

XR1200 Sportster Front Pulley Installation

30, 31 & 32 Tooth Pulleys Models TS & TAS

INTRODUCTION

The belt does not need to be replaced for the 30 tooth pulley. The 31 & 32 tooth pulleys require either a 139 tooth belt or a 66 tooth rear pulley. The 31 & 32 tooth pulleys do not have a Belt Guide. These have greater inboard offset than original Pulleys to compensate.

Ratios Available With Different Pulley Combinations: XR1200

Years	Engine	Primary	Engine	Clutch	Ratio	Trans	Wheel	Ratio	Final	Change
2008-Up	1200	34/57	34	57	1.68	28	68	2.43	4.07	Factory
2008-Up	1200	34/57	34	57	1.68	29	68	2.34	3.93	3.47%
2008-Up	1200	34/57	34	57	1.68	30	68	2.27	3.80	6.67%
2008-Up	1200	34/57	34	57	1.68	31	68	2.19	3.68	9.68%
2008-Up	1200	34/57	34	57	1.68	32	68	2.13	3.56	12.50%
2008-Up	1200	34/57	34	57	1.68	28	66	2.36	3.95	2.94%
2008-Up	1200	34/57	34	57	1.68	29	66	2.28	2.82	30.74%
2008-Up	1200	34/57	34	57	1.68	30	66	2.20	3.69	9.41%
2008-Up	1200	34/57	34	57	1.68	31	66	2.13	3.57	12.33%
2008-Up	1200	34/57	34	57	1.68	32	66	2.06	3.46	15.07%
2008-Up	1200	34/57	34	57	1.68	28	64	2.29	3.83	5.88%
2008-Up	1200	34/57	34	57	1.68	29	64	2.21	3.70	9.12%
2008-Up	1200	34/57	34	57	1.68	30	64	2.13	3.58	12.16%
2008-Up	1200	34/57	34	57	1.68	31	64	2.06	3.46	14.99%
2008-Up	1200	34/57	34	57	1.68	32	64	2.00	3.35	17.65%



The 30, 31 & 32 pulleys will cause the speedometer to read slower than actual road speed. The later charts show calculated percentage change and mph at different rpm. The speedometer can be corrected with the use of "The Corrector" available from us. Or, if your ignition module has not been upgraded you may purchase a high performance ignition module. Some offer speedometer correction. If you desire "more gear" than just the 32, we offer 66 tooth rear pulleys.

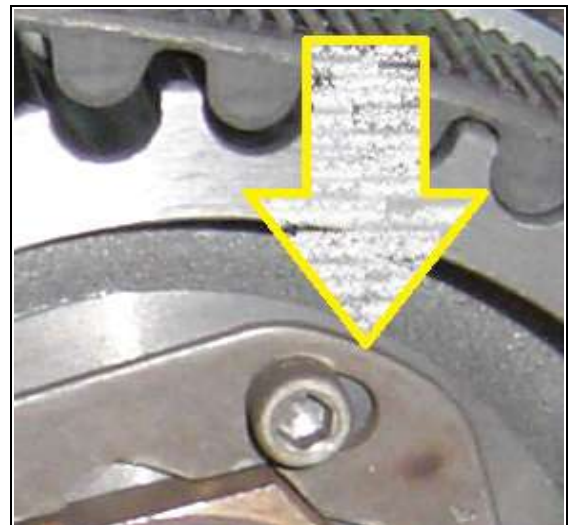
PULLEY REMOVAL

- Do not loosen the axle nut or adjusters until the pulley nut has been loosened with an impact wrench.
- Remove Pulley Cover
- Remove lock plate screws and lock plate
- Remove Pulley Nut, left hand thread. Usually requires an impact wrench and a Pulley Holder.
- Loosen axle nut, remove the axle adjuster nuts
- Move rear tire completely forward
- Inspect seal for leak, replace as required



PULLEY INSTALLATION

- Install pulley.. Use Blue Loctite, nut is left hand thread.
- Torque pulley nut 50 Ft Lb + 30-45 degrees, continue to tighten until holes in lock plate align with the plate mounting holes.
- Lock Plates with slots must have the screw on the left edge of the slot.
- Force the rear axle backwards, reinstall the adjuster nuts and adjust the belt tension/deflection at about 10 lbs force, 1/4"-3/8"
- Axle center to swing arm center, same both sides.
- Install the pulley cover and exhaust
- Test drive and then enjoy freeway cruising!
- If the belt rubs, it will be "shiny". File the bosses until the belt does not rub.



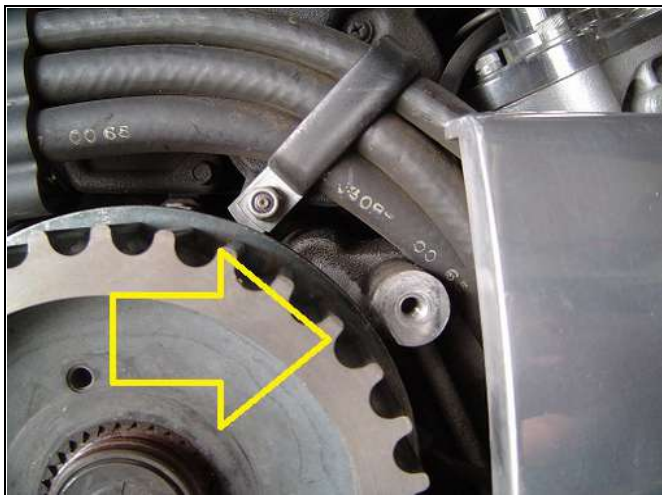
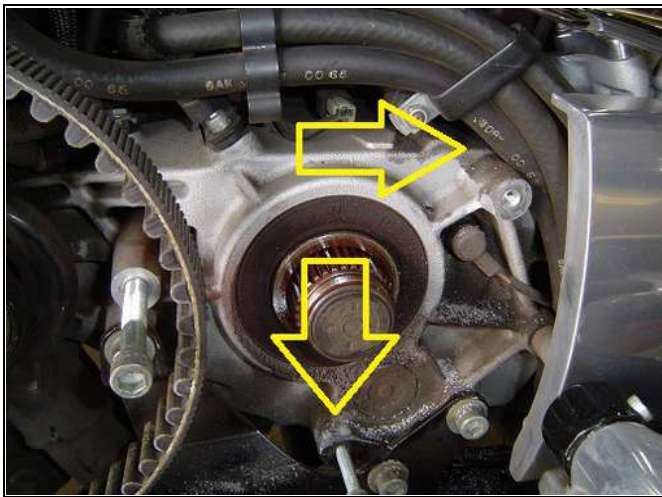
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MODIFICATIONS FOR 32 PULLEY

There are three mounting “bosses” on the engine case and rear of Pulley Cover. The front and bottom bosses must be modified, filed flat on the belt side, to allow the 32 pulley to operate without belt rub.

File both the forward and bottom bosses on the engine case and Pulley cover until there is ~1/16-1/8” clearance for the belt. The standoffs on the Cover require more filing at their base than at the end as they are tapered, “fatter” where they meet the cover. The following dimensions are a good start point to begin the modifications.

Boss Location	Width	Depth
Front	1/4”	1/8”
Bottom	1/4”	1/8”
Rear	0”	0”



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Speedometer Sensor Location, VSS

CHANGES IN MPH & ENGINE RPM

XR1200: 190/50/17; 1.68 Primary, RPM @ MPH

Pulleys	25	30	35	40	45	50	55	60	65	70	75	80
28/68	1401	1681	1961	2241	2521	2801	3081	3361	3641	3922	4202	4482
29/68	1352	1623	1893	2164	2434	2704	2975	3245	3516	3786	4057	4327
30/68	1307	1569	1830	2091	2353	2614	2876	3137	3399	3660	3922	4183
31/68	1265	1518	1771	2024	2277	2530	2783	3036	3289	3542	3795	4048
32/68	1225	1471	1716	1961	2206	2451	2696	2941	3186	3431	3676	3922
28/66	1359	1631	1903	2175	2447	2719	2991	3262	3534	3806	4078	4350
29/66	1312	1575	1837	2100	2362	2625	2887	3150	3412	3675	3937	4200
30/66	1269	1522	1776	2030	2284	2537	2791	3045	3299	3552	3806	4060
31/66	1228	1473	1719	1964	2210	2456	2701	2947	3192	3438	3683	3929
32/66	1189	1427	1665	1903	2141	2379	2617	2855	3093	3330	3568	3806
28/64	1318	1582	1845	2109	2373	2636	2900	3164	3427	3691	3954	4218
29/64	1273	1527	1782	2036	2291	2545	2800	3054	3309	3564	3818	4073
30/64	1230	1476	1722	1968	2215	2461	2707	2953	3199	3445	3691	3937
31/64	1191	1429	1667	1905	2143	2381	2619	2857	3096	3334	3572	3810
32/64	1153	1384	1615	1845	2076	2307	2537	2768	2999	3229	3460	3691

XR1200: 190/50/17; 1.68 Primary, MPH Change with Pulleys

	0.0%	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0
28/68	0.0%											
29/68	3.6%	31.1	36.3	41.4	46.6	51.8	57.0	62.1	67.3	72.5	77.7	82.9
30/68	7.1%	32.1	37.5	42.9	48.2	53.6	58.9	64.3	69.6	75.0	80.4	85.7
31/68	10.7%	33.2	38.8	44.3	49.8	55.4	60.9	66.4	72.0	77.5	83.0	88.6
32/68	14.3%	34.3	40.0	45.7	51.4	57.1	62.9	68.6	74.3	80.0	85.7	91.4
28/66	2.9%	30.9	36.0	41.2	46.3	51.5	56.6	61.8	66.9	72.1	77.2	82.4
29/66	6.5%	32.0	37.3	42.6	47.9	53.3	58.6	63.9	69.2	74.6	79.9	85.2
30/66	10.1%	33.0	38.5	44.0	49.5	55.0	60.5	66.1	71.6	77.1	82.6	88.1
31/66	13.7%	34.1	39.8	45.5	51.1	56.8	62.5	68.2	73.9	79.6	85.2	90.9
32/66	17.2%	35.2	41.0	46.9	52.8	58.6	64.5	70.3	76.2	82.1	87.9	93.8
28/64	5.9%	31.8	37.1	42.4	47.6	52.9	58.2	63.5	68.8	74.1	79.4	84.7
29/64	9.5%	32.8	38.3	43.8	49.3	54.7	60.2	65.7	71.1	76.6	82.1	87.6
30/64	13.0%	33.9	39.6	45.2	50.9	56.5	62.2	67.8	73.5	79.1	84.8	90.4
31/64	16.6%	35.0	40.8	46.6	52.5	58.3	64.1	70.0	75.8	81.6	87.4	93.3
32/64	20.2%	36.1	42.1	48.1	54.1	60.1	66.1	72.1	78.1	84.1	90.1	96.1

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other items from 883SPORTSTER.com

Rear Pulley, 66 Tooth



Oil Temperature Gage



Halo Headlight



Triple Light



LED Rear Lamp Replacement Kit



Pulley Holder Kit



Speedometer Corrector

