

Steve's WPL B-series KM Steering Setup

Problem(s) (depending on which steering link you use, you may experience one or more of these):

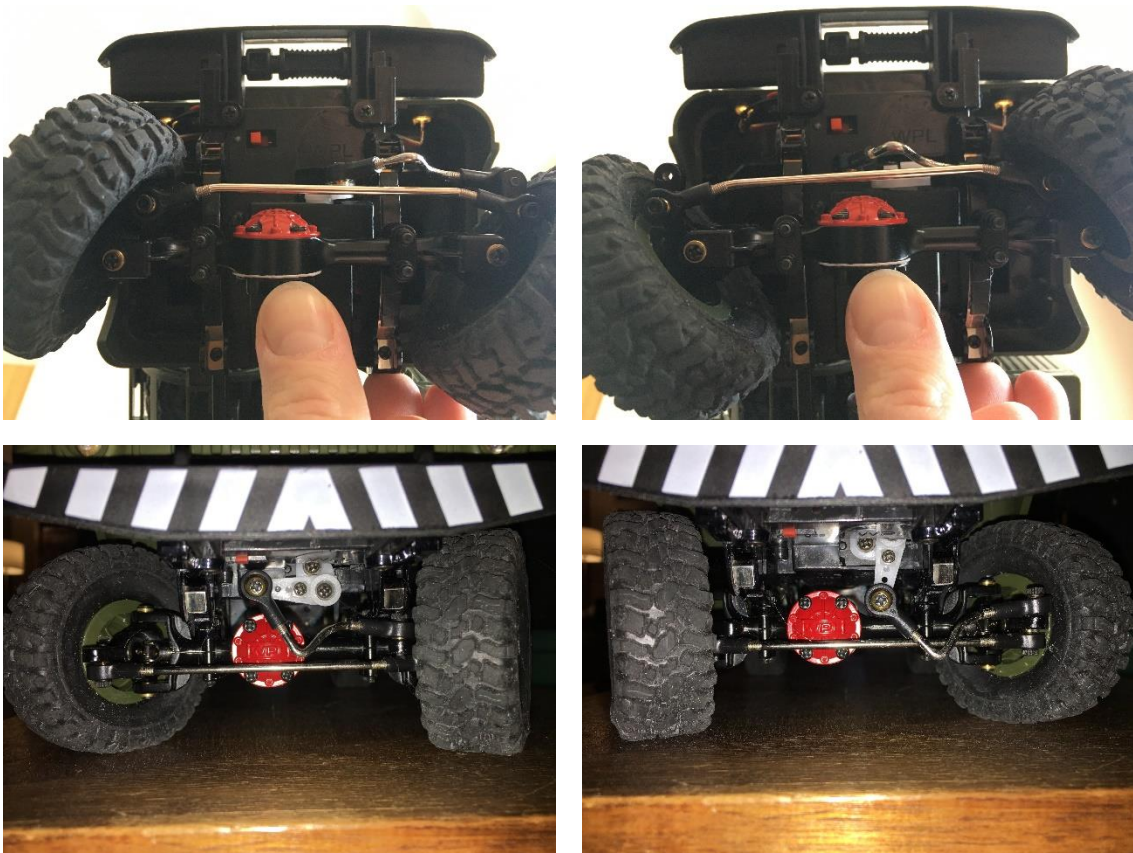
- Steering link compresses spring when turning.
- Maximum steering angle not even to left vs. right.
- Steering link end contacts suspension/frame/servo mount, limiting steering angle.
- Servo horn contacts suspension/frame/servo tray, limiting steering angle.
- Limited steering angle means large turning radius.
- Servo has some play in servo tray.

Solution (see photos):

- Custom servo horn.
- Slight trimming of servo tray.
- Steering link shape and length adjustment.
- Paper shims to secure servo.

Results:

- No more steering link spring compression (at my normal ride height, anyway).
- Same maximum steering angle to left and right (somewhat limited in forward driving by available servo torque).
- Steering angle is as large as possible (limited by the tires contacting the leaf spring mounts), achieving tighter turning radius.



Photos of modifications:

- Steering horn fabricated from trimmed circular steering horn with standard horn attached.



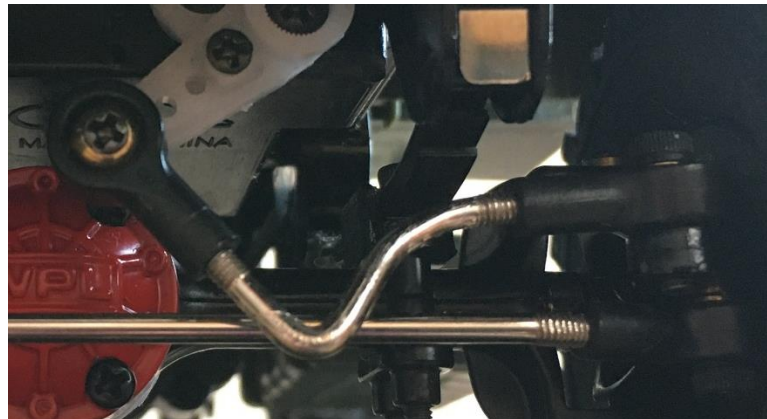
- Steering horn alignment on servo. Inner side of arm at about a 45° angle.



- Slight trimming of servo tray (on right side of servo shaft in photo) to allow clearance for new servo horn.



- Close-up of steering link bent from the one that comes with the metal axles. The distance between the centers of the ball ends is about 45 mm. Angle the link forward slightly to make sure it clears the long steering link by adjusting the angle in the end links.



- Servo shimming to secure it in the servo tray. I folded a paper to 5 layers thick with a tail so that I could hold onto it and position it while sliding the servo into place. Once installed, I ripped off the tail. The servo doesn't budge now.

