

**Safety Tips # 47**  
**By Ben Hochberg**  
**ABATE of Colorado**

**Tired of the Old Grind?**

Every bike has limits to how much it can lean before parts of it start hitting the pavement and scraping. It's called "maximum lean angle" and it's usually published with the other specs relating to any particular model. Interestingly, bikes often have different maximum lean angles for left and right turns.

In spite of what is published about your bike's maximum lean angles, the actual figure will vary with things such as bike load, suspension setting, tire inflation, crowned roads and banked roads, and pavement irregularities.

I like to lean! It's one of the most enjoyable parts of riding. I have two bikes, a Buell Thunderbolt and a Harley ElectraGlide. I have never leaned the Buell over far enough to scrape any parts, and I probably never will! (I'm just not a good enough rider and I'm not willing to take that kind of risk. Plus, going that fast on public roads would mean I would be exceeding the speed limit.) But the Harley is a different story. It scrapes quite readily, in only moderate turns. The skirts on the bottom of the floorboards are halfway gone, due to them being ground on the pavement while making turns.

There is a problem with grinding parts down on the pavement, and I'm not talking about the expense of replacing the worn parts. The problem is that whatever amount of force is causing parts to grind on the pavement is force that is no longer available for traction for your tires to grip the road. So the harder one scrapes parts, the less traction one has. And of course, this issue happens only when one is leaned way over and needs the most traction he/she can get!

I have a buddy who is an outstanding rider. His skills far exceed mine. He has the same kind of bike that I do. Somehow he is able to maintain the same pace as me in turns, and yet I have never seen him scrape his floorboards. How can that be? This is now my challenge: to learn how to ride at the pace that I enjoy and still not grind parts on that low, wide, heavy bike.

Here's what I have come up with. First, make sure the tire pressure and suspension are set correctly for the load and type of riding ahead. Pick a path of travel in turns that allows the least lean angle, in other words, a path of the largest radius, with all other things, like road and traffic conditions, considered. Then, apply the smoothest possible inputs to the controls of the bike. This means smooth throttle application ("sneaking on the throttle" is one cool term I have heard), smooth, gradual countersteering input to the handlebars, and selection of an entry speed that allows you to stay away from the brakes during the turn. Looking far through the turn will help us avoid having to make steering corrections while in the turn, which can reduce available lean angles.

Every ride affords the opportunity to practice and get better!