

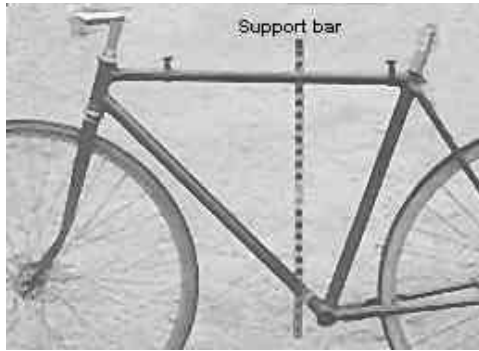
Attach a short bar (about 2' long) vertically and midway between the wheels as shown in the photo, some plastic cable ties or thin wire are all that's needed to hold it in place. It's useful if this bar has a few holes in it.

Now attach a length of thin rope or wire to the top of this bar, balance the bike upright and straighten the steering. Allow the bike to lean away from you and take the weight with the rope held horizontally. Repeat this several times, but with the rope being attached to progressively lower positions on the vertical bar.

When the rope was tied near the top of the bar, you'll notice that the steering turns in toward the direction of lean. However, when the rope is at the lower end of the bar the steering is out away from the lean and as we might then expect there is an intermediate vertical support position that allows you to lean the bike without any tendency to steer one way or the other.

Now remount the bar as far forward as possible without interfering with the front wheel and repeat the experiment.

The main difference to note in this case is that the position for zero steer is higher up the bar than in the previous case. If you do this again with the bar mounted towards the rear you'll find that the rope location for zero steer is much lower.



Left shows the bar mounted midway between the wheels, at right it's mounted toward the front



The other pics. show the three steering effects depending on the height of the horizontal force.

