

SportGear worksheet

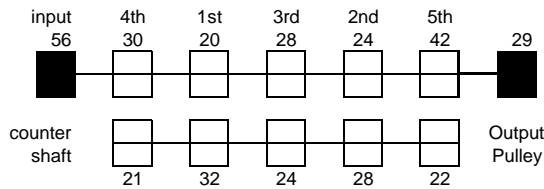
Component	Gear	Ratio	Shift	% step	Delta	Overall ratio	Main shaft	Counter shaft	Mesh ratio
Primary drive		1.600					56	35	
1st gear ratio	1	3.055				9.27	20	32	1.60
2nd gear ratio	2	2.227	1-2	27.1%		6.76	24	26	1.17
3rd gear ratio	3	1.636	2-3	26.5%	0.0	4.97	28	24	1.17
4th gear ratio	4	1.336	3-4	18.3%	0.1	4.06	30	21	1.43
5th gear ratio	5	1.000	4-5	25.2%	-0.1	3.03	42	22	1.91
Final drive		1.897					29	55	
Rolling Radius (in)		12.25							
Circumference (in)		77.0							
Eng spd @ 60 mph		2497							
Final: Center distance		578.10 mm							
Final: Number of teeth		125							
Final: Belt pitch (mm)		14							

Vehicle speed (mph)					
Eng rpm	1st gear	2nd gear	3rd gear	4th gear	5th gear
5000	39.3	53.9	73.4	89.9	120.1
5238	41.2	56.5	76.9	94.2	125.9
7000	55.1	75.5	102.8	125.9	168.2

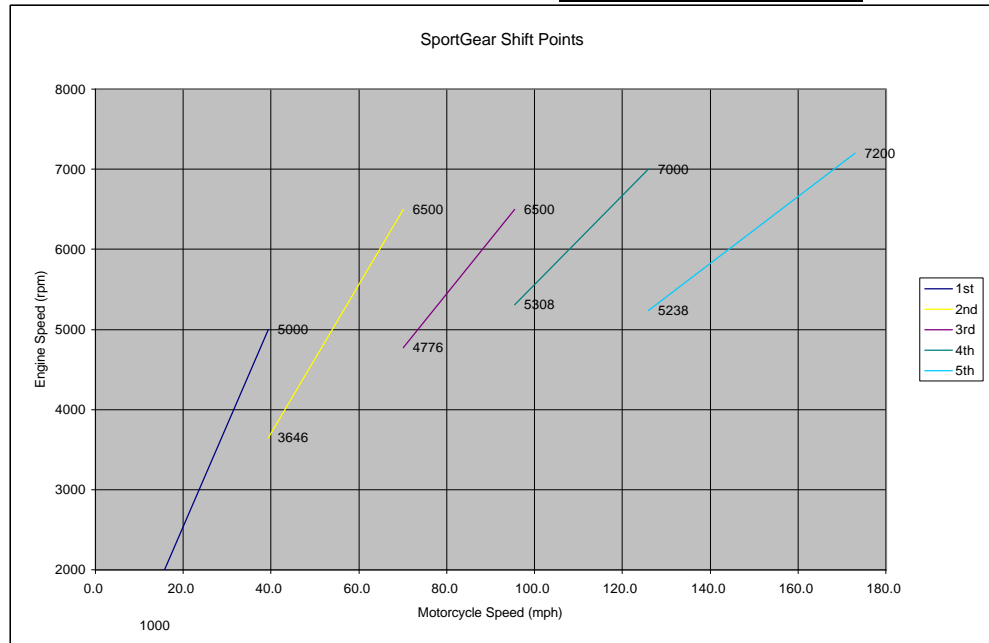
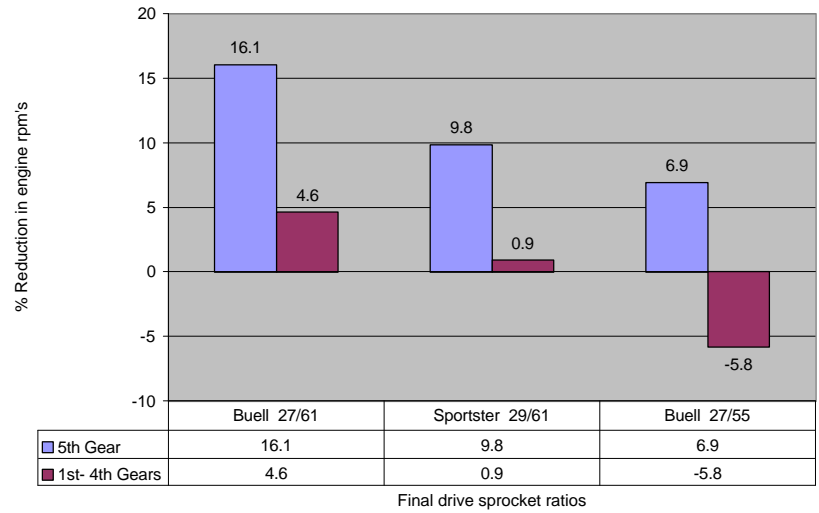
	Buell 27/61	Sports	Buell
5th Gear	16.1	9.8	6.9
1st-4th G	4.6	0.9	-5.8

	SportGear & 29/55	Buell	Sportster
1st - 2nd	27.1%	26.7%	27.1%
2nd - 3rd	26.5%	27.2%	26.5%
3rd - 4th	18.3%	17.6%	18.3%
4th - 5th	25.2%	15.3%	17.7%

SportGear shift points	mph	Engine rpms
1st gear	7.9	1000
1st Gear	39.3	5000
2nd Gear	39.3	3646
2nd Gear	70.1	6500
3rd Gear	70.1	4776
3rd Gear	95.4	6500
4th Gear	95.4	5308
4th Gear	125.9	7000
5th Gear	125.9	5238
5th Gear	173.0	7200



SportGear performance enhancement when 29/55 final drive sprockets installed



Gear ratio changes for '95 & up SportGear, Buell and Sportster

