

Ratio Chooser



RPM @ 65 MPH

Tire Diameter

	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
2.80	2548	2446	2352	2265	2184	2109	2038	1973	1911	1853	1799	1747	1699	1653	1609	1568	1529	1492	1456	1422	1390
3.00	2730	2621	2520	2427	2340	2259	2184	2114	2048	1985	1927	1872	1820	1771	1724	1680	1638	1598	1560	1524	1489
3.08	2803	2691	2587	2491	2402	2320	2242	2170	2102	2038	1978	1922	1869	1818	1770	1725	1682	1641	1602	1564	1529
3.23	2939	2822	2713	2613	2519	2433	2351	2276	2204	2138	2075	2016	1960	1907	1856	1809	1764	1721	1680	1641	1603
3.25	2958	2839	2730	2629	2535	2448	2366	2290	2218	2151	2088	2028	1972	1918	1868	1820	1775	1731	1690	1651	1613
3.27	2976	2857	2747	2645	2551	2463	2381	2304	2232	2164	2100	2040	1984	1930	1881	1831	1785	1742	1700	1661	1623
3.31	3012	2892	2780	2677	2582	2493	2410	2332	2259	2191	2126	2065	2008	1954	1902	1854	1807	1763	1721	1681	1643
3.36	3058	2935	2822	2718	2621	2530	2446	2367	2293	2224	2158	2097	2038	1983	1931	1882	1835	1790	1747	1707	1668
3.40	3094	2970	2856	2750	2652	2561	2475	2395	2321	2250	2184	2122	2063	2007	1954	1904	1856	1811	1768	1727	1688
3.42	3112	2988	2873	2766	2668	2576	2490	2409	2334	2263	2197	2134	2075	2019	1966	1915	1867	1822	1778	1737	1698
3.50	3185	3058	2940	2831	2730	2636	2548	2466	2389	2316	2248	2184	2123	2066	2012	1960	1911	1864	1820	1778	1737
3.54	3221	3093	2974	2863	2761	2666	2577	2494	2416	2343	2274	2209	2148	2090	2035	1982	1933	1886	1841	1798	1757
3.55	3231	3101	2982	2872	2769	2674	2584	2501	2423	2349	2280	2215	2154	2095	2040	1988	1938	1891	1846	1803	1762
3.60	3276	3145	3024	2912	2808	2711	2621	2536	2457	2383	2312	2246	2184	2125	2069	2016	1966	1918	1872	1828	1787
3.70	3367	3232	3108	2993	2886	2786	2694	2607	2525	2449	2377	2309	2245	2184	2127	2072	2020	1971	1924	1879	1837
3.73	3394	3259	3133	3017	2909	2809	2715	2628	2546	2469	2396	2328	2263	2202	2144	2089	2037	1987	1940	1894	1851
3.80	3458	3320	3192	3074	2964	2862	2766	2677	2594	2515	2441	2371	2305	2243	2184	2128	2075	2024	1976	1930	1886
3.89	3540	3398	3268	3147	3034	2930	2832	2741	2655	2574	2499	2427	2360	2296	2236	2178	2124	2072	2023	1976	1931
3.90	3549	3407	3276	3155	3042	2937	2839	2748	2662	2581	2505	2434	2366	2302	2241	2184	2129	2077	2028	1981	1936
3.91	3558	3416	3284	3163	3050	2945	2846	2755	2669	2588	2512	2440	2372	2308	2247	2190	2135	2083	2033	1986	1941
4.00	3640	3494	3360	3236	3120	3012	2912	2818	2730	2647	2569	2496	2427	2361	2299	2240	2184	2131	2080	2032	1985
4.10	3731	3582	3444	3316	3198	3088	2985	2889	2798	2713	2634	2558	2487	2420	2356	2296	2239	2184	2132	2082	2035
4.11	3740	3590	3452	3325	3206	3095	2992	2896	2805	2720	2640	2565	2493	2426	2362	2302	2244	2189	2137	2087	2040
4.22	3840	3687	3545	3414	3292	3178	3072	2973	2880	2793	2711	2633	2560	2491	2425	2363	2304	2248	2194	2143	2095
4.29	3904	3748	3604	3470	3346	3231	3123	3022	2928	2839	2756	2677	2603	2532	2466	2402	2342	2285	2231	2179	2129
4.30	3913	3756	3612	3478	3354	3238	3130	3029	2935	2846	2762	2683	2609	2538	2471	2408	2348	2291	2236	2184	2134
4.33	3940	3783	3637	3502	3377	3261	3152	3051	2955	2866	2781	2702	2627	2556	2489	2425	2364	2307	2252	2199	2149
4.56	4150	3984	3830	3689	3557	3434	3320	3213	3112	3018	2929	2845	2766	2692	2621	2554	2490	2429	2371	2316	2263
4.57	4159	3992	3839	3697	3565	3442	3327	3220	3119	3025	2936	2852	2772	2698	2627	2559	2495	2434	2376	2321	2268
4.62	4204	4036	3881	3737	3604	3479	3363	3255	3153	3058	2968	2883	2803	2727	2655	2587	2523	2461	2402	2347	2293
4.63	4213	4045	3889	3745	3611	3487	3371	3262	3160	3064	2974	2889	2809	2733	2661	2593	2528	2466	2408	2352	2298
4.71	4286	4115	3956	3810	3674	3547	3429	3318	3215	3117	3025	2939	2857	2780	2707	2638	2572	2509	2449	2392	2338
4.78	4350	4176	4015	3866	3728	3600	3480	3368	3262	3163	3070	2983	2900	2821	2747	2677	2610	2546	2486	2428	2373
4.86	4423	4246	4082	3931	3791	3660	3538	3424	3317	3216	3122	3033	2948	2869	2793	2722	2654	2589	2527	2468	2412
4.88	4441	4263	4099	3947	3806	3675	3553	3438	3331	3230	3135	3045	2961	2881	2805	2733	2664	2599	2538	2479	2422
5.00	4550	4368	4200	4044	3900	3766	3640	3523	3413	3309	3212	3120	3033	2951	2874	2800	2730	2663	2600	2540	2482
5.13	4668	4482	4309	4150	4001	3863	3735	3614	3501	3395	3295	3201	3112	3028	2948	2873	2801	2733	2668	2606	2546
5.14	4677	4490	4318	4158	4009	3871	3742	3621	3508	3402	3302	3207	3118	3034	2954	2878	2806	2738	2673	2611	2551
5.29	4814	4621	4444	4279	4126	3984	3851	3727	3610	3501	3398	3301	3209	3123	3040	2962	2888	2818	2751	2687	2626
5.38	4896	4700	4519	4352	4196	4052	3917	3790	3672	3561	3456	3357	3264	3176	3092	3013	2937	2866	2798	2733	2670
5.40	4914	4717	4536	4368	4212	4067	3931	3804	3686	3574	3469	3370	3276	3187	3104	3024	2948	2876	2808	2743	2680
5.43	4941	4744	4561	4392	4235	4089	3953	3826	3706	3594	3488	3388	3294	3205	3121	3041	2965	2892	2824	2758	2695
5.50	5005	4805	4620	4449	4290	4142	4004	3875	3754	3640	3533	3432	3337	3246	3161	3080	3003	2930	2860	2793	2730
5.57	5069	4866	4679	4506	4345	4195	4055	3924	3802	3686	3578	3476	3379	3288	3201	3119	3041	2967	2896	2829	2765
5.67	5160	4953	4763	4586	4423	4270	4128	3995	3870	3753	3642	3538	3440	3347	3259	3175	3096	3020	2948	2880	2814
5.83	5305	5093	4897	4716	4547	4391	4244	4107	3979	3858	3745	3638	3537	3441	3351	3265	3183	3106	3032	2961	2894
5.86	5333	5119	4922	4740	4571	4413	4266	4128	3999	3878	3764	3657	3555	3459	3368	3282	3200	3122	3047	2976	2909
6.00	5460	5242	5040	4853	4680	4519	4368	4227	4095	3971	3854	3744	3640	3542	3448	3360	3276	3196	3120	3047	2978
6.14	5587	5364	5158	4967	4789	4624	4470	4326	4191	4064	3944	3831	3725	3624	3529	3438	3352	3271	3193	3119	3048
6.17	5615	5390	5183	4991	4813	4647	4492	4347	4211	4083	3963	3850	3743	3642	3546	3455	3369	3287	3208	3134	3063
6.20	5642	5416	5208	5015	4836	4669	4514	4368	4232	4103	3983	3869	3761	3660	3563	3472	3385	3303	3224	3149	3077
6.33	5760	5530	5317	5120	4937	4767	4608	4460	4320	4189	4066	3950	3840	3736	3638	3545	3456	3372	3292	3215	3142
6.43	5851	5617	5401	5201	5015	4842	4681	4530	4388	4255	4130	4012	3901	3795	3696	3601	3511	3425	3344	3266	3192
6.50	5915	5678	5460	5258	5070	4895	4732	4579	4436	4302	4175	4056	3943	3837	3736	3640	3549	3462	3380	3301	3226

This chart shows RPM (rotations per minute) calculations at 65 miles per hour for various combinations of final gear ratios.

The shaded area represents the generally accepted 2,000 to 3,000 RPM range

- Improved fuel economy
- Optimum range
- Improved Power

Tire size, transmission ratio, final gear ratio, and engine RPM at cruising speed must be considered.

Ratio = $\frac{\text{RPM} \times \text{Tire Diameter}}{\text{MPH} \times 336}$

RPM = $\frac{\text{MPH} \times \text{Gear Ratio} \times 336}{\text{Tire Diameter}}$

MPH = $\frac{\text{RPM} \times \text{Tire Diameter}}{\text{Gear Ratio} \times 336}$

Tire Diameter = $\frac{\text{MPH} \times \text{Gear Ratio} \times 336}{\text{RPM}}$

Recommended RPM at 60 MPH	
4 Cylinder	2,200 - 3,200
6 Cylinder	2,000 - 3,000
Small Block	1,800 - 2,800
Big Block	1,600 - 2,600
GM Diesel 6.2L	1,800 - 2,800
Ford diesel (Non-turbo)	1,600 - 2,500
Ford diesel (Turbo)	1,400 - 2,200
Dodge Diesel	1,400 - 2,200

This chart assumes a manual transmission and a final drive ratio of 1:1. Multiply by the overdrive ratio for RPM (Example RPM x 0.70)