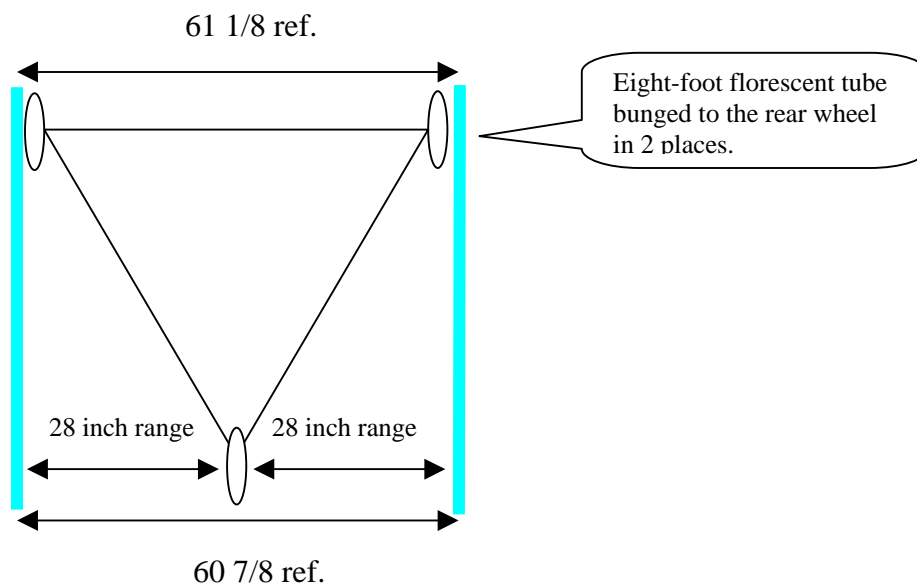


Checking alignment of rear tires on a Hannigan Trike

1. Park the trike on a flat surface and jack the back end up so the rear wheels are just off the ground to relieve some of the stress on the tires when doing any adjustments to the tow in and tow out. The other way would be to put swivel pads under each wheel. Be sure that each wheel is the same height off the ground and the trike is stable and on jack stands.
2. Get two (2) eight foot florescent bulbs, the kind with the tit in the center. Measure back from the edge of the bulb 10 inches and mark that measurement with a piece of tape.
3. Find the center of the rear wheels and mark that spot with a piece of tape.
4. Line up the edge of the tape on the tube to the edge of the tape on the wheel and bungee cord the tube to the tire as low as you can. You will need two bungee cords for each tire as you will need to put one in the front of the tire and one in the back of the tire. Be sure that the little tit on the tube is extended out past the tire so that it can be measured from the center of the tube on the other side and under the mufflers. When you are done the tube should be on an angle downward towards the front and just resting on the floor allowing a tape measure to go just in front of the front wheel from tube to tube. To help with the movement of the tube sliding on the floor put something slippery under the tube for it to slide on like a piece of wax paper.
5. Find the center of the front wheel and mark the RIM (NOT THE TIRE) with a piece of tape so that you are always using the same spot for your measurements. Do this on both sides of the front wheel. When you are done be sure that the front wheel is straight and inline.
6. Find the center of the tube and mark it with a piece of tape across from the tape on the front RIM
7. Now take four measurements.
 - Between the tits on the rear of the tubes
 - Between the tits on the front of the tubes
 - From the tape on the rim on the left to the tape on the center of the tube
 - From the tape on the rim on the right to the tape on the center of the tube
8. The measurement from the left and right side of the front wheel to the centers of the tubes should be the same on both sides and somewhere in the 28-inch range. The difference between the back measurement to the front measurement should be $1/8$ to $1/4$ difference and should be a tow in measurement. As a reference only, if the back is $61 \frac{1}{8}$ then the front should be $60 \frac{7}{8}$ To 61 inches.

- 9 Adjustment on the tie rods is very touchy and does not need a lot of turning on the nut to move the wheel in or out. A 1/4 turn on the adjusting nut could be as much as an 1/8 of an inch or more of movement over the 8 foot tube length. After each adjustment, and before you do a measurement, be sure to tighten up the lock nut so that you are securing the wheel in place as it would be if the adjustment were final.



Each trike will be a little different, the thing that is important is the distance on each side of the front wheel and the 1/4 to 1/8 inch tow in from the back measurement to the front measurement.

