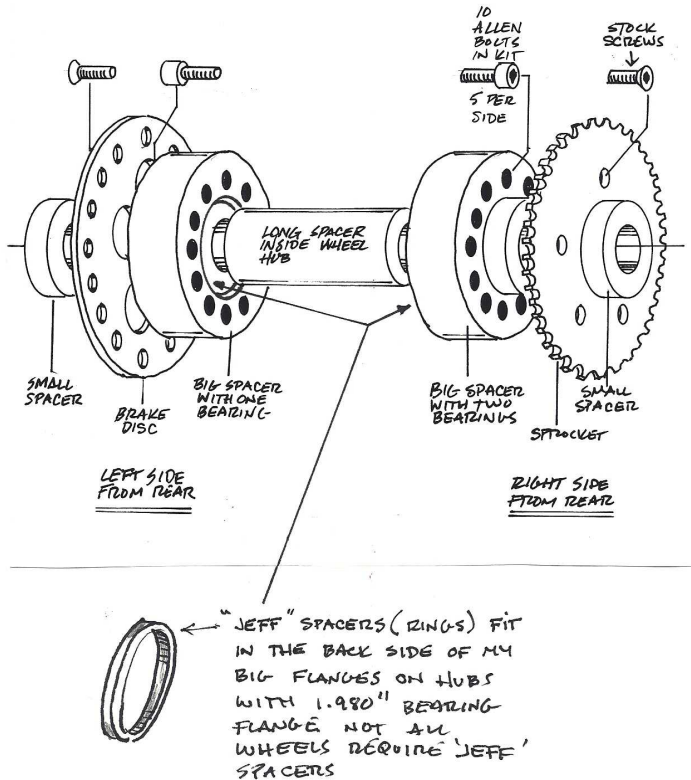


SKR 19" rear wheel conversion kit for 9 spoke wheels

Updated 3/19/19



Street trackers, Dirt trackers and Hooligan racers need 19" wheels on the rear so they can get traction from dirt track tires made only in 19". My kit permits using a 19" Sportster front wheel on the rear. The Sportster front wheel was originally tapped for 5/16 cap screws to mount the rotor. Harley used 7/16"-14 cap screws on the rear wheel. We now make kits for 7/16 screws and they are provided with the kit. **You must** drill out the 5/16" holes in your front wheel for the 7/16-14 cap screws in kit. Have the machining done locally or I will have it done for you at \$65 - spoked wheel for \$85.

Do not attempt to install an A kit made for 9 spoke wheels on a later Sportster designed for 13 spokes

We do not have a kit to do this

Instructions for wire wheels

Wire hubs are too wide for my kits. Use a stock Harley Davidson 19' x 2.5" cross four pattern rim mounted to a stock rear Sportster hub. Contact Buchanan's Spoke & Rim. Buchanan's rear spoke kit is custom made and the description of the **spokes is 8 1/4"-XS-75**. The estimated cost for 40, 6-8 gauge stainless steel spokes w/nipples is \$135.00 each rear set. With tax and shipping the total cost is just shy of \$160.

Buchanan's Spoke & Rim, Inc.

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Azusa, CA 91702

Tel (626) 969-4655 Ext 17

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With wire wheels go with tubes. It may seem odd but here's the tube size. 5.00 to 5.8 x 18. 19" tubes tend to blow up when installing.

Instructions for spacer kit

1. Pop the bearings out of your wheel-you don't need 'em. The races you can leave or pull
2. Your wheel has a bearing retaining collar (pilot). It fits inside my big flanges with or without the 'Jeff' spacers. It is likely the pilot has been abused over the years and to make it fit, you may have to dress it with a file. No big deal
3. I have already pressed the bearings into the large hubs-two in the drive side, one on the brake side.
4. Attach the **thicker big spacer**/adaptor to the **right** drive side
5. Insert longest "crush" spacer into hub between the big adaptors
6. Attach the **thinner big spacer** to the **left** brake side (pick a side it doesn't matter)
7. Affix the rotor to the thinner/left big adaptor with **stock 3/8** bolts
8. Attach the sprocket to the thicker/right big spacer with OEM **7/16** screws
9. Use LocTite on fasteners
10. Mount your tire and balance the wheel.

A small warning (using a 9 spoke wheels on a 2000+ Sportster)

This 9 spoke conversion kit was designed for 1986 to 1996 Evo Sportsters which came with nine spoke wheels and 3/4" axles. I know that 2003 and on Sportsters came with 13 spoke cast wheels also with 3/4" axles. Some of you with later bikes will be tempted to use the better looking nine spoke wheels. You can certainly do this but you have to use rotors and sprockets with matching center holes. You may have to order early rotors and sprockets. We should maybe talk about this.

Phil Little handy flat track tire selection guide

Your limit widths for front is 5" and 5.5" for the rear

Front max width-5" for Sportster

Maxxis 73H	TT hard compound	27/70-19
Maxxis	Hard compound	130/90-19
Mitas DOT	Legal compound	27/7-19
Shinko 71H	Hard compound	140/80-19
Golden CC5	Med compound DOT	27/7-19

Rear max width- 5 1/2" for Sportster

Shinko 1H	Hard compound	140/80-19
Mitas DOT	Legal compound	27/7-19
Maxxis 73H	Hard compound	27/7-19
Golden CC6	Hard compound DOT	27/7-19

(DOT means road legal)

Tire conversion guide

<u>Metric</u>	<u>Flat track</u>	<u>Inches, width</u>
130/80	27/7-19*	5.00-5.10" [front or rear]
130/90	-	5.00-5.10" [front or rear]
140/80	27.5/7.5*	5.50-6.00" [rear]
140/90	-	5.50-6.00" [rear]

* Source Shinko

Notes

[] There really is no front/rear dedicated flat track tires (a front will work on the rear etc.) the exception to this is street or road race tires

[] Rear: select DOT approved or hardest compound-they will last longer

[] Front: you can use a medium compound, some are DOT approved

[] Shinko usually has the lowest price but their front is wider than 5" so you'll have to grind off the rubber edge (see below)

[] Most Sportster tires are tubeless (TT)

Tire sources

[] <https://www.shinkotireusa.com/dealer-locator>

[] More to come when I get the information

Note

The 9 spoke cast wheel came in two varieties. One has a pilot/collar that is 1.98" OD. The other wheel had a pilot/collar this is 2.333". My kit will fit both

Instructions-wheel prep

To make a 19" Harley wheel worthy for the rear of your Sportster, here are some recommended steps to take because these 25 year old wheels often are not pristine.

- 1) Remove stock bearings-you don't have to remove the races. You may have to turn this over to a bike shop unless you can pound out bearings without destroying the host wheel
 - 2) Drill and tape the 5/16" holes in your hub to accept 7/16"-14 screws I supply
 - 3) If big spacers just won't fit on your wheel, do these two things
 - A) Dress the edge of your wheel's pilot smooth with a file (they tend to flare out over years of use)
 - B) Put your big adaptors in the oven at low temp for an hour. They will grow slightly in diameter. If the wheel can be put out in the cold-even better
- [Do these two steps and your kit will fit with no problem. I thank Charles Bourgois from Tucson for the inspiration to mention this in my instructions]

Instructions-mounting a big tire on a narrow rim

If you don't communicate the following to your tire guy-you'll find him in the rafters mumbling to himself with his pants off and throwing 1" nuts at you the next time you go back.

- 1) Remove valve stem
- 2) Slobber mounting solution liberally to rim and tire
- 3) Introduce air in one great rush and stop when you hear the sound like a shotgun going off. If he isn't ready for the sound he'll load his pants-so warn him upfront
- 4) If tire fails to mount squarely inflate to the max and put it a warm room overnight. The tire will move into position on its own like magic

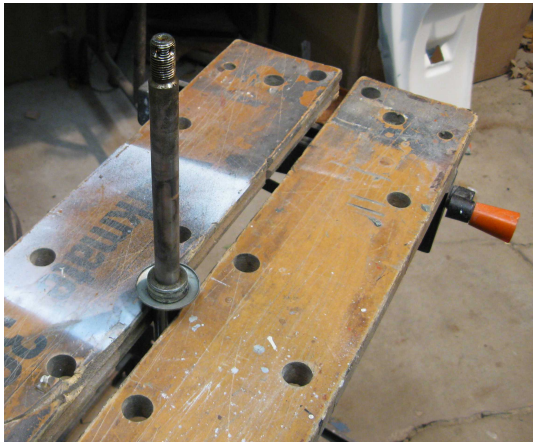
Front tire rubs on the fork slider

You tried to mount the front 27 x 7 x 19 tire but it was too wide or you could just squeeze it in and it sorta rubs. You need clearance or the dirt on your tire will act like sand paper and will grind gouges in your sliders. Here's the quick fix.



Step one

Make yourself a wooden template like these. The ID space between your forks is 5"



Step two

Find an old axle or chunk of pipe which will fit in the wheel bearing hole. Clamp it in a work bench like this or an alternative.



Step three

Plunk the wheel on the stem and pull out your belt sander. Install a course grit belt. Grind away the edge where the rubber side wall and business end of tire meet.



Step four

Start grinding. You'll find the grinder will spin the tire. Angle the grinder a bit and it starts to eat rubber while spinning the tire.



Step five

Use your template to measure progress. After you have clearance, install a fine belt to smooth the rough dressed area. You won't be able to tell it was an operation site.

A kit for 1988-98 nine spoke cast wheel \$325

Kit includes all the spacers, bearings and fasteners you'll need. Kit works with belt or chain.

Rear wheel description

Brake-single piston rear brake

Axle- $\frac{3}{4}$ "

19" wheel description

Spokes 9 cast

Pilot 1.980" O.D. (same as rotor & disc)

Bearings **[You don't use stock bearings or races]**

Hub 4.060" mount face to mount face

Rotor side big spacer is 1 $\frac{1}{32}$ " wide-**install with stock 3/8-16 screws**

Drive side big spacer is 1 $\frac{1}{4}$ " wide- **install with stock 7/16-14 screws**

Kit parts

You'll need to find 9 spoke 19" Sportster front wheel. Use the nine spoke wheel only on Sportsters up to 1998

[1] Wider big spacer for drive side-drilled for 7/16 screws

[2] Sealed bearings-drive side

[1] Sealed bearing-left side

[1] Narrow big spacer for rotor side-drilled for 7/16 screws

[2] 1 $\frac{1}{4}$ " small end spacers

[1] 5" Long crush spacer between bearings

[2] "Jeff" rings convert wheels with 1.98" pilots to 2.33"

[10] 7/16-14 Allen cap screws

Thanks Phil PhilLittleRacing.com 952-935-8833 or cell 952-607-6063 12/7