

My original zip tie setup had only one black zip tie (the one on the left in the attached picture chainst1.jpg). That kind of setup didn't, however, work properly as such. There are two reasons for this: first of all the black zip tie was too far out to the left from the ring set and it was too flexible, which is why it alone couldn't prevent the chain from rising upward with the middle ring. So, according to the first picture (chains1.jpg), my previous setup had some more black zip ties, one after the other closer to the ring set, and finally a white zip tie that is somewhat stiffer than the black ones. This white zip tie was tightened and glued (as the black ones) by some drops of Loctite on the chainstay right behind the big ring, so that its cut end was almost against the back of the big ring. With this setup as such, the chain suck problem disappeared totally.

Due to the fact that the plastic zip ties wear out sooner or later and have to be replaced, I developed a metallic alternative to be seen in the second attached picture (chainst2.jpg), the parts of which are shown in third picture (metalparts.jpg). So, a metallic paper clip frame, from which the clip arms have been removed, is bound upside down with one metallic zip tie around the chainstay as far to the right as possible (as seen in the chainst-pictures) behind the ring set (there is also another zip tie bound to the chainstay to give further support to the clip). In my bike, I also had to remove the fastening structures of the clip arm from one side of the clip frame, so that it fits between the chain stay and the tire. So, the idea is to install something strong enough between the ring set and the chainstay, so that the chain is not able to rise along with the middle ring above the chainstay.