

# GF4A

## Gear Ratio Chart

2224 S Fayetteville St  
Asheboro, NC 27204  
336-625-3844

Recommended Road Race Ratios											
Input Drive	27	21	26	20	25	24	21	24	24	21	23
Cluster Drive	29	23	30	24	31	30	27	31	32	28	32

		M/S	C/S											
1 s t  G e a r  O n l y	****	38	17	2.401	2.448	2.579	2.682	2.772	2.794	2.874	2.887	2.980	2.980	3.110
	****	33	15	2.363	2.410	2.538	2.640	2.728	2.750	2.829	2.842	2.933	2.933	3.061
		32	15	2.291	2.337	2.462	2.560	2.645	2.667	2.743	2.756	2.844	2.844	2.968
	****	38	18	2.268	2.312	2.436	2.533	2.618	2.639	2.714	2.727	2.815	2.815	2.937
		31	15	2.220	2.264	2.385	2.480	2.563	2.583	2.657	2.669	2.756	2.756	2.875
		37	18	2.208	2.251	2.372	2.467	2.549	2.569	2.643	2.655	2.741	2.741	2.860
		30	15	2.148	2.190	2.308	2.400	2.480	2.500	2.571	2.583	2.667	2.667	2.783
		37	19	2.092	2.133	2.247	2.337	2.415	2.434	2.504	2.515	2.596	2.596	2.709
		29	15	2.077	2.117	2.231	2.320	2.397	2.417	2.486	2.497	2.578	2.578	2.690
		36	19	2.035	2.075	2.186	2.274	2.349	2.368	2.436	2.447	2.526	2.526	2.636
		28	15	2.005	2.044	2.154	2.240	2.315	2.333	2.400	2.411	2.489	2.489	2.597
		29	16	1.947	1.985	2.091	2.175	2.247	2.266	2.330	2.341	2.417	2.417	2.522
		36	20	1.933	1.971	2.077	2.160	2.232	2.250	2.314	2.325	2.400	2.400	2.504
		28	16	1.880	1.917	2.019	2.100	2.170	2.188	2.250	2.260	2.333	2.333	2.435
		35	21	1.790	1.825	1.923	2.000	2.067	2.083	2.143	2.153	2.222	2.222	2.319
	Integral cluster shafts must be used above this line													
		28	17	1.769	1.804	1.900	1.976	2.042	2.059	2.118	2.127	2.196	2.196	2.292
		34	21	1.739	1.773	1.868	1.943	2.008	2.024	2.082	2.091	2.159	2.159	2.253
	29	18	1.730	1.765	1.859	1.933	1.998	2.014	2.071	2.081	2.148	2.148	2.242	
	28	18	1.671	1.704	1.795	1.867	1.929	1.944	2.000	2.009	2.074	2.074	2.164	
	34	22	1.660	1.693	1.783	1.855	1.916	1.932	1.987	1.996	2.061	2.061	2.150	
	26	17	1.643	1.675	1.765	1.835	1.896	1.912	1.966	1.975	2.039	2.039	2.128	
	26	18	1.551	1.582	1.667	1.733	1.791	1.806	1.857	1.866	1.926	1.926	2.010	
No ratio above this line can be used for a 2nd gear in a GF4A														
1 s t  2 n d  o r  3 r d		33	22	1.611	1.643	1.731	1.800	1.860	1.875	1.929	1.938	2.000	2.000	2.087
		33	23	1.541	1.571	1.656	1.722	1.779	1.793	1.845	1.853	1.913	1.913	1.996
		28	20	1.504	1.533	1.615	1.680	1.736	1.750	1.800	1.808	1.867	1.867	1.948
		32	23	1.494	1.524	1.605	1.670	1.725	1.739	1.789	1.797	1.855	1.855	1.936
		27	20	1.450	1.479	1.558	1.620	1.674	1.688	1.736	1.744	1.800	1.800	1.878
		32	24	1.432	1.460	1.538	1.600	1.653	1.667	1.714	1.722	1.778	1.778	1.855
		26	20	1.396	1.424	1.500	1.560	1.612	1.625	1.671	1.679	1.733	1.733	1.809
		31	24	1.387	1.415	1.490	1.550	1.602	1.615	1.661	1.668	1.722	1.722	1.797
		24	19	1.357	1.383	1.457	1.516	1.566	1.579	1.624	1.632	1.684	1.684	1.757
		31	25	1.332	1.358	1.431	1.488	1.538	1.550	1.594	1.602	1.653	1.653	1.725
		26	21	1.330	1.356	1.429	1.486	1.535	1.548	1.592	1.599	1.651	1.651	1.723
		30	25	1.289	1.314	1.385	1.440	1.488	1.500	1.543	1.550	1.600	1.600	1.670
		24	20	1.289	1.314	1.385	1.440	1.488	1.500	1.543	1.550	1.600	1.600	1.670
		30	26	1.239	1.264	1.331	1.385	1.431	1.442	1.484	1.490	1.538	1.538	1.605
		23	20	1.235	1.260	1.327	1.380	1.426	1.438	1.479	1.485	1.533	1.533	1.600
		25	22	1.221	1.245	1.311	1.364	1.409	1.420	1.461	1.468	1.515	1.515	1.581
		26	23	1.214	1.238	1.304	1.357	1.402	1.413	1.453	1.460	1.507	1.507	1.573
		29	26	1.198	1.222	1.287	1.338	1.383	1.394	1.434	1.441	1.487	1.487	1.552
	24	22	1.172	1.195	1.259	1.309	1.353	1.364	1.403	1.409	1.455	1.455	1.518	
	29	27	1.154	1.176	1.239	1.289	1.332	1.343	1.381	1.387	1.432	1.432	1.494	
	22	21	1.125	1.147	1.209	1.257	1.299	1.310	1.347	1.353	1.397	1.397	1.458	
	28	27	1.114	1.136	1.197	1.244	1.286	1.296	1.333	1.340	1.383	1.383	1.443	
	22	22	1.074	1.095	1.154	1.200	1.240	1.250	1.286	1.292	1.333	1.333	1.391	
	28	28	1.074	1.095	1.154	1.200	1.240	1.250	1.286	1.292	1.333	1.333	1.391	
	27	28	1.036	1.056	1.113	1.157	1.196	1.205	1.240	1.246	1.286	1.286	1.342	
2 n d  o r  3 r d		25	26	1.033	1.053	1.109	1.154	1.192	1.202	1.236	1.242	1.282	1.282	1.338
		23	24	1.029	1.050	1.106	1.150	1.188	1.198	1.232	1.238	1.278	1.278	1.333
		27	29	1.000	1.020	1.074	1.117	1.154	1.164	1.197	1.203	1.241	1.241	1.295
		27	29	1.000	1.020	1.074	1.117	1.154	1.164	1.197	1.203	1.241	1.241	1.295
		21	23	0.981	1.000	1.054	1.096	1.132	1.141	1.174	1.179	1.217	1.217	1.270
		23	26	0.950	0.969	1.021	1.062	1.097	1.106	1.137	1.143	1.179	1.179	1.231
	Direct Drive			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

\*\*\*Only Columns in Red are Recommended When Building Road Race Transmissions\*\*\*

Ratios in Blue Designate Wider Large-Tooth Design Gears

Ratios in Grey Designate Standard Width Stub-Tooth Design Gears

\*\*\* Will not Fit Old Style 101 A Case