

EARLY FRICTION ZONE DRILL

WHAT IS IT? A slow-speed drill that teaches us to set up the friction zone (clutch/throttle) BEFORE we add lean angle to the motorcycle. Example: Pulling into a parking lot from the street, slowing down and executing a U-turn at an intersection, transitioning from a fast straight section of a timed cone course into a tight slower section. In other words, any situation where we are going from higher speed, upright riding to slower speed turning movements that require the motorcycle to drop in or fall over into a turn.

HOW DOES IT HELP? As speeds drop, inertia diminishes and the effects of gravity increase. So, when we lean our motorcycles over at slow speed, the rate at which the motorcycle falls over increases, causing the rider to experience a “rollercoaster” feeling at times. By setting up the friction zone BEFORE this scenario unfolds, we stabilize the bike earlier, slow down the rate the bike drops into a lean angle, and increases our ability to control the drop because we are already in the friction zone metering out the power to the rear wheel. In summary-we set the tone for the process before gravity is in the equation, rather than the other way around.

From a timed police-style competition standpoint, the above benefits are all in play, however an added benefit is that this is one less task we will need to perform when we are in a tight section of a course and the bike is leaned over.

WHAT SHOULD IT FEEL LIKE WHEN DONE CORRECTLY? Bike should feel lighter upon turn-in, feel more planted in the turn because you already added power to chassis prior to lean-in vs. just coasting. No more “roller-coaster” feeling of the bike starting to fall due to lack of power, motor RPM’s should be steady prior to turn-in.

HOW TO PRACTICE: The key component of this concept is that we **NEVER** at lean angle to the motorcycle until we have the friction zone set and in play. Have that idea in your head as an overarching goal moving forward both on the street and in a competitive pattern. With all drills, start SLOW, using a large figure 8 pattern. Our goal is to learn what this technique **FEELS** like when done correctly.

Find a smooth, flat area away from cars, people, obstacles, debris, distractions, anything that might interfere with your working this drill. When you get frustrated, or make a mistake, take a lap around the area, relax, reset, and start again. **SMILE!** It will help you relax. **DO NOT FORCE THIS DRILL.** Settle in with the idea it will take time. **REMEMBER-** Speed is a byproduct of good practice and **WILL** come in time, but it’s **NOT** the destination. **ENJOY!**

#1 Ride at slow-speed, 1st gear, and in a straight line, clutch fully engaged (all the way out, full power to the rear wheel).

#2 While still riding in a straight line, without any lean-in or turning movement, begin to set up clutch/throttle in the friction zone. Once you feel you have the clutch in friction zone, set up the throttle so the motor is humming (around 200RPM +/- depending on motor type).

#3 Now the bike is ready to lean-in and make a turning movement, so pick a direction and execute a U-turn. *You shouldn’t have to make any radical inputs into brakes or body language in order to smoothly and comfortably get the bike turned around.

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#4 Repeat #3 until you can execute this easily at slow speed, any direction. Once your ability to set up the friction zone starts feeling comfortable, set up a figure 8 pattern and mark the spot (both directions, both cones) where you start lean-in. Make it easily visible while riding. This spot is now the point at which you **MUST** have the friction zone set for lean in. . **Keep in mind, for this first drill our speeds must be slow enough that we are not still slowing the motorcycle when we reach our reference mark to set up the friction zone.**

#5 Now ride the figure 8, **SLOW and SMOOTH**, making sure you are set up in the friction zone/motor humming at least 10' BEFORE the marker you set as the "lean-in" spot. Make SURE you have the friction zone set (**both directions**) so that you lean-in completely smooth and controlled with power to the bike (Friction zone/grey area/cherry patch).

CHALLENGE YOURSELF: For advanced riders, start picking up speed once you can effectively execute the above drills. Understand however, that this will require quick and efficient clutch/throttle set-up (smooth but fast ability to find that friction point). **AND**, as speed picks up significantly, will require you to overlap controls* (you will need braking AND clutch/throttle manipulation) prior to lean-in. Continue to use the same set-up and lean-in markers as you go faster. NOTE: **If you train patterns with NO BRAKES, make sure you set your speed BEFORE you set up clutch/throttle, THEN execute #4.**

*Overlapping controls require complex manipulation of the clutch, throttle, and front/rear brake all at the same time. This is an advanced technique that pays dividends from a performance standpoint, but is difficult or dangerous if not done correctly.