

# MOTOTRIAL BASICS



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# Welcome to the sport of MotoTrial!

Mototrial can be very addicting! If you are a rider that likes to compete or simply play ride, the sport has just enough challenge to get all of the senses going that makes a rider crave more and more each time they go out.

This booklet was printed to provide you with the basic knowledge to learn basic riding techniques.

MotoTrial requires a basic skillset which are called "The Basics". When these basic techniques are mastered, they will help the rider of all skill levels excel in not just MotoTrial, but other off road riding disciplines as well.

The basics include proper body position and techniques for:

- Going up hill and downhill
- Turning on flat ground
- Turning on a hillside
- Wheelies
- Riding over obstacles
- Trick riding

The top mototrial riders of today are seen on Youtube and other social media platforms and while they are amazing to watch as well as intimidating, this type of extreme riding is not what you will find at a local mototrial event.

Local events have courses for most rider abilities including beginners.

We suggest that when

you attend your first event, you try to view the sections the day before to determine what class you feel you are suited for. Keep in mind that sections cannot be ridden before the competition has started.





### Going uphill and downhill:

When going uphill, proper body position and throttle control are very important. Think of going up hills the same way you would walk up stairs. Your body position remains vertical to the ground no matter how steep the stairs are. This is the same as climbing hills on a trials motorcycle.

In Picture 1, When practicing climbing a hill, you will want to start out in first gear as the hill should not be that steep or long. As the bike starts climbing up, rotate your feet on the footpegs as you shift your body forward so that it remains in an up-right vertical position in relation to the motorcycle. Keep your knees slightly bent to absorb any obstacles.

In Picture 2, Going downhill uses a little different technique than going uphill as the body cannot straighten out enough to be vertical with the ground. While going downhill, you will move your body back over the rear fender as you start to go downhill. The proper body position is when the pressure between your hands and the

grips starts to go away, this is the “Neutral” position. Too much pressure against the grips from your hands means you are not far back enough.

Your knees will be bent slightly more than when going uphill. You will want to use both your front and rear brakes, keep in mind that your front brake is 75% of your stopping power while going downhill.

One note to always remember about going up and down hills is to let the front end of the bike “come to you” on up hills or “fall away from you” on down hills, many riders will bring their body to the bike which causes an off balance moment. If your body position remains vertical, it will help with your overall body positioning.



### Turns on flat ground:

The concept of turning is simple, the rider will lean the bike into a turn for the tightest circle while leaning the bike against the riders inside leg, the outside leg and knee are bent outward to maintain a “centered” position over the motorcycle. The riders shoulders will be parallel with the handlebars as the outside arm is bent outward to

also maintain this “centered” position. You can see in picture 1, that even though the bike is leaned over, the rider’s body position remains centered over the bike. This allows for a balanced and controlled turn. Note the riders shoulders in-line with the handlebars and the outside elbow bent outward.

Also note that in picture 2, how far the rear wheel tracks inside of the front wheel while making turns.



## Turns on a hillside:

The concept is the same for turning on hills as it is for turning on a hillside. In Picture 1, The body must remain centered over the motorcycle. The same body position as it is for flat ground however it is moved forward for turning uphill or backwards for turning downhill. In Picture 2, The concept of keeping the body “centered” over the bike remains.

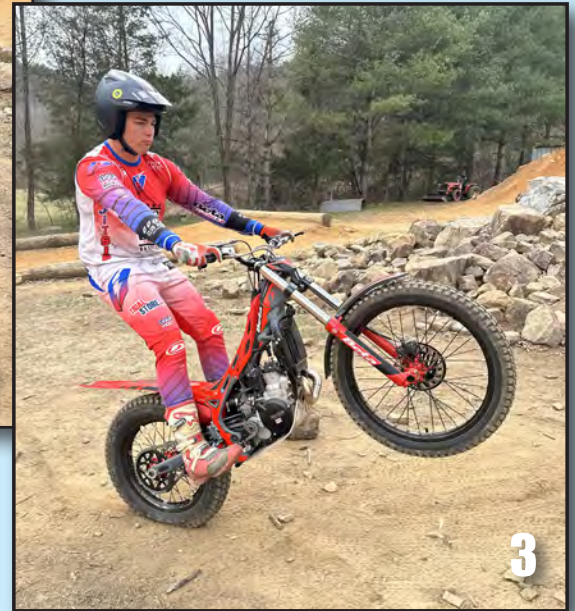
Another tip is to weight the outside footpeg while turning up a hill to help keep the rear tire as “square” against the ground as possible as the bike will straighten out at the end of the turn. In Picture 3, If the bike is leaned too far over, the rear tire will only grip on a small patch causing the rear end to slide out.



## Wheelies:

Wheelies are a necessity in MotoTrials, not to mention they are fun! Most riders think a wheelie is done only by giving the motorcycle gas while pulling up on the handlebars. However, there is one more very important technique that must be applied, that is compressing the front suspension.

In picture 1, you can see the rider compressing the front fork swiftly by pushing down on the handlebars, In Picture 2, as soon as the front fork is compressed and at the same time, the rider will lightly pull up



while applying the throttle at the same time. This compression of the fork allows for an easier wheelie with less effort as the spring inside the fork helps bring the front wheel up while it is expanding. In Picture 3, It is always important to keep your foot over the rear brake and one finger on the clutch while doing a wheelie to control the bike's height.



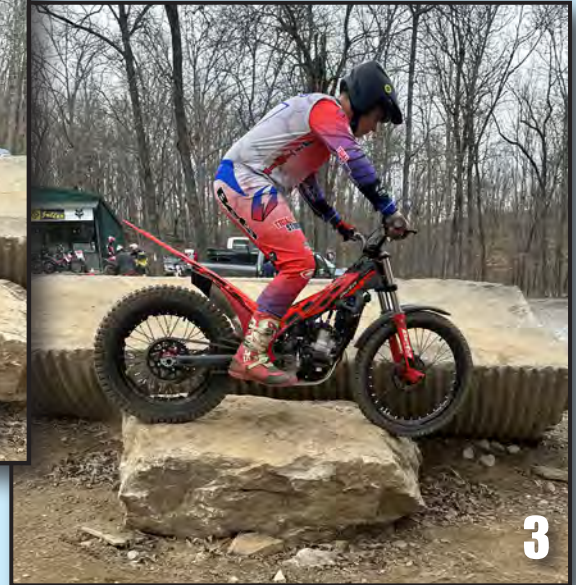
### Riding over square edge rocks:

In Picture 1, when riding over obstacles such as rocks, you will want to approach the rock in a slow way, you will compress the front end (like doing a wheelie), as the front end comes up, remember to maintain the height of needed with the clutch and/or throttle.

Bring the front tire just up against the top edge of the rock, this will compress the suspension a small amount, just after the front wheel clears the edge of the rock, In Picture 2, you will want to slightly unweight your feet from the foot pegs by straightening out your knees in an upward movement. This does not mean your feet will leave the pegs, you simply are creating



a rebound effect along with the rear suspension to lighten the rear tire. In Picture 3, As you absorb the rear wheel climbing up the rock, you will want your knees again to be bent as they absorb the rear wheel climb. When learning this move, you will want to keep constant throttle as the rear wheel rides over the rock. As you progress, you will “blip” the throttle as the rear wheel hits the rock.



## Riding over logs:

Riding over logs requires a different and more advanced technique compared to other obstacles that have more grip for the rear tire. Being that logs are much like mossy covered rocks, they require that the rear wheel hit the log at a higher elevation. For many logs, you will also want to keep the front wheel higher as the rear wheel climbs over to avoid going over the front of the bars and crashing.

You will notice in picture 1, the rider has driven the front wheel into the top of the log while at the same time pushing his body weight downward in a center of the bike position causing the entire motorcycle suspension to be compressed. In Picture 2, you can see the rider has extended his knees as the bike's suspension has rebounded, the effect doubles the extension force of the bike causing the rear wheel to leave the ground before the obstacle is hit, this in turn will put the rear wheel at a higher level minimizing the overall height of the log.

The last technique is shown in picture 3 as the rider then continues to apply the throttle lightly while pulling back on the motorcycle, this causes the rear wheel to become "weighted" and provides enough traction to keep the front end high avoiding an endo.



## Trick Riding:

### Hopping the front wheel:

Hopping the front wheel can be very useful if a section contains very tight turns that may be tighter than the turning radius of the motorcycle. This technique is generally not needed in the beginner or novice classes in trials however it can be learned over time.



In Picture 1, Much like riding a wheelie, the rider will compress the front fork downward with the clutch in and the rear brake compressed, as the front fork rebounds,

In Picture 2, the rider will simultaneously release the rear brake and the modulate the clutch to pull the front end up easily. This technique is used in many other conditions listed above in that you are using the motorcycle's suspension to assist in making small movements on the bike. You can start learning by hopping the front tire in the same spot and then when you have perfected this, you can start moving the front wheel from side to side.





**Hopping the rear wheel:**

Hopping the rear wheel is also an advanced move, many of the same techniques are the same as hopping the front wheel.

Note in picture 1, the rider is not using the rear brake, but rather has the front brake locked up to keep the motorcycle from moving forward, with one move, the rider will compress the rear suspension and as the suspension is rebounding, he will release the clutch and rebound with his knees.

You can see in picture 2, that he has compressed his knees and allowed the bike to come up to him. These motions will in turn, make the rear wheel lift up. You can start just by trying to do this in an up and down motion in the beginning, as you improve the move, you can start kicking the rear wheel sideways.





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### Floating turns:

A floating turn or “Floater” started in the 1980’s and has been used in the sport of trial ever since. It is a technique used to make a turn tighter or to carry the front wheel over an obstacle and setting it where the rider wants to.

Much like the wheelie, In Picture 1 the rider compresses the front fork, then as the fork rebounds, the rider will pull up on the handlebars and start a leaning turn at the same time, In Picture 2, this will, in effect,



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cause the front tire to come up and turn at the same time.

In Pictures 3 & 4, You will note the rider’s position on the motorcycle is much the same as when he is turning on a hill as the weight must be distributed over the center of the bike to continue the turn. This technique can be practiced in the beginning by running the tire up a mound of dirt as it will help get the turn started.



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