

Which Front Pulley For "My" Sportster?

General Comment:

For flat ground the 883 needs a target cruise rpm of about 3200 and the 1200 about 2900 to compensate for slight differences in road elevation, head wind and brief traffic slow downs without requiring a downshift. Add 100 rpm for each of the following; a passenger, windshield, saddle bags. Following are the different ratios and the rpm at 70 mph, with comment by year:

2004-Up:

The 30/66 is between the 32/68 and the 30/68. I run the 32/66; 2005/883, taxes paid. I am always solo, mostly flat ground, mostly interstate. The 883's have a primary ratio, engine to transmission, of 1.68:1, while the 1200's have a 1.50:1. Neither the 30 or 31 require modification to the pulley cover. None of these combinations require a belt change.

Pulleys Ft/Rr	Final Ratio	883 RPM @ 70MPH	Final Ratio	1200 RPM @ 70MPH
28/68	4.07:1	3772		
29/68	3.93:1	3642	3.52	3252
30/68	3.80:1	3521	3.40	3144
31/68	3.68:1	3407	3.29	3042
32/68	3.56:1	3301	3.19	2947
30/66	3.69:1	3417	3.41	3051
31/66	3.57:1	3307	3.19	2953

The "32" requires some modification to two of the mounting posts and the exhaust bracket to be filed for pulley/belt clearance. If you consider yourself "handy" with tools and you have them, this is about a 30 minute job. If you are not handy, you'll need someone who is handy, with tools.

There are instructions with photos you may view on the websites, 883Sportster or SportsterStuff. If you do not wish to modify, the largest pulley available is the 31TS-2. We also offer a rear 66 tooth pulley to replace your existing 68 tooth. The 31/66 combination is about the same as a 32 front but no modifications are required.

The 32 pulley changes 883 final drive by ~14%; road speed will be 14% higher than your speedometer, your engine rpm will be 14% less at the same speed as existing 28 tooth pulley. Neither of these pulley changes requires a belt change.

We offer a Corrector that just plugs in to the existing wire harness to make the speedometer right. The Corrector works until 2013. The 2013 and up The Corrector fixes the speedometer and odometer but interferes with the gear indication signal. An alternate "fix" is the dealer can reprogram the ignition module for the pulley change.

1991-2003:

The 30/61 & 32/61 are tall combinations, we do not recommend for 883's. Both the 883's & 1200's have the same primary ratio, 1.60:1.(Reference International 1200's), 29/55 = 3.03:1, at 70 mph is ~2880 rpm.

Pulleys Ft/Rr	Final Ratio	883/1200 RPM @ 70MPH
27/61	3.61:1	3373
29/61	3.37:1	3141
30/61	3.25:1	3036
32/61	3.05:1	2846

The left-hand pulley nut is large, 1-7/8". We offer a special socket with a 1/2" drive to fit an impact wrench for removal and a torque wrench for installation. We also have a pulley holder so the pulley doesn't spin and no pressure is put on the Primary Chain Adjustor, clutch or transmission.