

ESSENTIAL RIDING SKILLS



“Essential Skills for Building Rock
Solid Track Riding Foundations”

Disclaimer & Copyright Notice

Any advice that I give is my opinion based on my own experience. You should always seek the advice of a professional before acting on something that I have published or recommended.

By reading this guide, you agree that Life at Lean is not responsible for any accidents resulting in bodily harm or property damage that might occur due to how you interpreted the information presented in this guide.

The material in this guide may include information, products or services by third parties. Third Party Materials comprise of the products and opinions expressed by their owners. As such, I do not assume responsibility or liability for any Third Party material or opinions.

The publication of such Third Party Materials does not constitute my guarantee of any information, instruction, opinion, products or services contained within the Third Party Material. Publication of such Third Party Material is simply a recommendation and an expression of my own opinion of that material.

All trademarks and registered trademarks appearing in this guide are the property of their respective owners.

©2022 LifeAtLean.com. All Rights Reserved.

Preface

There's no denying that the motorcycles of recent times are very much wasted on the roads. With the latest and greatest sports bikes being able to break the speed limit in first or second gear, you can't possibly expect to really stretch the legs of these incredible machines.

Fortunately for us, there is a way in which we can release the beast, and better enjoy the bike for what it was designed to do. That way is bike track days.

However, with the vast amount of things that go into making a track day what it is and the elements of danger involved, you're no doubt going to have a lot of questions and maybe even some concerns about what they're all about, how you can make the most of them, and how you can use them to generally become a better rider. I would guess that's why you're reading this guide.

I was in that exact same position back when I first discovered track days in 2009, but I didn't have any sort of guide to help me, and my lack of knowledge mixed with a little youthful exuberance landed me flat on my backside.

Since that time though I have amassed a great deal of knowledge that I have picked up simply through a combination of personal experience, training I've had, and research I have carried out during my time doing bike track days.

While I will never profess to be the ultimate riding guru, I have grown into a capable track rider with very good knowledge of what is expected of us out on circuit, and I can most definitely help the learning riders out there and set them on the right path.

This guide has been put together to help learning performance riders start down the right path to fast and safe riding technique, as well as help them in many of the common areas that come with riding a motorcycle on the track.

With that, please go and enjoy this guide. I feel certain you'll gain an awful lot from it.

Thanks for being part of Life at Lean. It means the world to me!



Dan Netting

Editor & Publisher
Life at Lean

Table of Contents (Clickable)

The Racing Line.....	4
Braking Technique for the Track.....	6
How to Steer Your Motorcycle Effectively	9
Exit Power and Mid Turn Stability	13
Throttle and Lean: The Less Known Trap.....	16
Vision: A Key to Speed	19
Body Position and Knee Down.....	22
Using Your Lower Body on Track	26
Riding in the Wet	29
Raising Corner Entry Speed.....	31
How to Overtake Riders on Track	34
Thank You!	37

The Racing Line

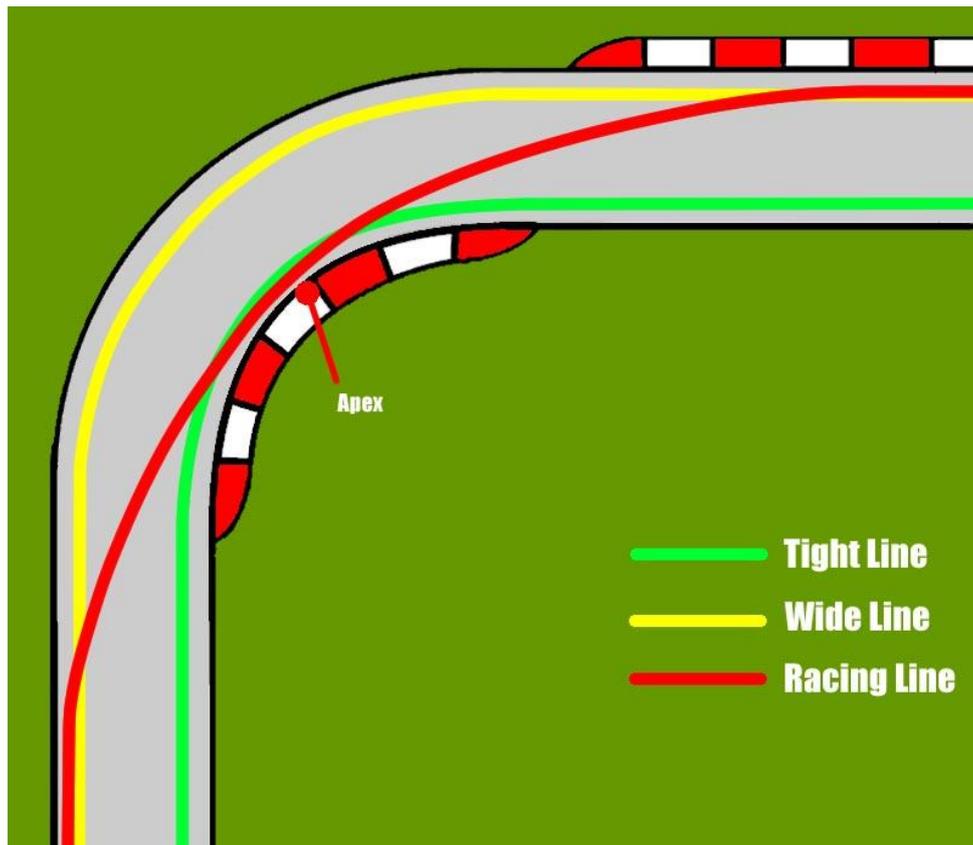
As a relative newcomer to track days you may not have any knowledge of what the racing line is. You may have even been taking part in track days for a little while, but there's a chance you might not be familiar with exactly what it is and how it helps us.

Here I want to share with you the basics of a racing line and exactly what you're trying to achieve with it.

What is the Racing Line?

Put simply, the racing line is your attempt to create the largest possible radius when travelling from your turn-in point, through the corner, and out to your exit point. Sounds pretty straight forward, but let's look into why we do this.

Look at the diagram below. I have detailed three possible lines through this 90 degree right hand bend. Let's look at how the lines differ.



Tight Line - The tight line sees you approaching the corner on the inside of the track with the intention of staying on the inside throughout the whole corner.

Because the inside of the bend is a smaller radius, we need to turn tighter to stay on the inside of the track, which also means we have to scrub off a lot of the potential corner speed to stop ourselves shooting off the other side of the track on the exit.

Wide Line - Things start to get a little faster on a wide line. By staying on the outside of the track throughout the turn we can now take more speed into the bend because the radius of the turn is larger than the tight line.

This sounds good, but because we're effectively taking the long way round the extra speed doesn't make a massive difference time wise because we have to travel a greater distance to complete the turn.

The Racing Line - This line through the bend sees a combination of both the previous lines. The act of starting on the outside of the track, turning in to meet the inside, and then naturally moving back to the outside creates the largest possible radius for the turn, meaning even higher achievable speeds.

With the racing line you are trying to straighten out the corner as much as you can and in doing so you create a flatter arc. A flatter arc means you don't have to turn as sharp, which therefore means you can carry more speed into and through the turn.

It's fairly simple when you break it down, we can travel faster in a straight line than we can when turning, so by using the racing line through a bend you are making it as straight as possible to maximise corner speed.

Try to adopt the racing line when you're next out on track to both increase your corner speed, but also increase overall safety by giving yourself more room for error.

Braking Technique for the Track

Braking should be a pretty simple affair, but you'd be surprised to know that out of all the riding techniques we use on track, it is during braking that the greatest number of panic buttons are pushed if not done correctly.

In this chapter I have outlined what we should work towards to improve our braking technique, as well as some of the results of getting it wrong; this I hope will leave you feeling confident on the brakes and have you pushing back your markers with ease.

The Primary Goal of Braking

Believe it or not, the goal of braking isn't to simply slam on the anchors as hard as you can and slow down as quick as possible. Slowing the bike down is obviously part of the goal, but how we do that can have a positive or negative impact on the corner ahead.

Every rider will have an entry speed they want to achieve, the primary goal of braking is to use the brakes to set that speed in as little time as possible without negatively affecting your corner entry speed and line. This means that there will often be a trade-off between outright braking potential and corner entry composure. The goal is to find the balance of both to maximise potential for that particular corner.

The Structure of Braking

As you may know, we don't apply constant pressure to the lever when braking, the pressure will vary from the time you first apply the brake to the time you release the lever. There are a number of ways in which you can structure your braking – that is to mean the points in the braking zone where you apply full brakes, soft brakes, or everything in between.

The most effective way to *set our speed* for a corner is to get the bulk of the braking done before you arrive at the point where you want to steer into the corner. If you leave all your hard braking right up until it's time to steer the bike it will often have you feeling like you're going in too fast, causing you to over brake and ultimately go in too slow.

It can also potentially have you making more serious mistakes like missing your markers, carrying too much brake into the corner (risking traction loss) or simply having you fall into a panic situation.

Instead, what would be more ideal is to start off by braking hard at first then trailing the brake pressure off as you approach your turn point.

This will not only have you feeling more relaxed at the turn point, but you will no doubt be going faster too. Another plus is that you'll feel less rushed, meaning more concentration on what's to come after you have finished your braking.

The Application of the Brake

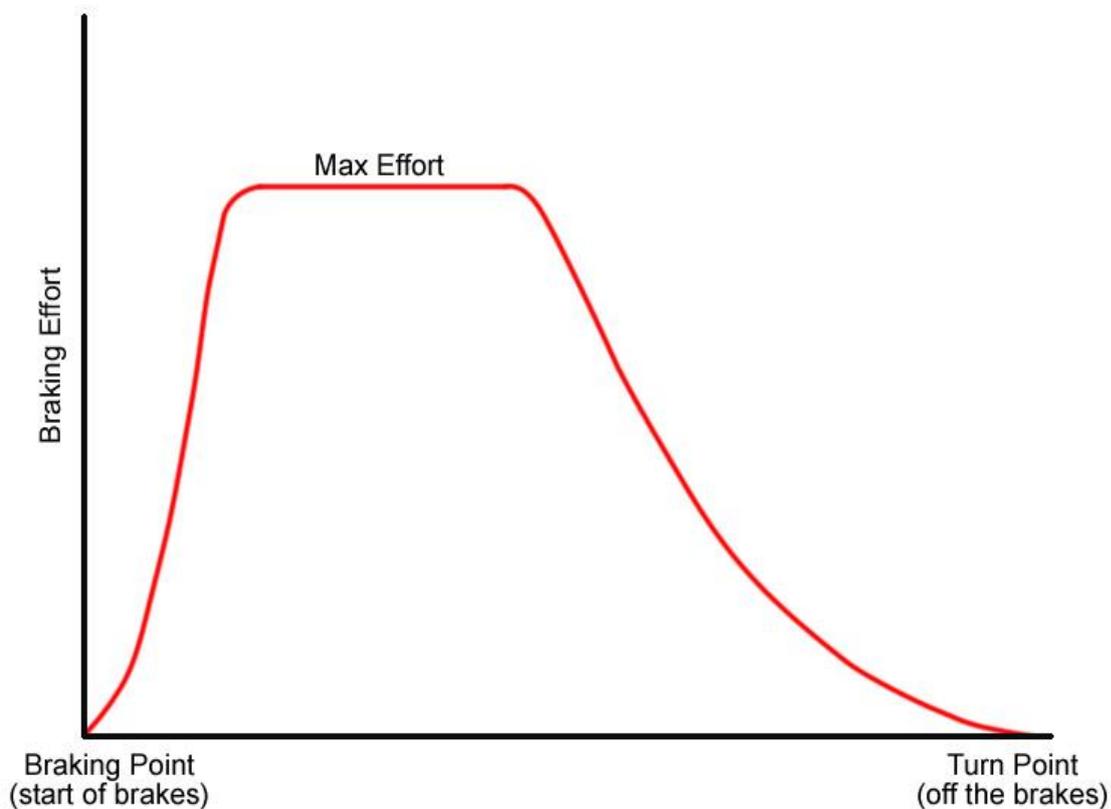
When talking about the initial application of the brake there's only really one main point to raise, and that is don't snap the brakes on.

By snapping the brakes on you are risking the suspension bottoming out which will increase the chances of the front wheel locking up (though it should be said that if your suspension is set up properly and is working correctly it shouldn't be bottoming out).

Brake application should in fact be quick (between a quarter and half a second between initial application and full power), but it should not be instant.

Look at the line graph below which shows your ideal braking efforts between your braking point and turn point. Note the steep curve from initial application to full brakes and how the line stays at the top of the graph while the speed is scrubbed off.

As the rider gets closer to the turn point you can see the line come back down the graph slowly as the brakes are tapered off.



The only other point to mention about brake application is what to do in the instance of a wheel lock up. If this happens then ease the pressure off the brake lever to allow the front wheel to start turning and stabilise itself and the bike.

Another thing to mention is that while newer riders will typically have the majority of their braking effort removed before beginning to commit to the corner, as riders gain more experience they will work to continue braking *past* the tip-in point.

This is known as 'trail braking' and it's something every high-level rider will be implementing to some degree.

A Word on the Rear Brake

Whether or not riders use the rear brake will mainly be down to personal preference, even up to very high levels of racing. In my opinion until you have mastered the use of the front brake for your main braking efforts it's something you don't have to focus on if you don't want to.

Minor speed and line management aside, when talking about pure stopping power alone the rear brake does little to improve the deceleration of your motorcycle, so from a personal standpoint I choose not to use it because of the little benefit it offers.

With that, I'll leave the decision entirely up to you.

Conclusion

The way we should be braking is fairly simple, but even the fanciest braking system in the world won't help you if you don't get it right.

The main lesson to take away is get all your hard braking done early to eradicate your internal panic buttons being pushed, this will mean a more relaxed head at the turn point and fewer mistakes being made as a result. You'll probably be going faster too!

Secondary points are get the brakes on quickly, but don't snap it on as this will only translate into an unsettled bike.

It'll take time and practice, but with enough of it your braking will come along nicely and you'll be pushing your braking markers further back when you see all the time you've given yourself from your braking point to your turn point.

How to Steer Your Motorcycle Effectively

You would be surprised how many people couldn't really tell you how they turn a motorcycle.

For a lot of people they simply arrive at a corner and without even thinking about it they tip in and go round the turn with little thought to what they're doing or what's going on underneath them.

Learning how we can effectively turn a motorcycle can have big benefits to our corner entry as well as helping us improve corner entry speed, setting you well on your way to confident and precise steering actions and turn-ins.

But before we look at how being aware of how to turn a motorcycle can help us, let's first briefly look at some simplified physics behind motorcycle turning.

How We Turn a Motorcycle - Counter Steering

What is counter steering?

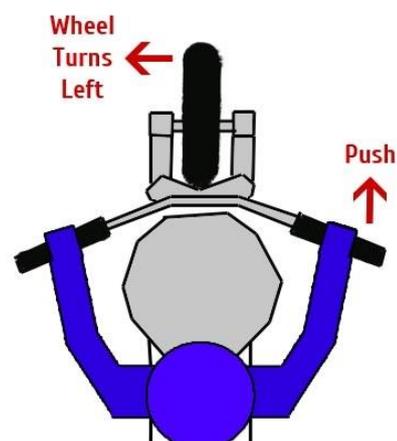
Counter steering is a method used by single track vehicles such as bicycles and motorcycles to initiate lean into a turn.

The idea is that - at anything above running pace - we briefly steer counter to the direction we actually wish to travel to get the desired lean angle for a turn.

So if you want to lean to the right, you steer left and the bike tips in to the right.

An easier way of saying it is if you wish to go right, just push on the right handlebar and this will initiate the lean in that direction.

To Turn/Lean Right



Is counter steering easy to learn?

I will confidently answer yes to this question, simply because I know you do it already! Counter steering is often talked about as a technique we can learn and try out, something that is separate from how we ride 'normally', but the simple fact is that counter steering is the only way to effectively and accurately steer a motorcycle.

You might think this isn't true as you've never tried it, but what you don't realise is that when you lean/tip into a corner, you subconsciously push on the inside bar to get the bike to lean over and go round the turn.

Still don't believe me? I ask you this then, if physics dictate that when you push on the right handlebar the bike tips to the right, what would happen if you tried to turn 'normally' (pushed on the left bar) and steered the front wheel into the turn to go round that same right hander?

The physics wouldn't change and lean the bike to the right again, that's for sure. Instead the bike would tip to the left because you are now counter steering in the other direction.

Whether you are conscious of you doing it or not, believe me when I say that counter steering is the **ONLY** way to effectively and accurately steer a motorcycle into a turn.

What About Other Turning Techniques?

You may have heard of different techniques for leaning a motorcycle such as body steering, or weighting the pegs, but while it is true that these techniques effect the lean angle of your bike to a degree, they are nowhere near as accurate as using controlled counter steering and should in no way be a substitute for it.

Now you know how a motorcycle is turned, we'll expand to how you can get the most out of it.

Learn Quicker Steering

As you'll see later in the Advance Lines: Squaring Off chapter, it can be beneficial to run deeper into the corner and turn quicker for a number of reasons which are detailed in that chapter.

Aside from the speed related dynamics of a motorcycle (the faster you are travelling, the harder it is to change your bike's angle relative to the road), it is the forces you apply to the bars that determine how quick you steer the bike and lean it over.

A more aggressive counter steering action - pushing harder on the inside bar - would see the bike lean over much quicker than if you were to push very gently on the bar.

Quick steering will unlock speed for you in a lot of areas, particularly if you are fairly new to the track and have a slow steering action. This is because for a given turn point, a quicker steering rate allows you to carry **MORE** speed into a corner.

Learning quick steering gives you more options with the lines you create, but it also flat out unlocks speed. It's a skill you should most definitely add to your riding arsenal.

Making Steering Easier

So now we know how you actually turn your motorcycle and that you should work to improve your steering rate (how quickly you lean the bike over), let's look at how you can make the act of steering a much easier task.

Forearms more parallel with the track – Imagine trying to turn the bike with the handlebars while standing up on your pegs so your arms are at a very steep angle to the bike. I'm sure you would agree it would be extremely difficult to put positive pressure through the bars and turn the bike from this position.

However, by bringing your head and upper body closer to the tank (while sitting of course) so your forearms are more parallel with the ground, you are pushing on the bars in a direction with less resistance, making putting pressure through the bars and steering the bike a much easier task.

Relaxed on the bars – By clinging onto the bars for dear life while hanging off the bike you are not only restricting the front end from doing its job, but you are also going to make the act of pushing on the bars difficult because your arms are tense.

By using your lower body and core to create support for your upper body, you will free up your arms to deal with the delicate matter of getting the bike turned.

Get into position early – By getting your lower body into its cornering body position early (before braking ideally), once you arrive at your turn point the only thing you will have to concentrate on is turning the bike and moving your upper body into the turn (see below for more info on this).

Some riders get into their cornering position right as they are trying to steer the bike, meaning they unsettle the bike right when they're asking it to dive into a turn. This is not ideal.

Go With the Bike, Don't Push it Under You

You see a lot of riders doing this and it generally comes from sitting quite upright on the bike.

A lot of inexperienced riders have the tendency to push on the inside bar but also push the bike away from them as it starts to lean, straightening the arm doing the pushing in the process; much like a motocross rider would.

This sees the bike start to lean but the rider staying where they are. For road racing bikes, this isn't best practice.

ESSENTIAL RIDING SKILLS

It isn't ideal for two reasons. The first being that you are using more of the bike's lean angle than necessary (hanging off to the inside of the bike means you don't have to lean it as much), and the second is you are making the act of turning itself more difficult because your forearms aren't parallel as described earlier.



Instead, you should get your upper body closer to the tank and hang off to the inside of the bike - in the direction you are about to travel - to stop yourself pushing the bike underneath you. This will make going with the bike that much easier.

Conclusion

A lot of problems can be caused as we enter the corner if we don't know how to steer a motorcycle and are not steering it effectively, so just being conscious of how we actually lean the bike and change direction is a good first step to improving our corner entry and gaining consistency with our tip-ins.

Go out and try to become more aware of what you are actually doing with the bars, once you can feel what you are doing you can then start to take the steps outlined above to help make the actual task of getting the bike turned much easier.

If you can do that then I hope that you will see your turning become more accurate, consistent, less labour intensive, as well as generally making your riding safer through your greater control of steering, and in turn lean angle.

Exit Power and Mid Turn Stability

When looking at making gains on the track, one of the biggest benefits (if not the biggest) comes from drive out of the bends, but this is one area where a lot of riders struggle to improve, and with the images we see on TV of racers being catapulted out of their seats for a flying lesson, it's no wonder.

Getting on the power out of bends is one of the hardest aspects of riding a motorcycle on the track to improve, with many fearing the dreaded high side.

However that doesn't mean I can't help you here, and there are a few points that can be raised to get you thinking about what areas you should be looking at on your quest to improve your drive out of bends.

Is Your Line Letting You Maximise Your Exit Drive?

If you are using a shallow entry line (turning in too early and too slowly) this will only have you running wide on the exit and it'll prevent you from getting on the power because you will be turning for much longer to get the bike pointed up the track.

By steering the bike quicker and deeper than you did before you will allow yourself to get on the power harder, much earlier because of the straighter line you've given yourself out of the corner at corner exit. The Advance Lines: Squaring Off chapter will give you a better understanding of why this line is beneficial.

Picking Up the Bike is Key

Your ability to pick the bike up quickly will dictate how hard you can get on the power out of bends, this is because picking the bike up reduces the cornering forces the tyres are subjected to, so it allows you to then be more aggressive with your throttle application.

It's worth noting though that this point goes hand in hand with the previous point and if you're taking a shallow entry line, trying to pick the bike up quickly at (or just after) your apex will probably only see you heading off the track.

Therefore it is your line in to the corner that dictates how quickly you can pick the bike up, and how quickly you pick the bike up that dictates how hard you can get on the throttle.

But just how do we pick up the bike? If you read the chapter on How to Steer Your Bike Effectively you'll know that we use counter steering to tip-in and set our lean angle for a corner, but how do we pick it up?

It's easy, just do the reverse!

To lean the bike into a turn we push on the inside bar. When you want the bike to stand up, just pull on the inside bar and it will stand up. All you are doing is counter steering in the other direction. It's so simple!

Let Your Eyes Show Your Brain the Space

A very common trait that a lot of riders adopt is to spend too much time focusing on the apex, to the point where they are right on top of the apex and still looking down at it.

It's only once they make it to the other side of the apex and look up to find out where they're heading do that they actually see how much space they do or do not have.

Instead, once you are confident you are going to hit your apex (different people will have different timings, but for me it's about 2-3 bike lengths away from the apex), look up and out to your exit and more often than not you will realise that you could have picked the bike up earlier and got on the power sooner because of the extra space you can now *see*. This is one of many ways your visual skills can help you.

Mid Turn Throttle Control – Timing is Key!

The biggest hindrance to less experienced riders is poor throttle timing.

Apply the throttle too early in the corner before your line is properly set and you're going to run wide. Apply it too late and you're simply wasting time (and probably messing up your line their too)

You should only open the throttle once your bike is on the right line mid-corner and you're sure you're going to hit your apex and/or exit point.

Once it's open and you're confident in your line, then you can start developing the throttle and very gradually rolling it on, only increasing that rolling on once you can begin standing the bike up.

The Fear of Slides at Corner Exits

A common fear when talking about drive out of corners is the fear of the back end stepping out or sliding, but let me offer you this comfort blanket. If the back steps out when you start to apply your exit power, I would very much like to assume that because you are at the exit of the corner you are starting to pick the bike up as a natural part of the corner exit routine.

Yes the rear may have stepped out, but as you pick the bike up you are picking it up into the slide and aligning the front and rear wheels once more, meaning eventually the rear tyre will regain full grip because the bike is now upright.

Look at the GP riders at Sepang as an example (pictured right) they get the back to step out and slide but then start their pick up to fire the bike out the other side (the benefit being they can get the bike pointed up the track earlier so they can get it upright earlier), but do they crash as soon as the rear starts to slide? No.



While I don't expect anyone to go out and start sliding around Casey Stoner style (he has waaay more talent), it certainly eases the fears knowing that even if the back steps out as you are exiting a corner, the fact you are picking the bike up will go a long way to stopping it getting out of control (not chopping the throttle helps massively too), all the while the bike's dynamics will keep it from hitting the deck long enough for you to pick it up.

However, this should not be mistaken for getting greedy with the throttle while the bike is right on its side (sliding on the edge of the tyre doesn't last long, or end well). What I'm talking about here is the back end stepping out as you are picking the bike up and getting it onto the portion of the tyre where meaningful power is usually applied.

Throttle and Lean: The Less Known Trap

When looking at your typical track day crashes, a large majority of them will be a result of a loss of traction from the rear tyre, usually around the exit of a turn.

You don't often see track day riders losing the front, simply because they won't be pushing the front hard enough for it to break traction.

You may see the front being lost on occasion (often mid turn), but this is usually a result of chopping the throttle or applying the brakes while carrying high lean angle.

Even so, at track day level it is usually a loss in traction at the rear that sends riders on a trip to the gravel trap.

Unfortunately though, riders are too quick to dismiss the issue as being down to a worn out tyre, or simply being too greedy with the throttle, but there is a very common issue you see among losses in rear end traction, and one that is not very well-known.

I call it, throttle and lean.

What is it? And why is it bad?

Put simply, it is the act of applying throttle (accelerating) and turning the bike (adding lean angle) at the same time in the middle of a corner.

As you'll no doubt know, your tyres have a sort of traction allowance, and provided your actions on the bike use up no more than that maximum allowance, you'll happily circulate round and round the track all day long with a cheesy smile on your face.

An example of going over that allowance would be a bike at high lean slamming on the front brake mid corner. High lean already uses up a lot of your traction allowance, and by grabbing the brake you would be asking much more of the front tyre than it can handle, resulting in a loss in traction and a trip back to the paddock in the wagon of shame.

Just like too much brake at high lean can exceed your traction allowance, so can throttle and lean.

What happens when we throttle and lean?

Ok, so we know that a bike at high lean (not necessarily maximum lean) is using up a lot of the tyre's traction allowance, but what else happens to cause the rear tyre to let go?

First, a little explanation is needed.

Just as changing the sprocket size on your bike will change the gearing, changing the size of the rear wheel will do the same. If you was to throw a ten inch wheel on the back, the bike would then be able to accelerate faster.

Now, consider the shape of a modern day motorcycle tyre. The diameter of the centre of the tyre is considerably larger than that of the edge of the tyre, right?

So what do you think happens when the bike leans over right to the edge of the tyre? It changes the gearing! In this case it actually shortens the gearing, which in turn means the rear wheel will spin up faster when applying throttle compared to when the bike is stood up.

Watching the top riders in MotoGP is a prime example of this. Watch them in turns where they flick the bike right over very quickly (turn 3 at Jerez is a good example) and notice how the revs go up.

This isn't the riders accelerating as they lean it over, the revs go up because the gearing has been shortened by the bike going over onto the edge of the tyre.

Why the loss in traction?

High lean angles take up a lot of your traction allowance, rolling on the throttle as part of your mid corner and exit routine takes up even more still, then when you lean the bike over more (to change your line) it raises the gearing and effectively means you are now accelerating even harder than you were before, even if you continue the same rate of throttle roll on.

Another factor comes from the fact you are asking the bike to do two different things.

Once you get back to the throttle to start your mid corner maintenance throttle, the bike will then want to hold the line it's currently on. Or, if you roll on enough you may even start to run a little wider.

So, with the throttle you are getting the bike to hold the line or perhaps run a little wide. To then press on the inside bar and try to tighten the line goes right against what you're asking the bike to do with the throttle.

This conflict, together with the gearing effect detailed above adds up enough to surpass the traction allowance and cause the rear tyre to break away.

A Prime Example

You see it a lot at turn exits where riders have gone wide. They realise they're running wide so they lean the bike more to get it back on a good line, but they still maintain their original throttle plan and start rolling on at the exit as normal. The result?

Extra lean + normal exit throttle = loss in traction.

I know first-hand of the consequences of this, as it was how I crashed out of my very first track day.

In a bid to chase the knee down grail, on the exit of Druids at Brands Hatch I could see I had a lot of track to play with, so I tried to lean the bike more while continuing my exit throttle.

While not a corner exit, the first twenty seconds of this video demonstrates perfectly the results of throttle and lean.

<https://www.youtube.com/watch?v=HM-k0yD-c58>

The rider turns into the left hander, starts to apply their mid turn roll on, but then incorrectly continues to add more and more lean while continuing their throttle roll on. The result speaks for itself.

Today's Tyres Mask the Issue

The track tyres of today are so good that they will mask this issue for a lot of riders, and you may not experience problems until you are much faster and getting close to the limits of traction, in which case it's worth nipping this in the bud right from the off so it doesn't cause issues later down the line. So, your mantra should be...

Never add throttle and lean at the same time mid-corner at high lean.

The Slight Exception

For a lot of newcomers, it is only once the bike is fully stood up that they apply full throttle. However, at slight lean angles you can actually apply full throttle without issues. This is because there aren't enough cornering forces going through the tyres for full throttle to cause a break in traction.

So, you can in fact apply throttle (even full throttle) while adding slight lean. Watch the MotoGP guys go through turns six and seven at Assen for a prime example.

This is definitely one of the more common track day crashes, and I hope the above has opened your eyes to it, because this, something so simple, can be the difference between going home with your bike intact, or in pieces.

Just remember, at anything more than slight lean angles, throttle should not be applied while adding lean. If you feel it is a must for a particular turn, then there is more likely an issue with how you are performing the initial stages of a corner.

Vision: A Key to Speed

It's no great mystery what ultimately holds us back from going faster as track day riders. In the end what we do on the bike is governed mainly by the decisions our brains make, in turn allowing us to perform tasks based on the information our five senses are feeding them.

Out of the five senses then, which is the most important to have under control in order to go faster around the track? The title is a bit of a give away, but if you guessed vision then you are indeed correct. If you guessed taste....well then there's no hope for you.

How fast you can go round a corner is massively influenced by what your eyes are communicating about the space ahead of you and where you are in relation to it. If your visual skills aren't up to scratch, your perception of your speed, position and available space will be negatively affected and leave you riding well below your potential.

Having your visuals working to help you is one of the most important aspects of going fast, but it can also be one of the most complex, and while I don't hope to perfect your visual skills in this guide I do want to open your eyes (no pun intended) to a few points that will get you going in the right direction.

The Things to Combat

The first and most common trait that new (and even some experienced) riders tend to show is a tendency to ride "blind". This is from a combination of not looking far enough up the track through the different stages of a corner, as well as not having any real references for where they're going and where they want to be.

The lack of real reference markers means that the rider is almost feeling their way around the track and as such they will be very inconsistent with their lines through the corners.

Another downside to riding blind is the fact that riders are often left feeling rushed, typically as they reach the entry point, because their brain is receiving all the information about where they are and what's coming up in too little time.

As a result they are never fully prepared for what's ahead of them, and when the time comes they have to deal with something unexpectedly, be it an oil spill on the track, a bike coming up the inside and sitting them up harshly, or they find they're running wide, the panic buttons are pushed hard and the consequences are usually not so good.

Another common trap that riders get caught in is target fixation, something that is more often than not brought on from the above – riding blind and then being surprised by something. For example, a rider will go flying into a bend then on the exit realize they are starting to run wide, as a result they look at the exact spot they don't want to go to – the outside of the track.

You may well have heard the phrase that when riding a motorcycle 'we go where we look', and that's exactly what happens in this situation. The rider drifts further and further to the

outside of the track because all of their attention is fixed there, they then become frozen on the bars and controls and sure enough end up taking an off-track excursion. Instead if the rider was looking up the track where they wanted to go, their visual skills probably would have saved them.

Vision Skills That Can Help Us

Reference Markers – By using reference markers around a corner, it gives us a way to map out exactly where we want to be and where we want to go, as well as a way to gauge whether or not we are correctly positioned for the different stages of a corner. In the end you can map out your whole corner from braking marker, to turn, apex and exit markers. You are almost giving yourself a dot to dot map to follow around the track.

Looking Ahead – Moving your eyes up and ahead of you to your next reference marker is a sure fire way to have you feeling more calm and collected at speed. You can see where you are in relation to your next reference so you know how much time you have to get there, and when you do get there you know where the next one is because you are always looking ahead.

This means that not only do you know where you're about to be, but where you'll be after that, giving you a much better perceptiveness of the time and space you have to work with, which not only helps you ride faster but it also further goes towards stopping those panic buttons being pushed in the event of something going wrong or surprising you.

Wider Vision – While I am advocating the use of reference markers and focusing on them to map out your route around the track, it's possible to be TOO focused. Focus too much on one marker to the point where you lose everything else and you're going to run into the same problems.

By expanding your vision and using your peripherals to monitor other markers or other riders, you can take your 'looking ahead' skills that one step further.

A great drill that the California Superbike School teaches to demonstrate a use of wider vision is the Two Step. This teaches riders to focus on their turn marker as they are heading towards it, then when they reach a certain point, move their heads and look in to the corner to find their apex while they're still heading towards their turn marker, using their peripheral vision to track it and establish when they have reached it so they know when to turn.

The benefit being that once you arrive at your turn marker, because you are already looking at your apex you know exactly where you want to go and how much and how quickly you need to steer to get there.

More information about the Two Step can be found in Keith Code's: A Twist of the Wrist II

Once you start to practice widening your vision, you will eventually be able to "see" objects or markers without actually looking at them.

Conclusion

All too many people head straight for things like body position, braking and throttle control to gain time on the track, and while they are indeed important aspects, your visual skills are arguably the most important element to have in check in order to become a fast, controlled and consistent rider.

It is not a skill to be neglected if you hope to achieve true speed (and safety) around the track. Get those eyes open and move that vision forward and you will feel like time slows down, and as a result you will actually start riding quicker!

Body Position and Knee Down

Note: This chapter was originally written mainly for people who are looking to get their knee down, but it still serves as a great guide for getting your body position up to scratch and getting you feeling comfortable on the bike if you feel your current setup needs it.

I begrudge calling this a how to get your knee down guide, because I don't want it to come across as a guide for showing off. However, as I was told by Neil Hodgson himself (shameless name drop) in an instruction session years ago, getting your knee down is an important part of riding on track.

Getting your knee down is our only real physical gauge on how far we are leaning the bike - aside from the more dangerous pegs, belly pan or end can method. When you know how far you're leaning it inspires confidence that you and the bike are perfectly happy to take it that far at a moment's notice.

With that then, here's my guide to help you sort out your body position and get yourself on your way to your first knee down.

It's All About the Body Position and Speed

You'll be surprised to know that in most cases you're probably not that far off from the lean angles needed to get your knee down, but because your body position is way off it looks like you're miles away. Here are some points to help you get in the right position.

We'll start from the bottom:

Feet stable on the pegs - There are different ways to set up the feet, but as long as they provide you with a stable base for the rest of your body you're on the right lines. Personally I find it best to have both pegs just in front of the balls of your feet, like you're almost trying to wrap your toes around the pegs. This allows me to slightly raise my calf on the outside leg (the leg you're not trying to get your knee down with) and lock my knee and upper leg into the tank.

The inside foot sees the peg in the same position, but with a very slight turning of the heel inward towards the bike. If you've got a heel plate you can turn it in and rest it on that as a reference.

You will see other riders and even professional racers with their feet in different positions. One of the favourites is to have the peg in the middle of the outside foot with the toes pointing outward.

Again it's all about personal preference, but the most important thing the feet can do as said above is set up a stable base for the rest of your body (for moving around on the bike, weight transference etc), which leads me nicely onto the next point.

Your legs hold you on the bike, not your hands - With your feet positioned as described above, you should then have your outside leg up against the tank and providing support, this and the outside peg will be your main anchor points (more on this in the following chapter) which come from pressing down on the peg and pulling the leg into the tank.

Stick your inside knee out as far as you can without straining. This is where pointing your heel (on the inside leg) inwards towards the bike helps as it gives you a little more turn at the hip to stick your knee out.

How much cheek off seat? - It's as simple as, as much as you wish while still being stable and anchored on the bike without the need to hang on with your arms. A good starting point is to hang one cheek off, although some people slide all of their bum off, others only half a cheek. It's something you'll find in time, but the end result should always have you stable on the bike and not hanging on the bars.

Not too close to the tank - If you sit with your nut sack (or lady garden) being pulverised by the tank, when you come to slide off to one side you will have a tendency to rotate around the tank, pushing your inside knee to the front of the bike, rather than outward towards the road/track. Sit a few inches back so you can easily slide sideways on your seat. Your inner thigh will then be where your crotch once was.

Some riders feel that sitting right up to the tank aids you in the braking zone and also helps you get more weight forward to help stop wheelies on corner exits, but personally I prefer to sit off the tank a little because it more easily allows me to get in to the position I want to be in.

Don't forget your head - Again different people have different styles, but a nice neutral position will see your head sitting roughly where the inside mirror would be on any modern sports bike.

Imagine trying to look at yourself in the mirror and you won't be far off a nice head position.

To give you an idea of how it should look, imagine looking at yourself from a bird's eye view and drawing a line from your head down your spine to your tail bone.

Now when hanging off, that line should be roughly parallel with the line of your bike running right down the middle from front to back.

What you don't really want is your lower body hanging off with your head still central on the bike. This will have you crossed up on the bike and will actually make it harder to stick your knee out correctly.

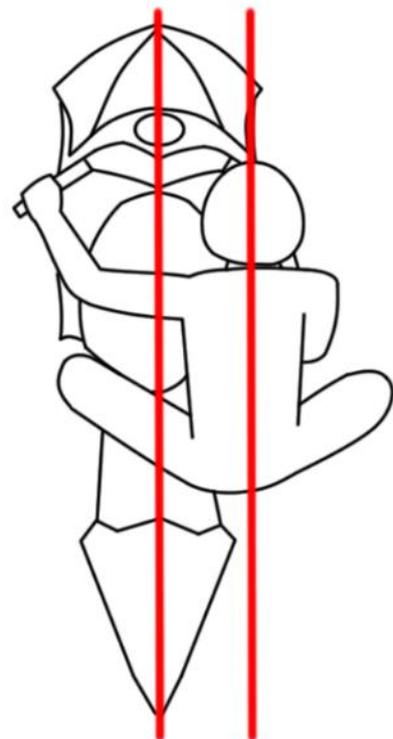


FIG. 1

Hanging off makes you lean the bike less - If you are correctly getting your body off and down to the inside of the bike you are creating a lower centre of gravity for you and the bike, meaning the bike doesn't need to be leaned as far as it would if you were going around the same corner at the same speed but sitting bolt upright.

Get into position early - Get into position before you arrive at your turning point. Trying to move around on the bike while trying to turn will only add instability to the bike through unnecessary input, created from you moving your weight around and pulling on the bars to get into position. I won't go into further detail as it's a little out of scope for this chapter, but just remember, get into position early.

Build your speed slowly - I'm sure you don't need me to tell you, but you can have the greatest body position setup in the world, but if you're travelling at 5mph you're not going to be getting your knee down anytime soon.

However, you don't need to be going 100mph either, especially if it's a tighter radius corner.

If you don't get your knee down after applying the above, let your speed naturally increase (and with it your confidence) and the necessary lean angles will come in time. Don't rush trying to carry too much lean if it is going to place you well outside your comfort zone.

Try it Yourself!

If you have one, put your bike on its side stand and have a sit on your bike and practice getting into the position detailed above.

Note where you can feel yourself hanging on. If you can feel a strain in your arms, concentrate on tightening your leg muscles to clamp yourself on the bike.

The end result should see you being able to remove your hands from the bars completely, meaning that when riding you'll have a nice relaxed grip on the bars to leave the front end to do its job of stabilising the bike.

Don't worry if you can't let go for too long, it's harder to do when the bike is standing still, however you shouldn't be falling off the bike as soon as you let go and should feel fairly comfortable taking your hands off.

Conclusion

Please note that this is not the definitive motorcycle body position manual. You will see plenty of track day riders and professional racers alike that do things differently, but the steps outlined above should give you a very good base to start from.

Something I've learned in my time doing track days is that too much emphasis is put on body position when riders are looking at areas to improve, when in fact there are more rewarding areas to concentrate on to improve your riding, such as your vision or exit throttle.

However, I know what it's like to chase your first knee down and to get that feeling of euphoria after it comes, and because of this I completely understand why riders want to try and achieve it.

So take the body position tips above and apply them to your riding, it should set you well on your way to tidying up a sloppy riding position and/or getting your knee down for the first time.

If it doesn't happen straight away give it time. As your speed naturally increases it will most certainly happen if you have a sound body position setup.

Using Your Lower Body on Track

The way the sports bikes of today look and make you sit wasn't just a fluke from generations of design changes.

The position of the pegs, seat, tank and bars have been meticulously defined to put riders in a position that will enable them to best handle the bike and use it as intended.

What you find with many inexperienced and experienced riders alike (I would guess born out of many miles road riding) is a tendency to rely on mainly one area for stabilising themselves on the bike – the bars.

The pegs, seat, grooves in side of the tank and overall shape of it have all been designed and positioned to give you multiple points of contact that you can use to anchor yourself to the bike.

With a little work from your lower body you can give yourself a stable base to work from that will allow you to ride not only quicker, but safer too. Here are the ways in which your lower body can help you and the bike.

The Front End is for Steering and Bike Stabilisation Only!

You may not know it, but believe me when I tell you that the front end has an extremely important job of keeping the bike upright and stable.

As you've probably seen many times, a rider can take their hands off the bars and quite happily maintain their course without fear of ever getting intimate with the tarmac, and (without getting into deeper motorcycle dynamics territory) this is largely down to the front end working as it should by design.

When you throw on a rider that rides with arms stiff as a board and hangs onto the bars for dear life mid-corner, the front end isn't happy because it can't freely do its job of keeping the bike stable.

As a result, it could act unfavourably when trying to deal with the contours of the track (tank slapper anyone?).

On the flip side, with a rider that is well set up and supported on the bike using their lower body and core muscles, the front end is happy as Larry because it hasn't got a sizeable weight pulling it all over the place while it tries to deal with bumps and undulations.

The only time we want to interfere with the front end is when we want to change the direction of travel, which I should add is made a great deal easier when you're not hanging on the bars in terms of the effort it takes to steer the bike, the fine level at which you can now make minor corrections, and the extra level of feel you get to slight movements from the front end.

Benefits on the Brakes

There are also benefits to using your lower body to support yourself during your braking efforts.

When you're hard on the brakes, if you rely solely on your arms to brace yourself it means that more unwanted weight is being transferred to the front end, but what's more is the rider often stays in this stiff straight arm position at the turn point which will again make the act of turning the bike more difficult.

By gripping the tank with your knees to stop yourself sliding forward and using your core muscles to support your upper body, you are giving the front end an easier time but also leaving your upper body a little more free and relaxed to accurately steer the bike at corner entry.

As a side note, have a look at Stompgrrips for your bike, they make using the tank for stability an awful lot easier, particularly on the brakes. I personally would never do without them now.

Give Your Suspension an Easier Time

It sounds strange, but you as the rider can in fact act as part of the suspension. By taking some of the weight off the seat and weighting the pegs you are using your own legs to help absorb bumps, which will in turn give your bike and its suspension an easier time of dealing with your fleshy mass.

Flicking From One Side to the Other (Chicanes)

Another time when you can benefit from using your lower body is during quick flick chicanes. During a chicane there will be a time when you need to move your body from one side of the bike to the other, and what a lot of riders tend to do in this situation is push their bums out of the seat to move it across to the other side.

The trouble with this is that during the time when you are moving your bum across, your only points of contact with the bike are the pegs and the bars, and while the pegs will be taking most of your weight, you will be using the bars to stabilise yourself.

What happens is that as you're moving your body - and in turn your weight - across the bike, there will more than likely be some unwanted inputs that you make on the bars that will affect the speed and accuracy at which you can steer the bike from one side to the other.

Instead you should look to unweight the seat by pushing on the pegs (not lifting your bum right out the seat) and while using your knees to hold on to the tank, almost slide across the seat into position for the second part of the chicane.

This will see far less unwanted inputs on the bars and you will also free up your arms to do the most important job of accurately counter-steering the bike and flicking it over.

This one takes some practise, but as they say, practise makes perfect!

Again, Try it at Home

With your bike on its centre stand or on a paddock stand, have a go at weighting the pegs and gripping the tank slightly with your knees and then taking your hands off the handle bars.

If you do it slowly, you should feel your legs and lower torso (back and abdomen) coming in to support your upper body. If you struggle to do it, these are the muscles that you need to work on and build up until you can do it more easily.

You can also try this while riding. While keeping your hands on the bars this time, concentrate on getting all of your upper body weight off of your hands and supported by your lower body to the point where you can freely move your arms and hands.

This is the point where you really want to be throughout your riding, hands free to let the front end do its job but also free to easily and accurately turn the bike.

If this is notion pretty new to you it could well feel like it's all a bit much, but with a little fitness work (if you need it) and a bit of practise it soon becomes second nature.

As with most things relating to body position, different riders will do things differently and it's your job to find a position that feels right for you in terms comfort, that also lets you get the results you need i.e. a free upper body and front end.

By using your lower body more and learning how we effectively steer a motorcycle, you'll be amazed at just how easy it is to quickly and accurately get a motorcycle to do what you want; all the while the front end is keeping everything safe and stable for you with its new found freedom.

Riding in the Wet

It amazes me how many people are so quick to write off a track day once the rain starts to fall. People assume that once the track gets a bit wet, all hope is lost for an enjoyable day, but this couldn't be further from the truth.

Obviously if you've only got slick tyres then you'd be classed a mad man for going out, but with a set of dedicated wet weather tyres from any of the main manufacturers there's no reason why you can't have a day that's just as enjoyable as it would have been in the dry.

Even if you're a newcomer to track days and are running road tyres, they too are quite capable in the wet, so don't go writing it off just yet.

It is true however that the margins for error won't be as large in the wet, and there are certain things that you wouldn't necessarily get away with that you would in the dry, so below I have detailed some wet weather riding tips that will help you get the most out of your day even after the heavens have opened.

Keep everything smooth - With the decrease in grip levels the wet brings compared to super sticky dry tyres on a dry track, you can't be quite as aggressive with your actions. Throttle application should be gentle and rolled on smoothly, pressure on the brakes should be built up slowly and a little more gentle too.

Also you should try your best not to chop the throttle mid turn as this will send all the weight to the front and potentially overload the tyre. Lastly your body movement should be smooth and controlled so you don't upset the bike.

Stay relaxed - Being relaxed in the dry is important, but it is even more so when riding in the rain. You want to give your tyres the easiest time possible, and by being relaxed you will free up the front end to do its job of keeping the tyre in good contact with the road, as well preventing your rigid body from causing harsh weight transference when getting on the throttle and on the brakes.

Do everything upright - All of your hard acceleration and braking should be done in a straight line while upright, that way you are putting the biggest strains on the tyres during the time they have zero cornering forces being applied, giving your tyres a lot easier time by not asking them to deal with too much at once.

Trust the tyres - It's obviously natural to be tentative when venturing out onto a wet track, but today's dedicated wet weather tyres provide amazing grip levels if you treat them right.

The lean angles achievable aren't a million miles away from those in the dry, and the most confident of wet weather riders will happily have their knees scraping the tarmac just like they would when the sun is out.

It will take time to build up that confidence, but knowing that wet tyres are capable of taking you there (assuming they're in good condition) sure helps.

Use your body to help you - As you may know, hanging off the bike means the bike doesn't need to lean as far during cornering. Help your tyres out by hanging off the bike to keep it upright and encourage less forces to be applied to them through decreased lean.

This is another point that is also important in the dry, but becomes more relevant when riding a motorcycle in the rain when grip levels are decreased.

Warmers or no warmers? - This is mainly down to personal preference and will differ from rider to rider. Some feel better knowing there's some heat in the tyres, briefly using warmers before they go out, others feel there's no point given how wet track tyres work.

Personally I choose not to use them because of a couple of reasons. The first being that wet tyres heat up quite quickly and because they're generally a softer compound they don't need to run at temperatures as high as dry tyres, so it only takes a short amount of time to build heat into them if you're going at a fair rate.

Secondly, when using warmers and going out on very hot wets, it would be difficult to keep that level of heat in them, so you will likely get the sensation that grip is decreasing in the early part of the session as they cool back down to their operating temperature.

You can soften suspension - If you are one for fettling with your suspension, it wouldn't be a terrible thing to take a few clicks off everything (compression, rebound and preload) to soften it up and help it better deal with the conditions.

I wouldn't worry too much though if this isn't your game, if your bike isn't specifically set up for the dry, i.e. everything made harder, and you don't run a pace on the higher side, then your current settings should cope just fine in the wet.

Conclusion

As said at the start of this article, a little bit of rain does not mean wasted track time if you have the correct tyres to deal with the conditions, and I'm not just talking about racing wets, even today's road tyres are very capable when riding a motorcycle in the rain.

By going out with the right mentality and following the advice above, there is no reason why you can't enjoy a wet track day just like any other.

Some riders greatly enjoy riding in the wet as it is a massive lesson on how to be smooth and controlled on track, something that will only help to benefit you with your dry weather riding in time.

Raising Corner Entry Speed

I would like to say right from the start that this chapter has not been put together for those that are looking to raise corner entry speed to knock a few tenths off their lap times, but rather for those that are struggling to raise corner entry speed through fear of leaning the bike for various reasons, maybe a lack of trust in the tyres or just general inexperience.

Also, there are a whole host of reasons as to why you might be struggling to improve your corner speed; there could be something mental, physical or even mechanical holding you back, so take this as an aid on your quest to improve your corner entry speed.

With that then, let's take a look at some aspects of riding that could be holding you back as well as some things you can do to help yourself improve corner entry speed.

Are You Braking Correctly?

Are you rushing into the corners and leaving all your hard braking as late as possible? If you are, then this can be totally counterproductive.

In an attempt to carry more speed into a turn, a lot of people brake as late as possible and try and charge into a turn thinking they are carrying more speed in.

The reality of this late hard braking approach is that you will often over brake for the turn and go in slower, as well as triggering other panic related issues in the process.

For a more accurate and controlled way of carrying more speed into a corner you want to get all your hard braking done much earlier so you can be letting the brakes off slowly, way before the turn point; this will allow you to more precisely control the speed you carry into the turn.

Be Conscious of Where You Let off the Brakes

Rather than charging into the turn as described above, why not set a modest braking marker and then note the point at which you let **off** the brakes before you turn in. Can you find a marker where you let them off?

After this, using the same initial braking point, why not try to get off the brakes a little earlier this time to carry a little more speed in; this can be a great way to confidently gauge that you are carrying more speed into the turn.

Pick One Corner to Try and Improve

Make it easy for yourself and pick just one corner to try and raise your entry speed on. Pick a corner you enjoy that isn't too fast or too slow that allows you to comfortably gauge the lean angles you are carrying through the corner.

Just work on increasing the corner entry speed for this one corner and when you feel you have reached a level you are happy with, move on to the next.

Follow Faster Riders In

One of the best ways to build confidence in your bikes abilities is to watch and follow other riders go through a corner a little faster than you with no problems or dramas.

This should have you thinking 'well if he can go through there just fine, why can't I?' Find a rider in your group that is slightly faster than you and use them to gauge your speed into the turn, though I wouldn't recommend doing this with a rider that is much faster than you as you don't want to step too far out your comfort zone and panic.

Also as you get to the fastest riders on the day, be mindful that their machinery could be better equipped than yours to deal with higher corner speeds. This method is best suited to those that are confidently sure there is more to get out of their machine.

If you try this method, try not to focus too much on the rider in front. Use them to set your entry speed, but make sure you're still aware of your own reference markers and where you're heading.

Following a rider blindly will only increase the chance of you making an unwanted error.

Widening Your Vision

More often than not your vision will be one of the primary things holding you back from improving your corner entry speed. Focusing too much on a given point or area on the approach to a turn will give you a sense of tunnel vision which may cause you to be too cautious with the speed you take into the corner.

Instead, try to widen your vision and become aware of the area around not only where you're going, but also where you want to be. People will often refer to this as looking through the corner.

Becoming more conscious of your intended route will give your mind a kind of map around the corner, which will in turn show your mind just how much time and space it really has to work with.

Set Yourself Up Early

Rather than giving yourself 101 things to do near the turn point, get yourself and the bike prepared for the turn well in advance so you can concentrate on the one thing you are trying to improve.

That means getting yourself into position on track, making sure you're in the right gear and setting your body position ready for the turn.

Having Trouble Trusting the Tyres

Building trust in your tyres comes with the experience of knowing what grip and lack of grip feels like, which I know doesn't really help solve your lack of tyre trust, but you should know that modern sports tyres will grip all day long at your bikes maximum lean angle (to the point where something on the bike will ground out before the tyre lets go) assuming the tyres, bike and surface are in good condition and your riding technique is sound.

Also know that tyres don't just suddenly go from full traction to zero traction. The loss of traction potential from modern tyres will always be gradual, and the tyre will be giving you signals (that even an inexperienced rider will feel) long before it suddenly gives up on you and sends you into a massive slide.

This is again assuming you don't overload the tyre with your own inputs brought on from poor technique.

In the end though it's the rider that determines how much traction the tyres have, so by practising good riding techniques you don't need to 'trust the tyres' because you know you're doing the right things to allow the tyres to give you all the grip you need.

Get Some Instruction

As I said at the start of this chapter, when it comes to the complexities of various riding techniques, there really is no substitute for good coaching.

Having a coach there that you can relay information to about what you're experiencing and how you're feeling, as well as having them watch what you're doing is *THE* best way work towards improving on the weaker areas of your riding, this is because the coach will be able to give you tailor made drills and techniques to help you progress.

Proper instruction should not be undervalued.

Conclusion

Raising corner entry speed is definitely one of the more difficult things to improve when talking about track riding because getting it wrong can trigger a whole host of panic buttons, and there is always a fear of the consequences of getting it wrong.

It's safe to say that it will take time to build your confidence to carry more speed and lean angle into a corner, probably because you feel you are travelling into the unknown somewhat, but by taking the above advice into account as well as putting in the effort to practice it, I feel sure that you will be able to improve your confidence and corner entry speed in good time.

How to Overtake Riders on Track

Overtaking is something that is part and parcel of track days, and getting by a slower rider is something that 99% of riders will have to contend with on any given day.

However, while it is something that the vast majority of riders have to pull off, many will agree that catching a slower rider is one thing, but getting by is another altogether.

Passing isn't so much of a problem when there is a substantial speed difference between you and the rider in front, but when you catch someone that is only marginally slower than you it can be very difficult to get by and you will often find yourself sitting behind them for much longer than you'd like, feeling nothing but frustration. This can, in turn, lead to unsafe passes.

In this chapter then I will cover some points to help you beat the frustration that can come from being stuck behind a slower rider, which I hope will make your passes as swift and painless as possible.

There are a couple of unwritten rules you need consider and bear in mind before we get started though.

There are No Winners on Track Days

The first is that we are dealing with track days and we're not racing. This means that all passes should be courteous, and what you do to get by another rider should affect them as little as possible.

This means no diving up the inside and sitting on their apex or chopping their nose off around the outside. You don't need to be aggressive.

The organiser on the day will tell you the rules for passing during the briefing, but it is usually something along the lines of; leave a six foot gap between you and the other rider and try to do your passing on the straights.

Another point is that it is up to the person doing the overtaking to make it safe, and because riders aren't just going to move over and let you pass them, you need to think about how you can get by without affecting them too much.

Challenge Accepted

As said, it is entirely up to you to make sure a pass is as clean as possible, but when you're stuck behind a rider for a considerable length of time you start to get impatient, and that's the point at which you contemplate some rash moves.

Instead of thinking of the rider in front as a frustration though, think of them as a challenge. Think of the process of overtaking as a chance to use your brain and solve a problem – getting by the rider in front quickly, cleanly and safely.

Patience and Planning are Key!

You don't need to pass on the very next corner! If overtaking them as soon as possible is the only target, this will often lead to rushed passes with little forethought. Instead you need a proper plan of attack. This could take a few corners or a few laps to put in place.

To do this you need to look at what strengths you have over the rider in front as well as note the nature of the track. See where you're quicker.

Do you get out of some corners better? Are you stronger on the brakes? Are there less dicey corners than others? Can you pass in such a way that won't tempt them to attack straight back? If they do attack straight back, what will you do?

These are the types of things you need to consider and look out for when planning your pass. Your strength could simply be you have a faster bike. How can you best use that to your advantage?

If you're on a less powerful bike and it's clear you're faster in the corners, it will be in the twisty sections where you'll have to make your move. If possible, pass on a corner that doesn't lead onto another straight that will allow them to power straight back through.

You need to recognize any advantage you have and make use of them as best you can.

The Usual Passes

On the brakes – Take a tighter entry line and brake a little later and harder (not rushing the corner). Be assertive and put enough of your bike in front to signal your intentions. In this situation the vast majority of riders will give you the corner and leave you to it.

If you can see they're trying to come back at you, you need to decide whether you concede the corner for now or whether you have enough leeway (both in terms of track space and talent) to fend them off comfortably.

On the power – If you find that you're better on the power, leave a gap to the rider in front on entry, square off the corner so you can get on the power earlier and harder and this should give you a good enough run on them.

If you have a more powerful bike this is a sure fire way of getting passed.

If they have the legs on you in terms of power, trying this before a shorter straight will yield the best results because on a longer straight their extra power will eventually negate your extra speed out of the previous bend.

Get a Good View

If you're finding it difficult to get by, rather than following them around on the same line, try moving a foot either side of them to free up your vision so you can see ahead and better judge if there are good opportunities to pass.

It's also worth noting at this point that you should be well focused on your own reference points and mainly using your peripherals to track the rider in front.

Don't get caught in the trap of locking onto them as it will only make your job more difficult because you can't fully utilize the track like you can on a clear lap.

As I said at the start, catching a rider is a completely different kettle of fish to passing them, but with a little patience and planning (keeping a cool head helps too) you'll find frustration levels will be kept to a minimum.

Study the rider in front, work out what advantages you have, then use those advantages as best you can and with time and practice you'll be pulling off passes that are clean, safe and frustration free.

Thank You!

First of all I would just like to say a massive thank you for reading this eBook! It means the absolute world to me.

As I detailed at the start, many many hours have gone into the content that is shown here, and while I'm confident you would have, I truly hope you have gained something from it and that it has sent you down the path to many happy track day miles.



But this isn't the end! Here's some ways you can get hold of more content from Life at Lean to keep this learning and improvement train going!

Free Video Training Series – ROAD TO HIGH-LEVEL RIDING

How to go from complete track riding beginner to knee down "fast guy" (or gal) riding comfortably and confidently in the top riding group...

HERE'S WHAT YOU'LL LEARN:

- *The big mistake many track riders make when trying to go faster, which costs them A LOT of wasted time and frustration.*
- *How to improve confidence at corner entry, so you can begin increasing straight line and corner entry speed.*
- *The full step-by-step road map to go from complete beginner to high-level rider!*

Get it Now! - <https://lifatlean.com/road-to-high-level-riding-workshop>

YouTube Channel

<https://www.youtube.com/c/lifatlean>

Life at Lean Articles

<https://lifatlean.com/all-articles>

.

Outside of that, once again thank you for being part of Life at Lean. You guys rock!

Dan Netting

LIFE AT LEAN