

# Speaking of Frames

Contributed by BMWVMCA NEWS  
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Thanks to Ian Peachey who sent this idea in.

Use this as a quick check for wheel alignment with a length of plumb line (string, twine, Bindfaden) tied between the two wheels as shown in the photos.

It works much easier if both tires are the same width, but if they are not, you can still use this trick to check your bike.

If one tire is narrower than the other, measure its width, subtract that width from the width of the wider tire, then divide that number by two. The last number you arrive at will be how thick to make your shims, wood works fine, to add to the edges of the narrower tire, using them to hold the plumb line.

The plumb line should now be set so that the two lengths along the sides of the tires should be parallel.

Next, walk to the front of the bike, and while sighting down along the plumb line, and with one hand on the handlebar, move the wheel so that it aligns with the rear wheel as close as you can get it. Tighten the steering dampener if you have one.

If the alignment is off, and most bikes are at least a small amount out of true, you will be able to see it when sighting along the plumb line.

This method cannot be any more accurate than the wheels and tires.

The frame alignment of the bike in the photos shows it to be about 2 mm out of true. This is not likely enough to be noticed while riding.

If you have an engine installed in your bike, you can wrap the plumb line around the tires closer to the ground, below the engine and frame. If the center stand is in the way, you might need assistance from a friend to hold the bike upright.

Use a bit of masking tape to hold the plumb line in the center of one of the tires while you walk around to the other end of the bike.

This method can be used much the same as using two straight wood boards laid up against the tires along the ground. Try finding two straight boards.

Next, if your fenders are off, use two straight pieces of angle iron or wood about four feet (1,3 meters) in length, and ask some of your friends to hold them vertically against one side of each wheel while you sight down along the length of your bike. Double check your plumb line. If the two boards are parallel, your bike is fine. Allow for minor tolerance.

If they are not parallel, you will definitely notice it when riding.

RS