

Basic Training Fails (Part 2)

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Dropping your motorcycle stinks. Doing it in view of others is even worse. These unfortunate mishaps actually happen more often than people think. Tip overs accounted for more than half of the crashes recorded in the 2016 Virginia Tech Motorcycle Safety Foundation naturalistic study.

Whether it's poor footing at a stop or loss of balance at parking lot speeds, drops can really ruin your day. At a minimum there's going to be unnecessary scuffs somewhere on the bike. Worse possible outcomes are broken parts or body aches.

I once took a training course where a guy dumped his Harley bagger in a u-turn and got stuck underneath it. Talk about adding insult to injury. Thank goodness most tip overs aren't serious.

My previous article identified primary aspects of fundamental training that may be short changing riders in the long run. This article highlights four secondary aspects. The first two may perhaps be nit-picking, while the other two are pretty serious.

As with the first article, my intention isn't to slam the waiver courses or suggest radical curriculum changes. I'm a huge fan of them. Not only did I get my start through a waiver course, but spent 10 years of my life teaching it before branching off into advanced training through my own school. Let's jump in.

Riding Posture

It seems crazy to say that there's a right way to sit on a motorcycle. How hard can it be if you sit on the seat and reach for the grips?

When riding a motorcycle skillfully, the body appears to be one with the bike. It's easy to notice those truly relaxed.

Basic training courses stress an almost robotic body placement and positioning on the motorcycle. Certain baseline body positioning looks unnatural at times. Nobody expects a rider to be as stiff as they are in a waiver course once they become more comfortable.

Certainly the posture skills taught to newbies have more in common with lifetime posture than not, but there are some major differences.

First of all, covering the clutch lever is overstressed in waiver courses and it should be. A quick squeeze can help a new rider regain control of a runaway motorcycle and the courses are conducted in cramped parking lots. Experienced riders typically don't cover the clutch beyond low speed maneuvers, when slipping the clutch in the friction zone is proper technique. Most students intuitively stop covering the clutch by the middle of the waiver course. This one really isn't a problem.

The opposite is true for covering the front brake lever. That's a big no-no in waiver courses and is a technique that might take riders years to pick up on their own. Covering the brake lever is a great idea for riders. It decreases reaction time and is useful for controlling speed and steering. This was covered extensively in my previous article.

As with any new skill, you have to walk before you can run. This is the case with upper body placement.

Besides using special techniques for low speed turning and swerving, novice riders are taught to lean their upper half with the motorcycle. This means that their chest centerline is the same as the centerline of the motorcycle. A centerline refers to a vertical line that splits the rider or motorcycle in half when viewed from the front.

Accomplished riders know that leaning the upper body into the turn and "kissing the mirror" is a good technique which naturally reduces motorcycle lean angle. In other words, the rider's chest centerline is inside the motorcycle's. This results in more stability, ground clearance and motorcycle lean angle in reserve.

Shifting

Waiver courses require the coach to tell students to make the shifting steps distinguishable and to slightly pause between each action. What changes after basic training is that smooth shifting becomes important for maintaining consistent traction, especially when curves are involved.

Most riders eventually learn to coordinate shifting more gracefully on their own as time goes on without giving it much thought. That might be why few advanced books or

courses directly teach proficient gear shifting techniques.

Some modern motorcycles provide shifting assistance. Even so, a skilled motorcyclist demonstrates finesse with every gear change. This means taking slack out of the shift lever with the left foot on upshifts, using a slight pulling action on the clutch lever and manipulating the throttle to better match road speed with engine rpm.

In Curve Challenges

Using the 1981 Hurt crash study as a guide, early course developers included stopping and swerving skills in their curriculum. These skills are mostly taught to riders moving in a straight path of travel at lower speed when more traction is available for braking or direction changes. When leaning, significant portions of traction are required for turning. Tricky maneuvers while already leaned over can be more prone to overwhelming available traction.

People aren't going to learn skills for handling mid-corner emergencies in the waiver course. The only technique presented is stopping while in a curve. Even when preparing them for this situation, students are primarily taught to straighten the motorcycle upright, square the handlebars, and then do a typical quick stop. In other words, apply brakes only when the motorcycle is upright. This reduces in-class student crash risk because the motorcycle is not consuming turning traction when the hard braking is applied.

There are no exercises in the waiver course with objectives to teach how to just slow down in a curve, which is a much more likely situation than stopping there.

Basic training stresses only one solution to excessive cornering speed: pressing the inside grip more to increase motorcycle lean

angle. While this is an effective technique for misjudging too fast an entry speed, adding motorcycle lean in a vulnerable position adds risk.

Beyond the fundamentals, people should develop advanced skills that specifically teach how to adjust speed, change direction and ride over roadway obstacles while leaning in a curve. It's important to acquire these skills before they are needed.

Braking can be applied in a corner to reduce speed. This can be accomplished by closing the throttle or applying either brake. While I'm not a fan of using the rear brake past the corner entry, front braking with delicate application can be applied at any time or anywhere in a curve.

Skilled riders have the option to change their direction in a curve with either speed or steering inputs. A slower speed allows for sharper turning, while a faster speed pushes the motorcycle towards the outside of a turn.

It's okay to swerve while leaning in a turn, which is basically done with the handlebars like when upright. Just remember that when you swerve in a curve you're already consuming turning traction and that suddenly adding more can exceed what's available.

Handling slippery surfaces like gravel or liquid in a corner is pretty much the same advice as when traveling upright. Avoid any sudden changes in speed or direction until the threat is behind you.

Running over obstacles or potholes mid-curve should be expected in the real world. Try to enter corners with your front suspension travel as close to the middle as possible. This way it can better absorb any unusual compression events.

Waiver courses teach blipping the throttle to fully extend the forks before striking the obstacle, usually a 2" x 4" plank. As a result, the forks more easily soak up the impact.

In a corner we don't have the same luxury. Quickly adding throttle at lean raises the demand for acceleration traction, thus removing what's available for turning. The best way to handle rough roads in this situation is to have room in the suspension travel to absorb what it can.

A major difference between running over an object upright versus leaning is that you shouldn't lift your butt up off the seat and blip the throttle while leaning. That could upset the suspension. It's better to use the standard advice not to make any abrupt changes to speed and direction over slippery or uneven surfaces.

Low Speed Maneuvers

Plenty of motorcyclists seem to lose balance and control executing daily maneuverability tasks, resulting in low-speed crashes.

The recent Virginia Tech crash study researchers were surprised by the high number of "capsize" crashes, which comprised 57% of the total. To put this in perspective, the next two highest percentage crash types were "road departure" and "right of way violations" at 10% each.

Remove tip overs and the number of total crashes in the study drops from 30 out of 100 participants to only 13. The final report cites that these crash types are unique and not found in past analysis. Researchers go on to say that this is an area requiring exploration and suggest that the cause of such drops is a breakdown in rider proficiency.

Are the basic motorcycling waiver courses to blame for this phenomenon?

Novice training expressly discourages front brake use for u-turns practice. They do permit the rear brake to control speed. Folks, the front brake is perfectly fine to use at low speeds. Experienced riders should have higher dexterity on the brake lever, whereas newbies typically don't. It's 2021 and people still think they can't use the front brake on their motorcycles sometimes.

The counterweighting technique presented to new riders making slow turns implies planting both feet firmly on each foot peg. Insisting on this can be problematic later. By the time a foot can be moved from a peg to catch a tipping motorcycle, it might be too late.

Dangling, or hovering, a foot 4-6 inches over the ground saves reaction time in case a dab with a foot is necessary to prevent falling. When a motorcycle begins to capsize, it's easier to save it when more upright. There is a point where it's best to just let the bike go rather than risk injury. Regaining control of the weight before that point is critical.

Dabbing, or putting a foot down, is advised in waiver courses as a solution to prevent falling over. However, doing so on the evaluation deducts points for poor skill and judgement. A person could fail the test because of these point deductions.

Ladies and gentleman, dabs are okay. Gluing both feet to the bike when changing direction at 5 mph is just an unreasonable requirement in my opinion.

Keep in mind that the same exact techniques for low speed maneuvering taught in waiver courses still apply afterwards. The only change being

suggested is to dangle the inside foot just in case it's needed or wanted.

Some people think that dangling or dabbing a foot is terrible advice. My response to them is simple. If it's so dangerous, why do the waiver courses advise it during practice? Because they know it may prevent a fall and the inconvenient aftermath.

Conclusion

There's a popular saying that goes, "Some riders don't have 20 years of motorcycling experience, they have the same year repeated 20 times." This quote summarizes the essence of my basic training fails message.

The best way to get into motorcycling is by taking a basic license waiver course. That said, motorcyclists that only use the techniques presented there are missing out on greater confidence, control and enjoyment.

The Motorcycle Safety Foundation is known to advertise, "The more you know, the better it gets." Anyone that continues to follow the path of learning would probably agree.