

Chain Guide Tip

A chain guide is used to prevent the chain from coming off while racing. This can occur because of a couple of reasons.

It can occur if the chain is misaligned. This is a completely preventable with proper maintenance by using a chain alignment tool. There are several of these you can use. Sniper makes a good one.

The other and primary reason a chain will pop off is because of axle flex. An axle can flex a good deal. This can occur on a very tight corner when you get a good deal of wheel lift or potentially when you hit a curb or bump in the track.



Racing 4-cycles for many years, it has always been hard to find a good chain guide for running with LO206. Running 2-cycle we never used chain guides. This is because the 50mm axles are typically stiffer and less flexible than axles used with 4-cycle racing. However, we did at times

fall prey to a chain popping. A chain guide is a good solution and will keep your chain from popping. It is no fun sitting on the side of the track watching the race because your chain popped off.



There are plastic chain guides and some metal ones. None of these ever seem to work well for me. The plastic ones always seemed to get deformed after using for a while. The metal ones always were too big and bulky, some actually are so big they hit the ground.

A simple alternate solution for a chain guide is to use a larger gear on the left side of the gear (see picture). You only actually need a chain guide on the left side of the gear. This is because with the sprocket being close to the right side frame rail, the axle really can't flex that much on that side of the axle. The excessive flex comes on the left side of the axle forcing the chain off to the left. The picture at left has a 72 tooth gear with an 80 tooth gear as the chain guide. The 80 tooth is larger than you need. 4 or 5 sizes will be plenty.

You will likely need to run 219 chain to make this solution. I have not tried with 35 chain. This setup uses 219 gears, metric bolts, and locking nuts. You really don't need the gear to be that much larger, just big enough to restrict the movement of the chain. So, you can vary it depending on the gear you normally run at your track.

To setup this solution you will need:

- 6 metric socket head bolts – length 30mm
- 12 10mm locking nuts
- An extra gear that is minimum 4-5 tooth sizes larger for use as the chain guide.
- Grinding wheel

Before using a gear as a guide, you will need to grind off the teeth. The exposed teeth would be a safety hazard.

Once this is done, simply put the gear on as normal using the six 30mm bolts, fastening with six 10mm locking nuts. Make sure the chain is aligned correctly using an alignment tool.

With the longer 30mm bolts you will have space to put on the additional gear as a chain guide and then fasten it on with six additional 10mm locking nuts.

This solution has proven to work very well to prevent chain from popping off. It is light weight providing less rotational weight than many chain guides. It is also highly durable and never gets bent or out of alignment.