

Scenario 1 (Solid Lines)

Tire Diameter	33.0 [1]
Tire Effective Diameter [3]	32.0"
Differential Ratio	4.1 [5]
High Range	1.0:1
Transmission	Automatic

Transmission Gear	Reverse	1st	2nd	3rd	4th	5th	6th	7th	8th
Transmission Ratio	3.3:1	4.71:1	3.14:1	2.1:1	1.67:1	1.29:1	1:1	0.84:1	0.67:1
Overall Ratio	13.53:1	19.31:1	12.87:1	8.61:1	6.85:1	5.29:1	4.1:1	3.44:1	2.75:1

MPH in each gear by RPM									
Engine RPM	Reverse	1st	2nd	3rd	4th	5th	6th	7th	8th
1000	7	5	7	11	14	18	23	28	35
1500	11	7	11	17	21	27	35	42	52
2000	14	10	15	22	28	36	47	55	69
2500	18	12	19	28	35	45	58	69	87
3000	21	15	22	33	42	54	70	83	104
3500	25	17	26	39	49	63	81	97	121
4000	28	20	30	44	56	72	93	111	139
4500	32	22	33	50	63	81	105	125	156
5000	35	25	37	55	70	90	116	138	174
5500	39	27	41	61	77	99	128	152	191
6000	42	30	44	66	84	108	140	166	208
6500	46	32	48	72	90	117	151	180	226

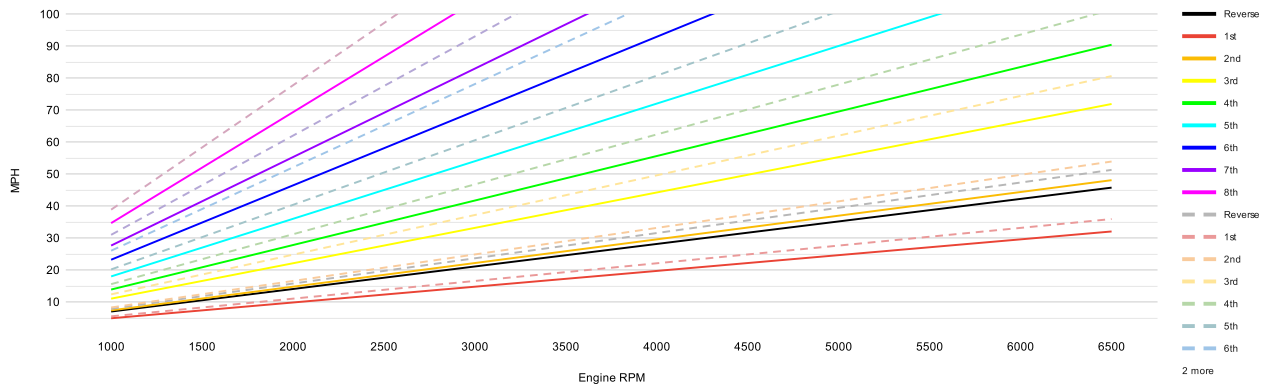
Scenario 2 (Dashed Lines)

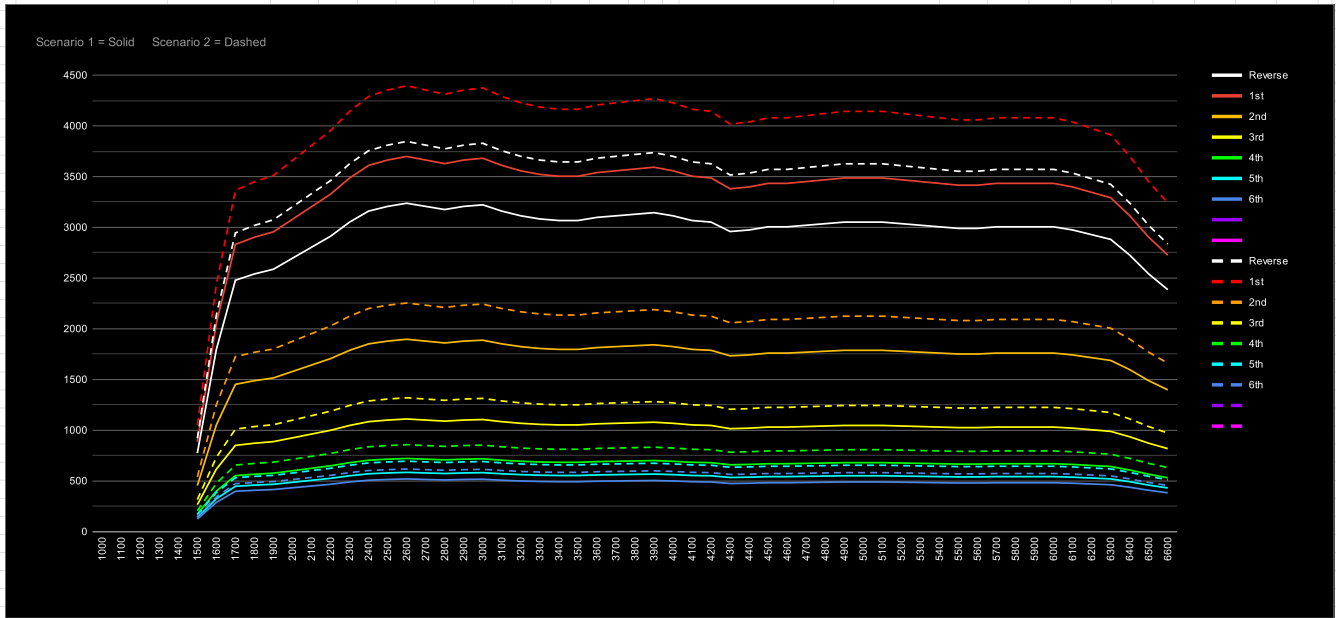
Tire Diameter	37.0 [2]
Tire Effective Diameter [4]	35.9"
Differential Ratio	4.1 [6]
High Range	1.0:1
Transmission	Automatic

Transmission Gear	Reverse	1st	2nd	3rd	4th	5th	6th	7th	8th
Transmission Ratio	3.3:1	4.71:1	3.14:1	2.1:1	1.67:1	1.29:1	1:1	0.84:1	0.67:1
Overall Ratio	13.53:1	19.31:1	12.87:1	8.61:1	6.85:1	5.29:1	4.1:1	3.44:1	2.75:1

MPH in each gear by RPM									
Engine RPM	Reverse	1st	2nd	3rd	4th	5th	6th	7th	8th
1000	8	6	8	12	16	20	26	31	39
1500	12	8	12	19	23	30	39	47	58
2000	16	11	17	25	31	40	52	62	78
2500	20	14	21	31	39	51	65	78	97
3000	24	17	25	37	47	61	78	93	117
3500	28	19	29	43	55	71	91	109	136
4000	32	22	33	50	62	81	104	124	156
4500	36	25	37	56	70	91	117	140	175
5000	39	28	42	62	78	101	130	155	195
5500	43	30	46	68	86	111	143	171	214
6000	47	33	50	74	94	121	156	186	233
6500	51	36	54	81	101	131	169	202	253

Scenario 1 = Solid Scenario 2 = Dashed





Scenario 1 (Solid Lines)

Engine	3.6 PUG
Differential Ratio	3.45
High Range	1.0:1
Transmission	Manual

Transmission Gear	Reverse	1st	2nd	3rd	4th	5th	6th
Transmission Ratio	4.49:1	5.13:1	2.63:1	1.54:1	1:1	0.81:1	0.72:1
Overall Ratio	15.49:1	17.7:1	9.07:1	5.31:1	3.45:1	2.79:1	2.48:1

Torque @ axle in each gear by RPM								
Engine RPM	Engine Torque [N]	Reverse	1st	2nd	3rd	4th	5th	6th
1000								
1100								
1200								
1300								
1400								
1500	50	775	885	454	266	173	140	124
1600	116	1797	2053	1053	616	400	324	288
1700	160	2478	2832	1452	850	552	447	397
1800	164	2540	2903	1488	871	566	458	407
1900	167	2587	2956	1515	887	576	467	415
2000	174	2695	3080	1579	924	600	486	432
2100	181	2804	3203	1642	962	624	506	450
2200	188	2912	3327	1706	999	649	525	467
2300	197	3052	3487	1787	1047	680	551	489
2400	204	3160	3610	1851	1084	704	570	507
2500	207	3207	3664	1878	1100	714	578	514
2600	209	3238	3699	1896	1110	721	584	519
2700	207	3207	3664	1878	1100	714	578	514
2800	205	3176	3628	1860	1089	707	573	509
2900	207	3207	3664	1878	1100	714	578	514
3000	208	3222	3681	1887	1105	718	581	517
3100	204	3160	3610	1851	1084	704	570	507
3200	201	3114	3557	1824	1068	693	562	499
3300	199	3083	3522	1806	1057	687	556	494
3400	198	3067	3504	1797	1052	683	553	492
3500	198	3067	3504	1797	1052	683	553	492
3600	200	3098	3540	1815	1063	690	559	497
3700	201	3114	3557	1824	1068	693	562	499
3800	202	3129	3575	1833	1073	697	564	502
3900	203	3145	3593	1842	1079	700	567	504
4000	201	3114	3557	1824	1068	693	562	499
4100	198	3067	3504	1797	1052	683	553	492
4200	197	3052	3487	1787	1047	680	551	489
4300	191	2959	3380	1733	1015	659	534	474
4400	192	2974	3398	1742	1020	662	537	477
4500	194	3005	3434	1760	1031	669	542	482
4600	194	3005	3434	1760	1031	669	542	482
4700	195	3021	3451	1769	1036	673	545	484
4800	196	3036	3469	1778	1041	676	548	487
4900	197	3052	3487	1787	1047	680	551	489
5000	197	3052	3487	1787	1047	680	551	489
5100	197	3052	3487	1787	1047	680	551	489
5200	196	3036	3469	1778	1041	676	548	487
5300	195	3021	3451	1769	1036	673	545	484
5400	194	3005	3434	1760	1031	669	542	482
5500	193	2990	3416	1751	1025	666	539	479
5600	193	2990	3416	1751	1025	666	539	479
5700	194	3005	3434	1760	1031	669	542	482
5800	194	3005	3434	1760	1031	669	542	482
5900	194	3005	3434	1760	1031	669	542	482
6000	194	3005	3434	1760	1031	669	542	482
6100	192	2974	3398	1742	1020	662	537	477
6200	189	2928	3345	1715	1004	652	528	469
6300	186	2881	3292	1688	988	642	520	462
6400	176	2726	3115	1597	935	607	492	437
6500	164	2540	2903	1488	871	566	458	407
6600	154	2386	2726	1397	818	531	430	383

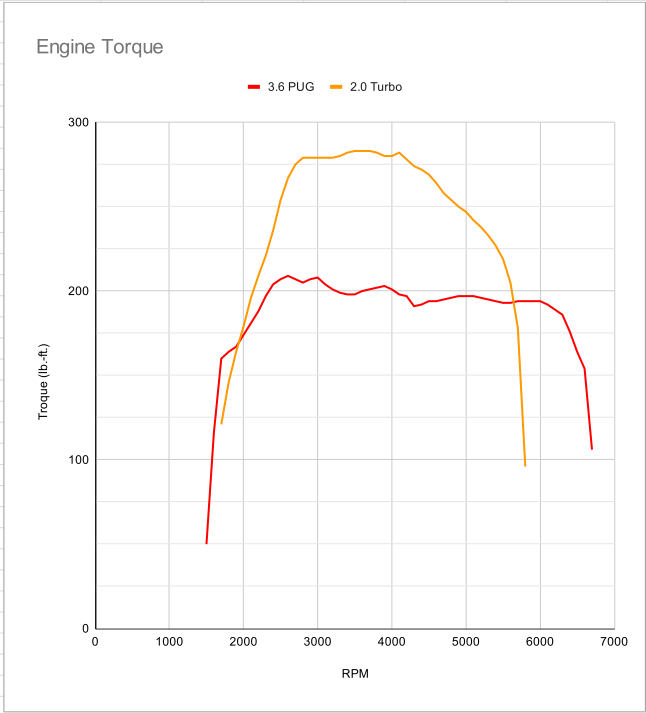
Scenario 2 (Dashed Lines)

Engine	3.6 PUG
Differential Ratio	4.1
High Range	1.0:1
Transmission	Manual

Transmission Gear	Reverse	1st	2nd	3rd	4th	5th	6th
Transmission Ratio	4.49:1	5.13:1	2.63:1	1.54:1	1:1	0.81:1	0.72:1
Overall Ratio	18.41:1	21.03:1	10.78:1	6.31:1	4.1:1	3.32:1	2.95:1

Torque @ axle in each gear by RPM								
Engine RPM	Engine Torque [N]	Reverse	1st	2nd	3rd	4th	5th	6th
1000								
1100								
1200								
1300								
1400								
1500	50	920	1052	539	316	205	166	148
1600	116	2135	2440	1251	732	476	385	342
1700	160	2945	3365	1725	1010	656	531	472
1800	164	3019	3449	1768	1035	672	545	484
1900	167	3074	3513	1801	1054	685	555	493
2000	174	3203	3660	1876	1099	713	578	514
2100	181	3332	3807	1952	1143	742	601	534
2200	188	3461	3954	2027	1187	771	624	555
2300	197	3627	4144	2124	1244	808	654	582
2400	204	3755	4291	2200	1288	836	677	602
2500	207	3811	4354	2232	1307	849	687	611
2600	209	3847	4396	2254	1320	857	694	617
2700	207	3811	4354	2232	1307	849	687	611
2800	205	3774	4312	2211	1294	841	681	605
2900	207	3811	4354	2232	1307	849	687	611
3000	208	3829	4375	2243	1313	853	691	614
3100	204	3755	4291	2200	1288	836	677	602
3200	201	3700	4228	2167	1269	824	668	593
3300	199	3663	4186	2146	1256	816	661	587
3400	198	3645	4165	2135	1250	812	658	584
3500	198	3645	4165	2135	1250	812	658	584
3600	200	3682	4207	2157	1263	820	664	590
3700	201	3700	4228	2167	1269	824	668	593
3800	202	3719	4249	2178	1275	828	671	596
3900	203	3737	4270	2189	1282	832	674	599
4000	201	3700	4228	2167	1269	824	668	593
4100	198	3645	4165	2135	1250	812	658	584
4200	197	3627	4144	2124	1244	808	654	582
4300	191	3516	4017	2060	1206	783	634	564
4400	192	3535	4038	2070	1212	787	638	567
4500	194	3571	4080	2092	1225	795	644	573
4600	194	3571	4080	2092	1225	795	644	573
4700	195	3590	4101	2103	1231	800	648	576
4800	196	3608	4122	2113	1238	804	651	579
4900	197	3627	4144	2124	1244	808	654	582
5000	197	3627	4144	2124	1244	808	654	582
5100	197	3627	4144	2124	1244	808	654	582
5200	196	3608	4122	2113	1238	804	651	579
5300	195	3590	4101	2103	1231	800	648	576
5400	194	3571	4080	2092	1225	795	644	573
5500	193	3553	4059	2081	1219	791	641	570
5600	193	3553	4059	2081	1219	791	641	570
5700	194	3571	4080	2092	1225	795	644	573
5800	194	3571	4080	2092	1225	795	644	573
5900	194	3571	4080	2092	1225	795	644	573
6000	194	3571	4080	2092	1225	795	644	573
6100	192	3535	4038	2070	1212	787	638	567
6200	189	3479	3975	2038	1193	775	628	558
6300	186	3424	3912	2006	1174	763	618	549
6400	176	3240	3702	1898	1111	722	584	520
6500	164	3019	3449	1768	1035	672	545	484
6600	154	2835	3239	1661	972	631	511	455

	209.0	283.0
RPM	3.6 PUG	2.0 Turbo
1000		
1100		
1200		
1300		
1400		
1500	50.0	
1600	116.0	
1700	160.0	121.0
1800	164.0	146.0
1900	167.0	164.0
2000	174.0	179.0
2100	181.0	196.0
2200	188.0	209.0
2300	197.0	221.0
2400	204.0	236.0
2500	207.0	254.0
2600	209.0	267.0
2700	207.0	275.0
2800	205.0	279.0
2900	207.0	279.0
3000	208.0	279.0
3100	204.0	279.0
3200	201.0	279.0
3300	199.0	280.0
3400	198.0	282.0
3500	198.0	283.0
3600	200.0	283.0
3700	201.0	283.0
3800	202.0	282.0
3900	203.0	280.0
4000	201.0	280.0
4100	198.0	282.0
4200	197.0	278.0
4300	191.0	274.0
4400	192.0	272.0
4500	194.0	269.0
4600	194.0	264.0
4700	195.0	258.0
4800	196.0	254.0
4900	197.0	250.0
5000	197.0	247.0
5100	197.0	242.0
5200	196.0	238.0
5300	195.0	233.0
5400	194.0	227.0
5500	193.0	219.0
5600	193.0	205.0
5700	194.0	178.0
5800	194.0	96.0
5900	194.0	
6000	194.0	
6100	192.0	
6200	189.0	
6300	186.0	
6400	176.0	
6500	164.0	
6600	154.0	
6700	106.0	



		Transmission	Manual					
		Top Gear Ratio	0.72:1					
		Speed	75 MPH					

Differential Ring & Pinion Ratio								
	3.45:1	3.73:1	4.1:1	4.56:1	4.88:1	5.13:1	5.38:1	
31"	2020	2184	2401	2670	2857	3004	3150	
32"	1957	2116	2326	2587	2768	2910	3052	
33"	1898	2052	2255	2508	2684	2822	2959	
34"	1842	1991	2189	2434	2605	2739	2872	
35"	1789	1934	2126	2365	2531	2660	2790	
36"	1739	1881	2067	2299	2461	2587	2713	
37"	1692	1830	2011	2237	2394	2517	2639	
38"	1648	1782	1958	2178	2331	2450	2570	
39"	1606	1736	1908	2122	2271	2388	2504	
40"	1566	1693	1861	2069	2214	2328	2441	

		Pinion Tooth Count										
		5	6	7	8	9	10	11	12	13	14	15
Ring Tooth Count	33	6.60	5.50	4.71	4.13	3.67	3.30	3.00	2.75	2.54		
	34	6.80	5.67	4.86	4.25	3.78	3.40	3.09	2.83	2.62	2.43	
	35	7.00	5.83	5.00	4.38	3.89	3.50	3.18	2.92	2.69	2.50	2.33
	36	7.20	6.00	5.14	4.50	4.00	3.60	3.27	3.00	2.77	2.57	2.40
	37	7.40	6.17	5.29	4.63	4.11	3.70	3.36	3.08	2.85	2.64	2.47
	38	7.60	6.33	5.43	4.75	4.22	3.80	3.45	3.17	2.92	2.71	2.53
	39	7.80	6.50	5.57	4.88	4.33	3.90	3.55	3.25	3.00	2.79	2.60
	40	8.00	6.67	5.71	5.00	4.44	4.00	3.64	3.33	3.08	2.86	2.67
	41	8.20	6.83	5.86	5.13	4.56	4.10	3.73	3.42	3.15	2.93	2.73
	42	8.40	7.00	6.00	5.25	4.67	4.20	3.82	3.50	3.23	3.00	2.80
	43	8.60	7.17	6.14	5.38	4.78	4.30	3.91	3.58	3.31	3.07	2.87
	44	8.80	7.33	6.29	5.50	4.89	4.40	4.00	3.67	3.38	3.14	2.93
	45	9.00	7.50	6.43	5.63	5.00	4.50	4.09	3.75	3.46	3.21	3.00

[1] Sport = 661 revs/mile
Sahara, Moab, Willys, High Altitude = 649 revs/mile
Rubicon = 537 revs/mile

[2] Sport = 661 revs/mile
Sahara, Moab, Willys, High Altitude = 649 revs/mile
Rubicon = 635 revs/mile

[3] If 'Tire Diameter' is input, the 'Effective Diameter' is calculated at 97.1%

[4] If 'Tire Diameter' is input, the 'Effective Diameter' is calculated at 97.1%

[5] Sport/Sahara = 3.45
Rubicon = 4.10
Diesel = 3.73

[6] Sport/Sahara = 3.54
Rubicon = 4.10
Diesel = 3.73

[7] According to www.automobile-catalog.com

[8] According to www.automobile-catalog.com

[9] If 'Tire Diameter' is input, the 'Effective Diameter' is calculated at 97.1%

[10] If 'Tire Diameter' is input, the 'Effective Diameter' is calculated at 97.1%

[11] According to www.automobile-catalog.com

[12] According to www.automobile-catalog.com