

the **CrossFit** JOURNAL ARTICLES

Bike Control Basics

Ascending Obstacles

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these moves at any real height. Getting on top of objects does not present as much danger as getting off them, but things can still get ugly. Consider wearing shin guards.

Make sure your bike is in good condition, especially your brakes, pedals, cranks, and chain. Depending on what objects you will be climbing and what type of terrain you are in, your tire pressure may need to be adjusted. If you are riding street obstacles with sharp edges, you will want higher tire pressure to avoid a pinch flat if you catch a wheel on an edge. If you are rolling onto rounded objects or riding natural off-road terrain, lower tire pressure will help grip the surface better. Fatter tires will help too.

As I mentioned in last month's article, all the skills that we are covering can be performed on most kinds of bicycles. That said, you will begin to see in this installment that certain kinds of bicycles will be more suited to these skills than others. The photos and videos here intentionally demonstrating these skills on low obstacles that shouldn't require specialized bikes. The higher the obstacle you wish to ascend, the more likely you are to need a specific kind of bicycle.

In the first installment in this series on bike skills, last month, we looked at some static skills, where you mostly balanced in place. In practicing those movements, you will have learned to lift your bike airborne and also will have gained some control rocking the bike from wheel to wheel. Now it's time to use those new skills to do something a little more useful—get up onto things.

Before we start, there are a few precautions. Though it should be obvious, you should start on small objects. Make sure that you have the technique mastered before you start trying

Wheel swap roll-up

Rollups

<http://media.crossfit.com/cf-video/Rollups.wmv>



The wheel swap is the smoothest and simplest way to get onto low objects. It can even be used on fairly high obstacles once you have mastered the technique. The wheel swap builds on the rocking trackstand skill from last month.

Start on a low object like a curb. Roll toward the curb slowly,

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with your pedals level. Your power pedal should be forward. Shift your weight back and pull up on the handlebars to lift the front wheel onto the object. As soon as your front wheel touches down, throw your shoulders forward over the bars to unweight your back wheel. Push the bars forward as you do, and your back wheel should lift up smoothly to the top of the object. This should feel very similar to the rocking trackstand, except now you are rolling and you do not use your brakes.



The timing is important. If you hesitate too long after setting the front wheel down before shifting forward, your rear tire will smack into the obstacle. With practice, you will instinctively learn how quickly to make the shift. This will depend on how fast you approach the obstacle, and how tall it is. With faster approaches, the wheel swap technique simply cannot be done, as there isn't enough time to make the shift. In these cases, a bunny hop will be needed instead. Try the wheel swap technique from different angles once you get it perfected. It can even be done riding alongside small ledges and similar obstacles.



If your bike has a low gearing, such as a trials bike or mountain bike in granny gear, you can do a wheel swap from a standing start. Balance in a trackstand just less than one crank stroke from the obstacle. Your power pedal should be forward. Pedal forward, and as your opposite foot (goofy foot) comes forward, wheelie your front wheel up onto the object. Once it touches, shift your weight forward just like the standard wheel swap.



Back hop

Backhop

<http://media.crossfit.com/cf-video/Backhop.wmv>



You are not likely to use the back hop much on its own unless you plan to ride advanced bicycle trials. However, it is very useful as a beginning drill to learn to bunny hop properly. Before trying the back hop, make sure that your back brake is working properly and will lock the back wheel.



Ride slowly forward, pedals level, with your power pedal forward. Your back should be flat so as to maintain a tight core. Apply both brakes to come to a momentary stop. Lean back, and pull up on the bars to lift your front wheel. As it rises, explode upward with a powerful hip extension. As the bike lifts airborne, you will pull up on the bars, then push them forward as the bike rises.



Bike Control Basics: Ascending Obstacles *(continued)*



Tuck your legs up tight to your body, pulling the bike up as high as you can. Once you start to return to earth, let the back end land first, compressing your body to absorb the shock. Try to always avoid landing on both wheels simultaneously, as this is hard on body and bike!

Start with small hops. It will probably take considerable practice to get the timing of this move perfected, unless you have prior experience with it. Eventually, you will be able to jump high with good technique. You will notice a hip extension in the back hop that is very similar to the hip extension of a clean or kettlebell swing.

Bunny hop

Bunnyhop

<http://media.crossfit.com/cf-video/Bunnyhop.wmv>

Bunny hops are the classic way to get your bike up or over objects. The technique is almost exactly the same as in the back hop, except now you are rolling forward and will not use your brakes.

Approach your obstacle fast enough to clear the edge. This will take a bit of practice to judge. Just as in the back hop, your pedals will be level, with the power pedal forward. Compress with both arms and legs as you near the obstacle, then lean back and pull up on the front wheel. All your weight will be pushing through the rear tire into the ground. Explode with a powerful hip extension, driving off the ground through the legs.

As in the back hop, pull up on the bars, then push them forward and tuck your legs to give you the clearance to get over or onto your obstacle. As you tuck, grip the pedals with your feet by pointing your toes downward. Whether hopping over or onto something, always be sure to land rear wheel first.

With good technique, you will be able to hop medium height objects almost effortlessly. Keep practicing, and slowly move onto higher obstacles as you gain confidence. You can also work at bunny hopping over things at speed, or hopping onto things at an angle, or from the side.



Scott Hagnas is owner of [CrossFit Portland](#). He is certified as a CrossFit trainer and Circular Strength Training (clubbell training) instructor. He has been riding BMX flatland for 26 years and counting and has filmed/produced /edited several series of BMX videos. He formerly competed in bicycle trials, placing second in amateur in the World Championships in 1990. When not training or riding, Scott can usually be found in the kitchen cooking up Paleo-style meals. He writes a monthly recipe column for [The Performance Menu](#) magazine.