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Snatch Strategies for CrossFit Workouts and Competitions

The squat snatch is the way to move the heaviest load, but what's the fastest way to snatch lighter loads for multiple reps? Dave Castro outlines your best options for high-rep snatch workouts.

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Susannah Dy/CrossFit Journal

A squat snatch will move big weight, but is it the fastest way to move light weight for high reps?

The barbell snatch is one of the most technically complex weight-training movements and one of the two lifts in Olympic weightlifting competitions. The squat snatch is ideal for maximizing the loads handled. Many track-and-field and ball-sports athletes train the power snatch and power clean exclusively to focus on the pulling phases without as much concern for the receiving phase. Traditionally, the snatch has been used in very low-repetition sets. CrossFit, though, has seen great benefit from high-repetition snatch (and clean) sets.

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Snatch ... (continued)

The goal of CrossFit is to develop increased work capacity across broad time and modal domains, and athletes with great capacity in high-repetition snatches and cleans have demonstrated broad capacity generally. In other words, these movements are outstanding for transferring abilities to other domains.

1 Rep or 30 Reps?

The traditional approach to the Oly lifts is to use these movements to develop explosive speed and power. They have certainly been proven effective for that purpose, and the best results are found with shorter sets. CrossFitters are certainly interested in explosive power and speed and will train low-rep Oly lifts. But true general physical preparedness (GPP) requires that we not pursue them to the exclusion of the other domains of fitness. Including high-rep snatch (and clean) workouts has a broader aim than training only power and speed.

Much attention has been paid to the technique of the snatch, and good technique is essential to maximizing the loads moved in any given set. If the barbell moves outside the base of support, the body's positioning is suboptimal and lifts are often missed. If the lifter doesn't maximize full use of the hips, the lifts will not be successful. CrossFitters will do well to develop this technique as much as is reasonable for their 1RM efforts.

The same approach, though, is not necessarily needed when dealing with light loads. These lifts can be successful even with inefficient technique, including keeping the hips high, pulling with the arms, not coming to full extension on the second pull and even swinging the barbell out.

The question now is what is the best way to maximize the number of reps performed in a given time period (or minimize the time to perform a fixed number of reps)?

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Susannah Dy/CrossFit Journal

When speed is the goal, athletes can benefit by experimenting with their technique to produce the fastest cycle time.

It is often thought that optimal technique for 1RM work and high-rep work is identical. After all, it comes down to physics, right? Well, maybe not, or perhaps it's more accurate to say that maybe the physics are different at light loads. In CrossFit competitions, we are not seeing a strong correlation between the completion times for high-rep snatch and clean workouts and the efficient use of traditional techniques. Some of the fastest times come with "great technique," but many do not.

What does this mean for us?

Well, as fitness whores and not technique snobs, this means we should explore non-traditional techniques for high-rep workouts.



Susannah Dy/CrossFit Journal

At the 2009 CrossFit Games, Jason Khalipa did very well with both heavy snatches and light snatches. At light weight, he chose to use a muscle snatch and then an overhead squat to complete his reps at 75. lb.

Squat Snatch

When doing high-rep snatches, we also see different options for attacking these workouts, which typically feature loads lighter than a person's 1RM snatch. This article is not about teaching someone how to do the lift. It's about giving the athlete who wants to be more efficient different things to think about with regards to attacking a high-rep snatch workout.

We'll start with the squat snatch. For establishing your 1RM snatch, the squat snatch is the most efficient movement. It is arguably also one of the most technically challenging movements we do with a barbell. The stance is about shoulder width, with the chest high. The grip is wide. Lumbar curve is maintained as the athlete passes through a positioning pull and comes to full extension, all the while creating speed and elevation on the bar. The athlete then rapidly changes direction to receive the bar in an overhead-squat position. You can spend a lifetime training this movement and never perfect it, but that alone is no reason to avoid putting this article down right now and trying a few reps with a broomstick in your garage. Train the squat snatch regularly, and don't be afraid to look like a beginner in this movement.

Heavy squat snatch: [.wmv](#)

Prescription of Movement in High-Rep CrossFit WODs

- 30 135-lb. squat snatches for time.
- 75 75-lb. power snatches for time.
- 5 rounds of 7 hang power snatches (135 lb.) and 15 pull-ups.

The preceding workouts should be done exactly as written. (Scale load when necessary and for trainees who have flexibility issues or are new to the lift. Scale movements when necessary as well.) It's part of what you, your coach or the workout of the day wants you to work on regardless of load and ability. Athletes can receive tremendous physical and psychological rewards for grinding through the movement and doing what is prescribed, and 30 squat snatches at 135 lb. is a demanding feat for even the best CrossFitters.

- Isabel — 30 snatches for time (135 lb.).
- Randy — 75 snatches for time (75 lb.).
- WOD — 5 rounds of 7 hang snatches (135 lb.) and 15 pull-ups.

These high-rep workouts give the athlete some options in how he chooses to do the snatch. Here is where we can get creative and decide on a pre-workout strategy to get the work done as fast as possible.

Coach Mike Burgener likes to say a squat snatch is simply a missed power snatch.

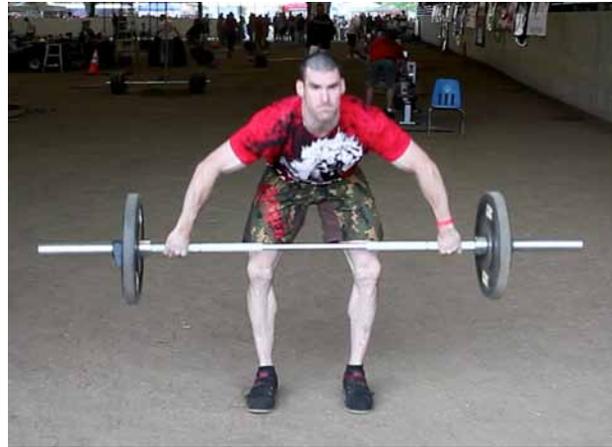
In a workout like Isabel, athletes will either squat-snatch or power-snatch the weight, though a few of our stronger athletes can actually muscle-snatch 135 lb. The power snatch starts with a similar start to the squat snatch, but instead of receiving the weight in a squat position, you receive it in a partial squat with your feet at shoulder width. We do not quantify the depth of this squat because it varies for each athlete and according to load. Coach Mike Burgener likes to say a squat snatch is simply a missed power snatch.

Power Snatch

For a high-rep snatch workout with a traditional power-snatch approach, we end up seeing feet starting at hip width and landing at shoulder width. The athlete then stands to full extension and resets the feet as (or after) he or she brings the weight down. Once the bar is on the ground, the athlete repeats the process. If an athlete is very strong with this movement this can be unnecessarily time consuming. In the video below, both Josh Everett and Adrian Bozman move their feet to the landing position, then reset them to the pulling position while the bar is overhead.

High-speed power-snatch reps: [.mov](#) | [.wmv](#)

Another aspect we see with high-rep snatches is a higher hip position throughout the movement, with the shoulders more aggressively over the bar. This allows the athlete to save some time by not resetting each time into the low-butt, high-chest position that is common with heavy snatches. From this traditional power snatch, we can start tweaking it and working on different techniques and strategies that can be used to shave seconds from WOD times.



Muscle Snatch

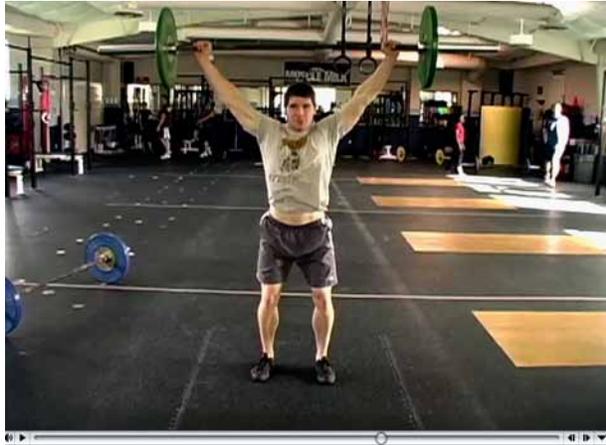
In workouts that have light snatches (relative to strength), it might be best to employ muscle snatches. In the muscle snatch you still create speed on the bar, but instead of re-dipping as you would in a power or squat snatch, your knees and hips do not close again after extension. The muscle snatch requires more upper-body strength and is typically done as a skill-transfer exercise for weightlifters. The other key aspect of high-rep muscle snatches is never moving your feet away from their starting position, usually hip width. Remaining stationary will allow you to cycle the reps in the fastest way possible. Depending on the rep scheme and load, the muscle snatch is also one of the most taxing ways to do this movement. Trying to maintain a fast pace for very high-rep workouts might not be worth the toll it takes on your system for later reps.

Muscle snatch: [.mov](#) | [.wmv](#)

High-rep muscle snatch: [.mov](#) | [.wmv](#)

At the 2009 Rocky Mountain Regional Skip Miller organized, he programmed a workout that required a total of 7,000 lb. to be snatched overhead, while the loads were left up to the athletes. Matt Chan chose 75 lb. and muscle-snatched the weight to a hard-earned victory. He muscle-snatched roughly 50 of the reps before having to switch to a more traditional power snatch. The muscle-snatch rep was much faster than the traditional power-snatch rep.

Matt Chan muscle-snatching: [.mov](#) | [.wmv](#)



Power Snatch With No Adjustment of Feet

High-rep muscle snatches at some point usually morph into something like a power snatch, where the athlete re-dips to catch the load. The difference here—and this is the difference that makes it more efficient—is that the feet do not change position; i.e. the pulling position and the receiving position are the same. This approach is faster than a traditional power snatch because it eliminates reset time, but it's slower than the muscle snatch. The power snatch with stationary feet is less taxing than the muscle snatch and might be better for long-term use in a workout.

High-rep snatches with fixed feet: [.mov](#) | [.wmv](#)

Being able to recognize you're losing the muscle snatch and knowing when to transition to the power snatch can be key to moving through the reps quickly.

Muscle Snatch to Power Snatch

It's also good to be able to switch from the muscle snatch to the stationary power snatch, just as Chan did in regional competition. Being able to recognize you're losing the muscle snatch and knowing when to transition to the power snatch can be key to moving through the reps quickly.

I did this workout with Greg Amundson at the track a few months back:

- 5 rounds of:
 - 15 power snatches (95 lb.)
 - Run 400 meters

Prior to the workout, I spoke to Greg about some of the different ways to do the work, and he decided to experiment. He was constantly in front of me, so I was able to watch him muscle-snatch most of the reps in the early rounds, and then at reps 10 and above on the later rounds, he transitioned to a power snatch.

Muscle snatch transition to power snatch: [.mov](#) | [.wmv](#)



At the 2009 Rocky Mountain Regional, Matt Chan employed a blisteringly fast muscle snatch before pounding out the latter reps with a power snatch.



Traditional Power snatch

Once the weight begins to get to a point where the above-listed options are not possible, it's time to look at a more traditional power snatch, where the feet start at about shoulder width and but land wider as the weight is received in a partial squat. The athlete stands to complete the movement and resets the feet before starting the next pull. I have also seen this done where the feet start in a landing position (wider) and stay in that position throughout.

Traditional power snatch: [.mov](#) | [.wmv](#)

Power snatch from wide pulling positions (fixed stance): [.mov](#) | [.wmv](#)

Split Snatch

After the power snatch goes on heavier high-rep workouts, another option is to switch to a split snatch. A split snatch requires more skill than just a power snatch but is less difficult for most people than moving to the full squat snatch on high-rep workouts. One downside to this movement is the need to reset the feet after each rep. The length and subsequent depth of the split will increase as the weight nears an athlete's 1RM. The heavier the load, the deeper you go.

Split snatch: [.mov](#) | [.wmv](#)



Weight Is Overhead—Now What?

Once the weight is locked out overhead and the athlete is standing, he or she has several options in returning the weight to the ground for the next rep.

Pulling It Down

For fastest turnover of reps with light loads, bringing the weight straight down from an overhead position is the fastest way. The weight hits the overhead position and you essentially pull it back to the bottom while maintaining your grip on the bar throughout. This is very demanding because it allows little time for relaxing or breathing. This method is best used with a fast move like the muscle snatch or power snatch with no adjustment of feet. If you are going to squat snatch or split snatch, you might want to look at some of the other options.

Pulling weight down: [.mov](#) | [.wmv](#)

Down to Hips and Reset

A technique that's slower than the previous method would be bringing the weight down to the hang position (around the hip area), then bringing it to the deck. It's a two-part movement that can be done fast or with a break at the hang position, which allows for some recovery, both mentally and physically. This is possibly the most common method for lower weight snatches at high reps.

Lowering to hips, then floor: [.mov](#) | [.wmv](#)



Drop From the Top

One of the best options on high-rep, high-load snatch workouts is to complete the movement in singles. Snatch. Drop from the top. Let the weight settle. Re-grip. Snatch. This method can actually be very fast in execution, and you save energy by removing the eccentric phase of the lift (bringing the weight down). You can also establish a decent rhythm. If you plan on doing a high-rep snatch workout and you are going to drop each rep, consider which bumper plates you use (if you have options). Colored Kraiburg plates have much more bounce than Hi-Temp bumpers (the recycled rubber ones), and you don't want to worry about chasing the bar around. Solid metal plates would have the least bounce, but I don't recommend using them.

Drop from the top: [.mov](#) | [.wmv](#)

Lighter loads don't necessarily need the hook grip, but it's still a viable option.

Grip

Lighter loads don't necessarily need the hook grip, but it's still a viable option. Be cautious of using the hook grip in high-rep WODs: you can get nasty tears in the web of your hand where the thumb and index finger meet. On heavily knurled bars, you also have to worry about tearing the fingers. Some athletes actually switch grips during WODs, starting with a regular overhand grip and then hooking the thumb as the grip deteriorates.

If you are going to do multiple reps and keep your grip the whole time, learn to loosen your grip at different points of the movement to save your grip strength. Instead of just hook-gripping it and squeezing it the whole time, think about natural points to relax the grip. You can back off on your grip when the bar is overhead as you stand to extension and as you bring the weight back down. If you rest the bar at the hang position, that's another area to ease up the tension.

Footwear

Play with different types of footwear. Do some of these high-rep workouts in weightlifting shoes and some in running shoes. Mix it up and see the difference in platform you get by snatching in less-than-optimal shoes. If you aren't going to wear lifting shoes, you have other options. Chuck Taylors are a favorite of many CrossFitters, and some trail-running shoes with harder soles (like Salomons) also provide a good option for a workout that involves running and snatching.

Try It Out

Next time you attempt Randy, Isabel or any high-rep snatch workout, take into consideration some of these variations and give thought to how and when to use the different options. With the proper planning and execution, these techniques might help shave a few seconds off of your previous time.



About the Author

Dave Castro is CrossFit's Co-Director of Training.