

# the **CrossFit** JOURNAL ARTICLES

## Parkour Basics

### A Compendium

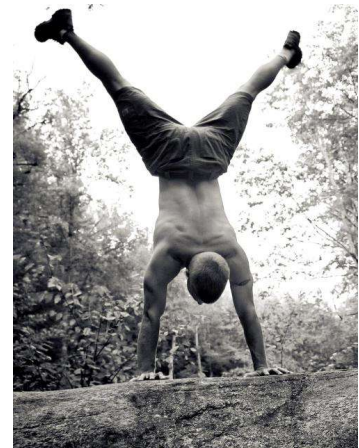
Jesse Woody

Mechanics, consistency, and intensity are the three pieces of a complete foundation for a safe learning progression in any new endeavor. Many of the elements inherent in the gradual and progressive creation of elite general physical preparedness apply equally to the pursuit of more specific skills and goals, including parkour, the ability to navigate your environment functionally, confidently, and safely in a variety of situations. This month, I have collected into a single reference document the fundamental parkour moves I discussed in greater detail throughout the past eight issues. I intend this to serve as a kind of “getting started” reference manual for parkour, outlining a progression for learning proper technique that enhances both the safety and the efficacy of the movements when applied to the varied challenges you may face.

#### Parkour articles in the *CrossFit Journal*

<i>Introduction to Parkour</i>	#43 - March 2006
<i>Environmental Awareness &amp; the Roll</i>	#44 - April 2006
<i>Two-Handed, Speed, &amp; Lazy Vaults</i>	#45 - May 2006
<i>Monkey, Dash, &amp; Reverse Vaults</i>	#46 - June 2006
<i>Jumping</i>	#47 - July 2006
<i>Tic-Tac &amp; Wall Run</i>	#48 - August 2006
<i>Turn Vault &amp; Cat Leap</i>	#49 - September 2006
<i>Underbar &amp; Gate Vault</i>	#50 - October 2006

**Jesse Woody**, age 26, father of two, has about eight years experience in fitness and nutrition (though a lot of that was time wasted on bodybuilding). He works in various capacities for the Woodberry Forest School in Virginia, including working with the outdoor education department and, currently, transitioning to head strength and conditioning coach. He’s been practicing parkour for three+ years (and CrossFit for a little over one), though he’s acted like a monkey his entire life. He is an administrator and frequent content contributor for the [American Parkour website](#).



## The basic straight landing and roll



The first step in learning both landing and rolling techniques is to perfect the air squat, as described in the December 2002 issue of the *CrossFit Journal*. Once you achieve the basics of perfect squat form, you will be able to transfer them to the proper technique for the landing and roll:

- Back arched and head up.
- Weight balanced on both feet.
- Knees pushed out to the sides throughout the entire movement.
- Find the ground by extending your legs.
- Control the descent by preparing for the drive into a sprint.
- Shoot for 15 to 20 comfortable reps at a given height, starting very low and progressing slowly to ensure flawless technique.

Proper mechanics in rolling requires merely that you grasp three simple aspects of the movement:

- Stance is shoulder width, in a slight lunge, head tucked into armpit and looking toward trailing leg.

- Sweep your lead hand through toward your trailing foot to set up your round position and guide your scapula to the ground.
- Tuck tightly throughout the movement and allow your momentum to carry you to your feet.

Once these basics can be repeated perfectly from standing, the next step is a roll with momentum:

- Land in the same stance from a slight hop: Feet shoulder-width apart, one foot forward, leaning forward, weight on the toes.
  - Allow your momentum to carry your torso forward as your knees bend.
  - When your body reaches near 45 degrees, boost yourself forward with a hop into a diving roll (tuck your head, sweeping your lead arm through, and tuck tightly).
  - Try 10 to 15 jumps to roll on both sides per training session, progressing in height gradually over time.

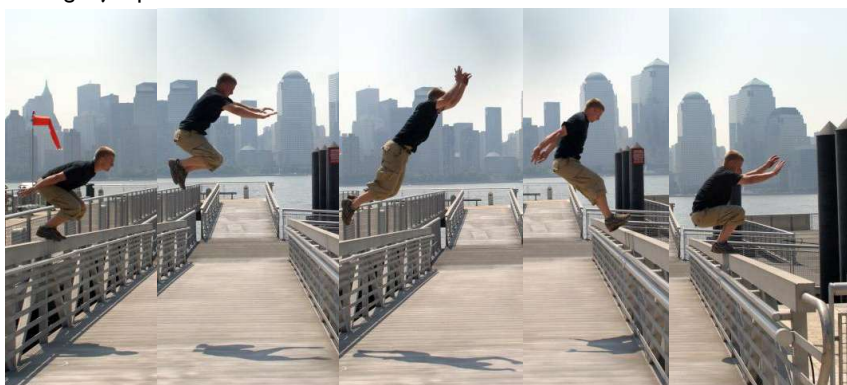
Jumping technique



Straight jump

The basics of jumping technique and the concept behind the precision jump apply to nearly every jumping movement in parkour.

- Stand with your feet directly below your hips in the jumping position and bend at the hips and knees while swinging your arms back. Explode through the hips, knees and ankles as you swing your arms toward your path of travel.
- Tuck your knees toward your chest mid-jump to maximize the efficiency of travel while you're in the air.
- For both the straight landing and the precision landing, you will extend from this tucked position toward the point of landing. In the precision jump, you will be jump at about a 45-degree angle and extend your legs in front of your torso to allow your momentum to carry you to your feet in balance as you absorb the impact.
- Making **precision trainers** will help the practice of this technique immensely. Shoot for anywhere from 20 to 50 consecutive jumps, landed in perfect balance.



Precision jump



Precision trainers

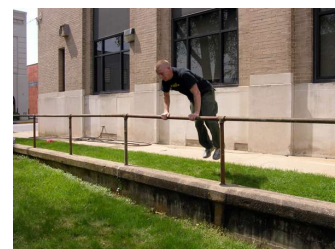
### Vaulting technique

Remember that every vaulting technique relies on the basic movement pattern of using your approach momentum and a perfectly mixed effort between your upper and lower

body to make your way over an obstacle as efficiently as possible.

### Two-handed vault

- Start from standing, bending at the knees and hips to jump while also pushing the object down and back with your arms. Balance the jump and press so as to maximize the effectiveness of the movement.
- Pay close attention to the landing, making it as smooth and silent as possible.
- Train in both directions, as early exposure to multiple angles will help immensely in the long run
- Shoot for fast, repetitive vaults from one side of a rail to the other and back, without pause and with perfect technique, for 10 to 15 reps as regular training.



### Lazy vault

The lazy vault is similar to the speed vault in that it's essentially a one-handed technique, but it requires less momentum to move over obstacles.

- Approach from an angle with your lead hand nearest the wall. Jump as you press toward your hips with this hand; then pass the railing to your trailing hand and finish the descent.
- Train this movement in both directions and on a variety of obstacles.
- Once you can perform the basic movement, train your ability to change and choose the direction of retreat in midair by adjusting the rotation of your torso and the pressure you apply to the wall or railing with your trailing hand.
- Add lazy vaults to a rail circuit (move directly from a left-handed lazy vault to a two-handed vault, back to a right-handed lazy vault, to another two-handed vault), attempting to complete as many passes as possible in a set time. This works great with Tabata timing.



## Speed vault

The speed vault takes the basic one-handed vault and adds extra approach speed. Commitment to a powerful approach is what sets this vault apart from the more basic techniques.

- Try to minimize the impact on your hand by approaching quickly and powerfully and attempting to jump up and over the object in question, using the boost from your hand and arm as only the last bit of propulsion needed to clear the obstacle.
- As with the two-handed vault, practice on both sides from the beginning.
- Attempt to perfect fast and smooth speed vaults from a variety of angles on a variety of obstacles. Once you can perform 8 to 10 fast speed vaults in a row on both sides on a variety of terrain, you have reached a functional level of proficiency



## Monkey vault

For the monkey vault, a bit more commitment is required. To make this work, you have to make a powerful dive toward the end of the object that puts your hips higher than your hands.

- Get your hips high by diving in an arc and exploding with a powerful push when your hands contact the obstacle.
- Your hands should be free of the object before your feet pass.
- When you can land a monkey vault on a variety of obstacles with a slight run-up, progress to increasing your approach speed and the speed of your retreat. You can also increase the depth of the objects that you're vaulting.
- A monkey vault to roll, repeated 10 to 15 times with perfect technique, is a great drill to improve two techniques simultaneously.



## Turn vault



The turn vault applies the concepts of the basic two-handed vault to a movement useful for breaking momentum and reducing the impact of the landing from greater heights.

The turn vault applies the concepts of the basic two-handed vault to a movement useful for breaking momentum and reducing the impact of the landing from greater heights.

- Start by training on a wall or railing with level ground on both sides. This allows you to master the movement pattern before adding height to the equation.

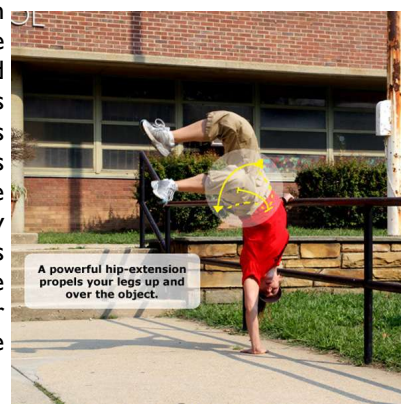
- Once you can smoothly perform the vault to both sides on level ground, move to an object that has a slight drop and requires a more precise placement of the feet.
- Shoot for 15 to 20 turn vaults to each side without a break in proper technique. Once you can accomplish this at a slow pace you can begin to quickly cycle turn vaults from one side to the other for an excellent conditioning movement.

## Gate vault

For the gate vault, use a powerful hip extension to propel your legs up and over an object after you have folded at the waist to position your torso on the opposite side. This is a very useful technique for taller objects that aren't stable enough for a wall run (such as chain-link fences).

- The starting object for this movement is the same as with the turn vault: a wall or railing with level ground on both sides.
- Once you grasp the technique from level ground, move to an object with a slight drop. From this point you can then find taller objects that will require a jump to put your hips at the proper height.
- Once you're comfortable with the technique, you

can choose an appropriate obstacle and attempt to pass over the object as many times as possible in five minutes using only the gate vault. As your technique improves, your total will improve also.

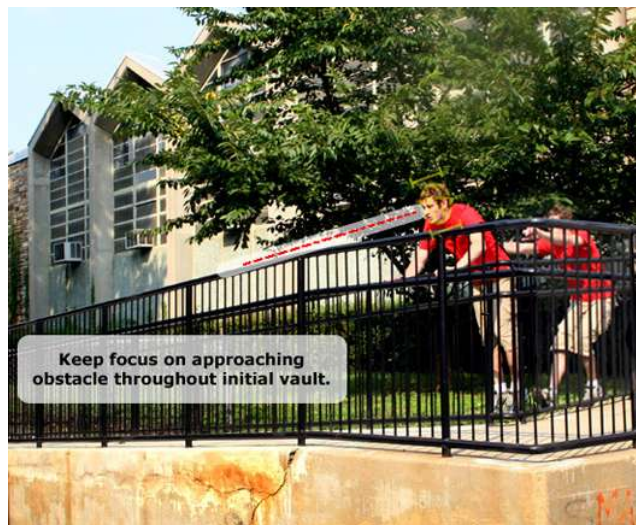


## Reverse vault

The most useful application of the reverse vault is for maintaining momentum over multiple objects where the rotation aids in transitioning smoothly from one to the next.

- The rotation can be learned relatively easily on an object slightly lower than waist height. Work the requisite jump and pressing motion with the hands and remember that the rotation follows the head and is transferred through the core to the hips to bring your feet over.
- Expand your capabilities with the movement to some more-varied obstacles, starting at first from standing and working up to approaching with speed.
- Once you have a solid grasp of the technique in both directions, you can progress transitioning into a reverse vault when you approach one obstacle immediately after another. For example, pick two railings around waist height that are between 3 and 5 feet apart. Vault the first railing and then attempt to land in a position that allows you to spring directly into the reverse vault. To do this you will land with one foot slightly forward and your hands ready to make contact with the second surface. Immediately spring into your rotation over the railing in one smooth motion.

- Once you grasp this technique, see how many passes you can make over the two railings in five minutes, or apply any interval timing to repetitive efforts scored by total reps. Increasing your total while assuring proper mechanics is a sure sign that you're getting more efficient at the technique.



## Climbing and swinging technique

For climbing-based techniques in parkour, the goal is to coordinate your upper and lower body to propel yourself upward as quickly and smoothly as possible. This skill carries

over to the running- and climbing-based techniques because they all require you to effectively transfer momentum from the run into vertical travel.

## Tic-tac

The wall run, tic-tac and pop or tap vault take some of the basics learned in vaulting and add a greater full-body component to allow travel over taller or deeper obstacles.

- To learn the tic-tac, practice the requisite cadence and coordination between the run and the step off of an object by incorporating a knee-high or lower wall into the middle of a run and stepping on top of the wall to propel yourself up and out in the direction of your travel. Train this from both directions.
- If the opportunity presents itself, it works great to transition from the horizontal surface of a small retaining wall to an angled surface such as a slanted wall or tree trunk. Retain the cadence you learned in the first drill, only this time your boosting step will take place on a more vertical surface. Gradually increase the angle if at all possible until you are able to perform the movement on a purely vertical surface.



- To train the tic-tac in its purest form, it works well to find a bench, trash can or other medium-sized object to place in your path of travel to attempt to propel yourself over after the tic-tac. Play with the distance from the wall or tree that you are boosting from to find your limit, then drill the movement from this point for 20 to 30 times on each side, shooting for perfect tic-tac and landing technique for each rep.

## Wall run and pop vault

Once you have mastered the technique in the tic-tac, you will have gained an essential awareness about applying the momentum from your horizontal travel to vertical movement. At this point you can use a similar technique for the wall run and pop vault.

- The technique for the wall run and pop vault is the same as for the tic-tac, only it's applied to purely vertical movement aided by the upper body. Find a wall around your height to start with. Run powerfully and confidently at the wall and play with the proper distance to maximize the height of your step off of the wall. Once you reach the apex of this step, apply a coordinated pull toward your chest with your hands and a rearward kip with your free leg to help you pull yourself to the top of the wall and transition to a support on top.

- For both of these techniques, the best training progression seems to be based on finding a wall that you can comfortably and consistently overcome, and then repeating the move 15 to 20 times, shooting for maximum speed and commitment on each attempt. Once you have mastered this height (with both feet) you can move up to higher walls and continue drilling the technique in the same manner.
- Another great way to expand your skill in this movement is to go head to head with another practitioner to see who can make it to the top of the wall the quickest. The motivation for 100% maximum effort that is gained through competition can't be matched by any other means.

*...continued next page.*



Wall run and pop vault ...*continued*



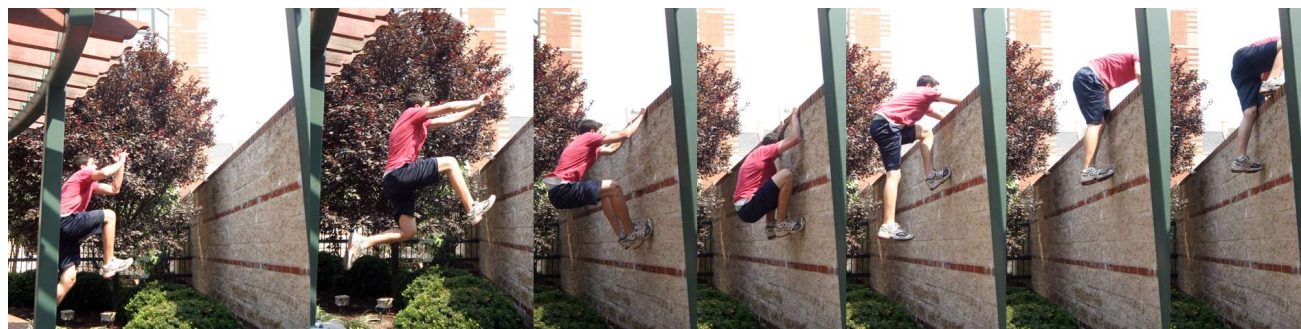
Cat leap

The cat leap is similar to both the wall run in its finishing top-out and the turn-vault in its body position upon landing. This is a movement that takes a good bit of commitment to work up to, but the gains in strength, coordination, and confidence that are gained are worth the effort.

- A body-height wall at ground level is perfect to begin your training on. Perform a broad jump, tucking your legs up and then extending them toward the wall to absorb the force of landing. Your hands will contact slightly after your feet, with elbows bent to absorb the force of impact. From here the technique resembles the top-out of the wall run, where you give a rearward kip with your free leg while performing a movement similar to a muscle-up to put yourself in a support position on top of the wall.
- Drill this ground-level technique to perfection, and then you can begin to progress toward downward cat leaps. In this technique, the surface from which

you jump will be at the same level as, if not slightly higher than, where your hands will contact the landing surface. As the vertical distance between the takeoff and landing points—and therefore the impact upon landing—increases, the technique becomes more difficult. A good progression would be: 1) higher-level landing, 2) higher-level landing with a longer jump, 3) level of landing decreased by half-height (around knee-level from takeoff), 4) same-level landing, same-level landing with a longer jump. Drill each successive level 10 to 20 times in a session, striving for perfectly efficient technique with minimal extraneous impact.

- The technique can be broken in half, as you can drill the jump and landing as one piece, then drill the top-out repetitively for strength gains. This allows the pull to press movement of the top-out to be worked

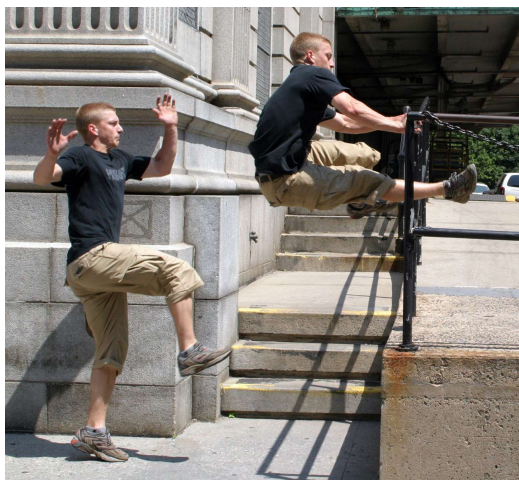


### Underbar

There are innumerable places to train this movement and its derivatives, from the most-common parallel railings to tree branches or car windows. Once you master this movement, you will never be at a loss for possibilities.

- Start your progression by playing with the basic swing on a pull-up bar or monkey bar. Shoot for maximizing the distance you are able to gain post-swing by extending your hips and elbows as you reach the apex of the swing. You should be reaching maximum hip-extension at the peak of the movement, and coordinating the motion of your arms to allow maximum power to be applied before extending your elbows to proceed in a powerful arc at this point.
- From this point, attempt to approach the obstacle with a good run-up, then tuck tight and get your feet in front of your torso in the jump. Grab the railing and, just at the apex of your swing, extend your hips and arms.

- Once you become proficient at maximizing the power of the swing in this manner, you can add the “underduct” trick mentioned last month. Pull a length of duct tape between two vertical supports and attempt to swing through this space. This allows you to work on progressively smaller underbars without the risk of injury.
- During a typical training session, it would work well to strive for 20 perfect underbars at a given width before moving on.
- Once you have gained confidence and awareness of your potential for movement through different spaces, you can begin to apply this to any random obstacle in your environment. Once you find a good object to use for training the underbar, be sure to check it from all sides for other potential variations of the movement to apply and expand your abilities.



So there we go, a quick recap of the common movements and what I hope is a manageable progression for new and old athletes alike. If you progressively increase your skills while paying proper attention to recovery, you can sustain your parkour training indefinitely and reap rewards in terms of ability and agility that will serve you well in all physical aspects of life for a long time to come.