>
4	<i>4-7</i>	<i>1.9</i>	<i>1</i>		<i>front wheel loose</i>
5					
...					

4. Conclusion: Analyze data making comparisons of actual and predicted performance.

Predicted performance for this design is 1.44 seconds. The average time for the tests was 1.95. The prototype was 0.51s slower than predicted.

5. Recommendations: What are the next steps?

1. Continue to adjust increment.

2. Try a different tire.

3. Fix front wheel