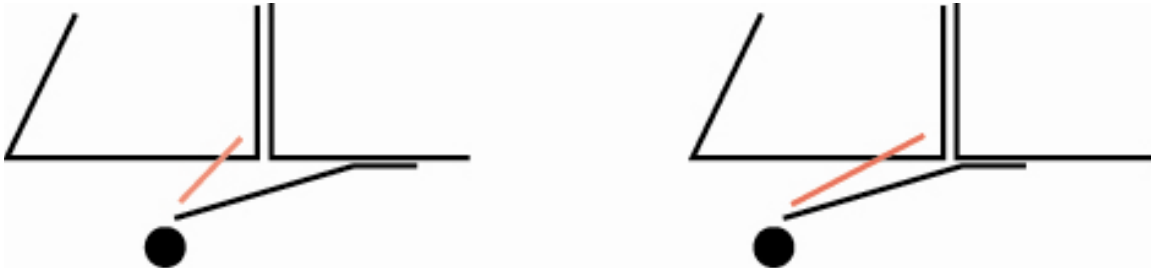
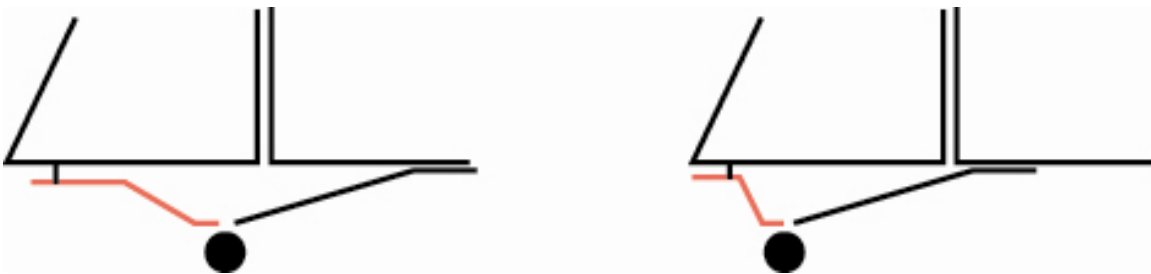


Here are some tips on positioning your tailwheel to get the best results from either the spring steering system or the tiller arm (direct drive) system. I have a simplistic illustration of the spring system drawn below. The red lines represent the connection from the rudder to the steering arm on the tailwheel.



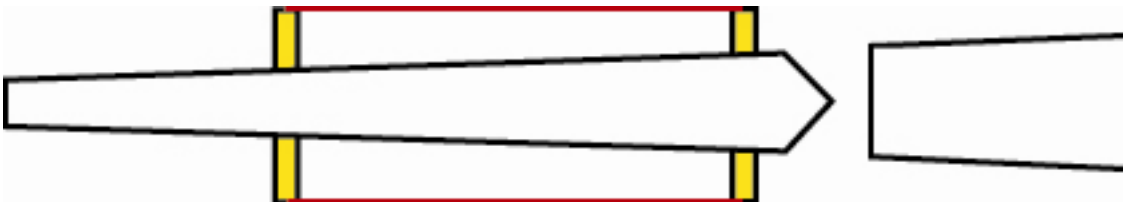
The illustration on the left is not good geometry. The tailwheel is positioned too far forward resulting in a steep angle from the rudder attachment point to the steering arm on the tail wheel. With this situation the rudder movement tries to lift the tailwheel as much as turn it. This results in poor ground handling and unnecessary strain on the rudder servo.

The illustration on the right is what you want to see. If you choose to use the spring system to steer your tail wheel you want to minimize the declining angle between the rudder attachment point and the tailwheel steering arm. Usually the only way to do this is to mount the tailwheel as far back on the bottom of the fuselage as possible.



The illustration on the left is good geometry for a tiller arm steering system. The rule of thumb is the pivot point on the tail wheel should not be more than 1 ½ inches behind the rudder hinge line. If you get it further back than this you will see excessive over steer. Example; the rudder turns 30 degrees and the tailwheel turns 45 degrees.

The illustration on the right shows an installation that will result in very poor ground handling and over steer to the point that the tailwheel would probably be pulled over center.



Looking down on the spring steering set up from above this is what you want to see. Adequate distance between the attachment points on the rudder and the steering arm on the tail wheel. It is also very important for the distance between the holes across the rudder attachment arm and the tail wheel steering arm is as close to the same as possible. If the tail wheel arm is more than 10% less wide than the rudder arm significant over steer will start to compound with the increase in attachment point width disparity. The problems this can lead to are described above. We have both steering systems available on our web site. The kits include all the components you will need to install either system with the simplest tools.