

**Propulsion Force Inputs**

eta\_drive 0.95 [dim]  
 Tire Radius 1.033333 [ft]

2009 Triumph Street Triple R with a ~200 lb rider

Drivetrain Efficiency

**Drive Ratios**

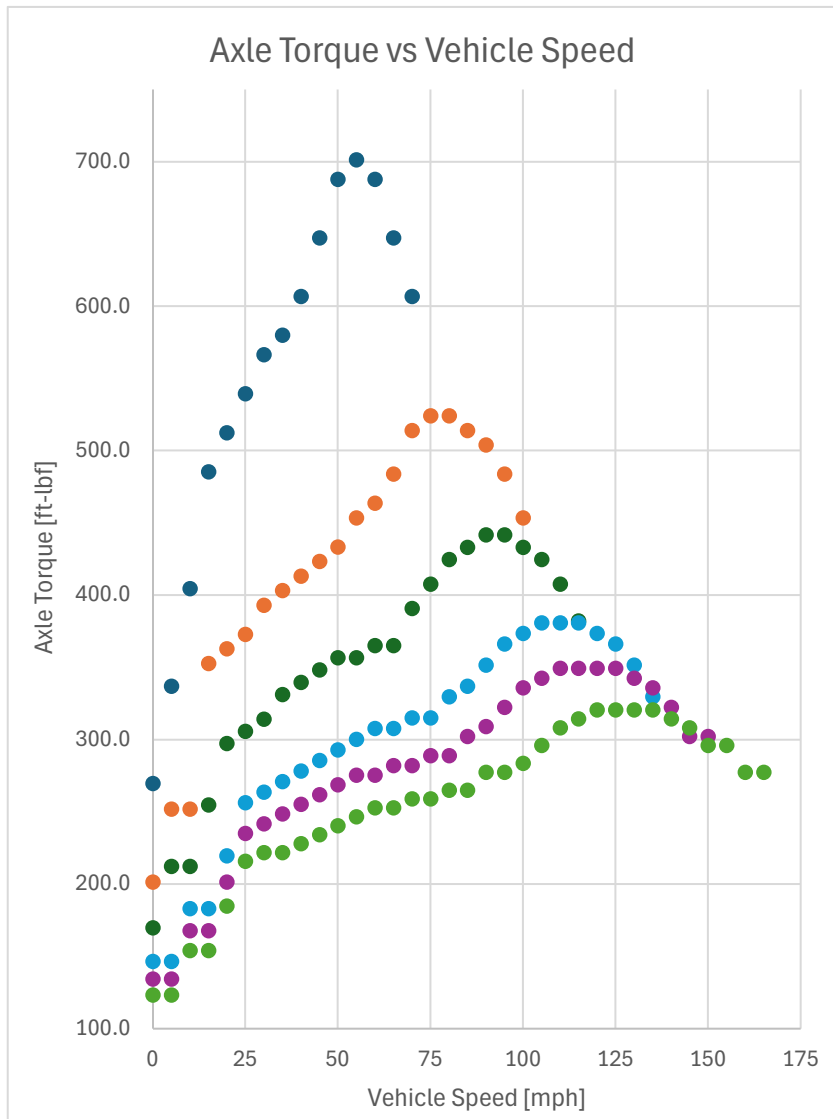
Pre-Transmission 1.847826  
 1st 2.615385  
 2nd 1.857143  
 3rd 1.565217  
 4th 1.35  
 5th 1.238095  
 6th 1.136364  
 Chain Drive 2.9375

**Overall Ratio in Each Gear**

14.19627926  
 10.08055124  
 8.495982987  
 7.327785326  
 6.720367495  
 6.168169466

**Engine Torque vs. RPM Data**

Engine Speed [RPM]	Torque [lb-ft]
0	20
500	25
1000	25
1500	30
2000	35
2500	36
3000	37
3500	38
4000	39
4500	40
5000	41
5500	42
6000	42
6500	43
7000	43
7500	45
8000	46
8500	48
9000	50
9500	51
10000	52
10500	52
11000	52
11500	51
12000	50
12500	48
13000	45
13500	42



Vehicle Speed [mph]	Engine Speed					
	1st Gear [RPM]	2nd Gear [RPM]	3rd Gear [RPM]	4th Gear [RPM]	5th Gear [RPM]	6th Gear [RPM]
0	0.0	0.0	0.0	0.0	0.0	0.0
5	962.1	683.2	575.8	496.6	455.4	418.0
10	1924.1	1366.3	1151.5	993.2	910.9	836.0
15	2886.2	2049.5	1727.3	1489.8	1366.3	1254.0
20	3848.3	2732.6	2303.1	1986.4	1821.7	1672.0
25	4810.4	3415.8	2878.8	2483.0	2277.2	2090.1
30	5772.4	4098.9	3454.6	2979.6	2732.6	2508.1
35	6734.5	4782.1	4030.4	3476.2	3188.0	2926.1
40	7696.6	5465.2	4606.1	3972.8	3643.5	3344.1
45	8658.6	6148.4	5181.9	4469.4	4098.9	3762.1
50	9620.7	6831.5	5757.7	4966.0	4554.3	4180.1
55	10582.8	7514.7	6333.4	5462.6	5009.8	4598.1
60	11544.8	8197.8	6909.2	5959.2	5465.2	5016.1
65	12506.9	8881.0	7485.0	6455.8	5920.6	5434.2
70	13469.0	9564.1	8060.7	6952.4	6376.1	5852.2
75		10247.3	8636.5	7449.0	6831.5	6270.2
80		10930.4	9212.3	7945.6	7286.9	6688.2
85		11613.6	9788.0	8442.2	7742.4	7106.2
90		12296.7	10363.8	8938.8	8197.8	7524.2
95		12979.9	10939.6	9435.4	8653.2	7942.2
100		13663.0	11515.3	9932.0	9108.7	8360.2
105			12091.1	10428.6	9564.1	8778.3
110			12666.9	10925.2	10019.5	9196.3
115			13242.6	11421.8	10475.0	9614.3
120				11918.4	10930.4	10032.3
125				12415.0	11385.8	10450.3
130				12911.6	11841.3	10868.3
135				13408.2	12296.7	11286.3
140					12752.2	11704.3
145					13207.6	12122.3
150					13663.0	12540.4
155						12958.4
160						13376.4
165						13794.4
170						