

Bulletproof Olympic Weightlifting: **20 mistakes you must avoid**



By Wil Fleming

Introduction

We all are aware of the importance of the Olympic lifts in athletic performance. The explosive triple extension that occurs in the clean, snatch, jerk, and their variations is not replicated anywhere else in the weightroom. Improvements in the Olympic lifts can lead to increased vertical jumps, faster sprinting times, and more muscle mass. These lifts can make or break a program.

They can make a program when done well, and coached the right way.

They can break a program when left out or coached poorly.

I had the unbelievable good fortune of learning to Olympic lift under the guidance of a former Olympian and a couple national team coaches. Unfortunately many athletes learn how to do the Olympic lifts from a coach that hasn't had that type of training.

Due to this fact, the Olympic lifts may be the most poorly utilized lifts in most weight rooms.

Seriously I know you can picture it.

Walking into a high school weight room and some kid has WAAAY too much weight on the bar, rolls it around for a minute on the floor muscles it up and catches it in a position that makes you wonder how he has so much flexibility in his adductors (history in gymnastics?).

My story looks a lot like the kid you just pictured, except for one fateful time in which I walked into the right weight room with the right coaches.

At the age of 15 I was an extremely undersized, and slow football player that got dominated in the limited varsity action I saw that year. I was strong for my class, with a 165 pound power clean, and no history of ever seeing the snatch completed. I found out about an old school dungeon-like gym specializing in making good football players (and gymnasts, and volleyball players, and basketball players!)

When I went in for the first time I witnessed a 150 pounds athlete clean and jerk nearly 50 lbs over my PR. I knew at that moment I was in the right place.

I went on to nearly double my clean, and snatched over 275 pounds on the way to becoming an all-state athlete in 2 sports, decreased my 40 yard dash time by 6 tenths of a second, and become a highly recruited Division 1 athlete.

With this manual I want to let you in on the secrets I learned when I walked into my favorite weight room.

I want to turn you into the coach that can change athletes' lives the way mine was changed.

I want to turn you into the athlete that makes explosive gains on a daily, weekly, and yearly basis.

In this manual you will learn all of the mistakes that I was taught to avoid at an early age, but mistakes that I see all too often in the weight rooms I walk into.

Here are the top 20 mistakes that keep you from being bulletproof.

Mistake #1: Missing too many lifts

I actually had a coach recently tell me about his plan for having athletes max out. It went like this.

“Well we put about 15-20 lbs more on the bar than the athlete can do and then have him try it. He usually misses it, then we do that same thing again. Once they miss it a second time, we drop about 5-10 lbs and try it a 3rd time. Sometimes they get it”

Wait. What?

The sad part is that I think this is the mode that a lot of athletes get into when training. They think that just a basic overload in the lift is a good thing.

In truth the power clean is a really complex pattern and overload isn't always rewarded, technique is rewarded. If you train knowing you are going to miss lifts, you are...going to miss lifts.

My experience when learning the lifts was laid out clearly and I do the same for my athletes, Missed lifts are a part of training but they are not a consistent part of training. Far more will be learned by completing lifts than by missing lifts any day.

Mistake #2: Starting from the floor when you can't make it there in good position.

Is a power clean a power clean if you don't start from the floor?

This is a mistake that I see all too often and with serious consequences. Athletes are told and made to start from the floor with the power clean when in truth they have no ability to get down to the start position and maintain any semblance of structural integrity.

The true start position for the clean is uncomfortable to say the least, it requires hip mobility, ankle mobility, thoracic spine mobility, and tremendous trunk stability. The likelihood that an athlete isn't lacking in one of these areas is low.

Lacking the mobility and stability to actually achieve these positions means that an athlete will default to easier patterns to get to a bar resting on the ground. Typically this will mean that they will achieve the movement from lumbar flexion, and then the cycle of back injuries occur.

All is not lost however, working to improve mobility in each of these areas can make big strides toward getting athletes in the right position.

In the meantime just beginning the lifts from a slightly elevated, but static position (A low block or another bumper plate) can help athletes get in start position that does not include lumbar flexion.

Mistake #3: No consistency in the start position

In any movement, we preach consistency, from a golf swing to a bench press. The pattern that we create time and again is the one to which we will default when the going gets tough.

The power clean is no different, but if I walk into most weightrooms and training facilities I see something entirely different.

Roll the bar around for a minute, hop up and down, roll the bar around some more and LIFT!!!

"But wait, I do 3 rolls every time, so my pattern is the same"

The approach to the power clean should be the same every time you approach the bar. Early on in training I sought to eliminate inconsistency by crouching by the bar before beginning the lift. Still I found difficulty achieving a consistent position in my lift off from the floor.

My training really took off when I took a 3 step process to get the bar in my hands.

- 1, Cover my laces with the bar, brace the core and lock in the lats. Unlock the knees.
2. RDL to my knees
3. Squat to the bar.

The first step is really about insuring that I have the proper relation to the bar and that my body is prepared to maintain a stable position throughout the lift. Keeping the bar close to the body on the initial lift off will allow for the most efficient bar path, and that requires you to be close to bar but also that you are able to maintain the right position.

Making an RDL movement to the knees allows my hips to be behind the bar. Getting the hips away from the bar will allow the hips to remain loaded throughout the lift.

Squatting to the bar, maintains a consistent torso angle down to the start position, meaning that on lift off the shoulders will remain forward of the bar.

With this 3 part pattern I am able to insure that I, or any athletes I coach, make it to the start position consistently.

Mistake #4: Pulling the bar too fast off the ground.

Lots of weight on the bar? Only one way to pull it.

HARD.

Right?

Not really. The first pull off the ground is all about maintaining consistent position and gaining momentum into the second (more aggressive pull).

As a beginning lifter I don't think that there is any mistake more common than pulling too fast off the ground. Speed is king in the Olympic lifts and coaches preach it from day one.

There is only one issue. A bar that is moving too fast will inhibit an athlete's ability to make an aggressive second pull.

Think of it this way: If a car were driving past you at 90 miles per hour and you were asked to push on the bumper to make it go faster, you would have very little time to improve upon the speed of the car and therefore have no effect on its acceleration.

Imagine the same car moving past you at 5 miles per hour. If you were to push on the bumper of this car, you could greatly improve its acceleration and velocity.

Same goes with the Olympic lifts. Pulling too fast before reaching the mid-thigh will make your 2nd pull much less effective.

Mistake #5: Pulling around the knees

This is another really common problem among novice lifters.

The bar trajectory off the floor should be back. Struggling with this is pretty easy to do because the overall feel of the power clean is straight up.

The bar must always start in front of the center of gravity (on the floor away from the hips), and the 1st pull should be used to align the bar with the center of gravity. Aligning the bar even more to the front of the center of gravity is a common problem that leads to a lot of missed lifts, and poor catch positions.

If the knees do not go back on the 1st pull the athlete will be mis-aligned forward of the toes in the above the knee position and not be able to put the full power of hip extension into the lift.

Pulling around the knees can also look like what an athlete might do when doing a deadlift and look as if they are squatting the bar up, using a very quad dominant position.

Mistake #6: Not finishing the 2nd Pull

Pretty early on some athlete that you train will realize that the lower they can go to catch the bar, the greater likelihood they will have in being successful in catching the lift.

Not finishing the 2nd pull, the fast pull, from the mid thigh upwards means that the athlete did not reach full hip extension and did not close the gap between their body and the bar.



Incorrect Pull



Correct Pull

Not reaching full extension with the hips is a big no-no because it is the primary reason that athletes do Olympic lifts in the first place. Explosively pulling on the bar to hip extension in the point right?

The Olympic lift happens fast, and as coaches we can miss things like this so instead of having Superman vision an easy way to spot this problem is seeing an athlete jump forward in the catch. A complete hip extension will result in the athlete catching the bar in the same position on the platform or slightly behind the starting position. Jumping forward is the red flag for an incomplete pull.

Mistake #7: Catching the bar like a starfish

A largely overlooked portion of the Olympic lifts is the receiving portion of the lift. The snatch is a great movement for force production, but just as important is the force absorption that takes place when you receive the bar. This position should mirror the position you would see when landing from a jump. When the receiving position does not mimic the landing from a jump, not only are you missing out on the benefits of force absorption, but you are also training yourself to land in bad positions in other athletic movements. Your training went from injury prevention to injury promotion.



The starfish is the ugly creature that likes to poke its head out when weights approach a maximum. I know you have seen it before, and you have likely done it before. The feet splay out wide, with all of your weight towards your toes. It is the least athletic position you can find in the gym.

Landing like a starfish happens because you have not prepared yourself to move rapidly under the bar. Your body defaults to what it feels is the fastest way to move under the bar, and in most cases this happens to be the feet wide, starfish position.

Prepare yourself by doing some drills like the snatch balance to improve your comfort level in getting under the bar for max weights. Although this drill requires you to go into a full overhead squat to receive the bar, it will still equip you with a strategy to get under the bar that is far better than the starfish.

Mistake # 8: Not drawing on the platform

Drawing on the ground is not just for bored children with sidewalk chalk, or if you were like me, its not just for writing the name of your rival on the ground for motivation. Drawing on the ground is a great way to help to improve your athletes technique in the Olympic lifts.

A Murray cross is a simple, but genius way to improve the technique of your athletes. By simply making two intersecting boxes you are able to give the athletes precise foot positions, for starting, for finishing, and for jerks. You can use tape to create the boxes, or have them painted on your platforms.



Using this method can give your athlete immediate feed back about the “correct-ness” of their lift. In fact using a murray cross is one of the easiest (albeit time consuming) ways to correct the starfish problem we talked about earlier. Feet landing outside of the box have landed too wide, feet landing forward of their start position means an incomplete pull.

Dimensions: Center Part: 18” Wide x 12” long
Top part: 4” wide x 12” long
Bottom Part: 4” wide x 12” long

Mistake #9: Not Including Pulls

The Olympic lifts’ inclusion into so many high school programs begins and ends with the power clean. This is a serious shame, If you look at the training programs of elite weightlifters pulls are often included in many of them. The clean or snatch pull is a great movement to incorporate to the programs of your high school power athletes as well.

A greatly overlooked piece of the puzzle in many programs is the clean/snatch pull. The movement mimics the normal movement – same start position, explosive extension- but does not include the final rack position. This means that the movement can be used as an accessory lift to actually improve power by allowing the athlete to exceed the normal loads that they would use when required to rack that bar.

The Olympic lift pulls despite using greater loads should be used as a technique tool. The movement should focus on extension of the hips, and finishing through the toes. A correctly completed pull should go straight up and the athlete should feel on balance as their feet heels re-contact the platform. A common technical error is cleared up by doing pulls - incomplete extension of the hips. If the athlete does not finish with complete extension they will be pulled forward and will need to take a step to regain balance, this is easy to spot and easy to fix. Cue the athlete to pull through the heels and finish through the toes.

Mistake #10: 3 is the magic number

Lets go ahead and get this out there. No one needs to do sets of 10 in the power clean. It just isn't necessary unless the programmed period of work is designed to develop an athlete's bar skills.

Moving on...

Even those that see the inherent problem with doing high rep Olympic lifts, will write programs with set after set of 5 repetitions and month after month of programming at 5 repetitions. I too have been guilty of this mistake.

Most Olympic lift programming should be done at 3 or fewer reps and most of that most should be done at 2 or 1 repetitions for high school athletes. Olympic lifts are a power movement and the traditional set and rep range, we learned from text books, must be modified as such.

The quality of movement needed to coordinate a great Olympic lift needs to be much higher than would be needed in normal strength movements (Bench, Squat, Deadlift, etc).

For the sake of clarity I have come up with a programming chart that looks like the one below.

If for a strength movement you do x reps for Olympic lifting you should do x reps
8-12 for strength movements = 5 reps for Olympic lifts
6-8 for strength movements = 3 reps for Olympic lifts
3-5 reps for strength movements = 2 reps for Olympic lifts
1-3 reps for strength movements = 1 rep for Olympic lifts.

Now that can get pretty boring if programming exactly like this for Olympic lifts, so to provide some variation we will use combo lifts (clean pull + clean) and complete 1+1, 2+1 to add some more volume in the lower rep ranges without trying to go for a 1 rep maximum.

Clearing up these issues can improve the quality and execution of the Olympic lifts in the programs you develop for athletes. Try them out and let me know what you think.

Mistake #11: Snatching from the floor

Any number of problems in the snatch can come from bad movement once the lift has begun, but an even more common problem that I see is a poor start position.

Poor start positions can be caused by plenty of different issue but a common one is just a lack of a clue what the heck the position should even look like.

At the floor level, the biggest thing you should see is a trunk position that is about 30 degrees above the horizontal. The angle of the shins and the thighs vary greatly based on the height of the person doing the snatching, but the one constant is the trunk angle (1). Get this wrong and you don't have much of a shot at getting the pull off the ground correct.

Lets say that you actually do have a clue what the start position should look like. Now that you do, lets see what goes into actually getting in the correct position. The true start position for the snatch is uncomfortable, to say the least. It requires you to be in a position that is difficult for the following reasons:

- Hip mobility- A quality that was zapped from you by sitting in a desk all day.
- Ankle mobility- Probably taken from you in that heated game of pick up basketball 3 years ago, when you rolled your ankle going for a game winning slam.
- Thoracic spine extension- Again, taken from you by your desk job.
- Trunk stability- Its not likely you have been practicing some awesome diaphragmatic breathing patterns over the last several years, so this is probably gone as well.

Not everyone lacks in every single area to get in the correct start position, but lacking the mobility and stability to actually achieve these positions, in even one area, means that an you will default to easier patterns to get to a bar resting on the ground. For those lacking in hip mobility, thoracic mobility, or trunk stability you will likely default to flexion at the lumbar spine, meaning a jacked up back is right around the corner.

Fortunately, you can work to improve mobility in each of the areas that you lack and rather quickly be able to achieve the correct start position. So take the time to develop mobility and stability where you need it, and then come back to trying to pick things up from the floor.

In the meantime, just beginning the lifts from a slightly elevated (but static) position (A low block or another bumper plate) can help athletes get into a start position that does not include lumbar flexion.

Mistake #12: Hitting Pop ups

If you manage to get in the correct start position for a snatch from the floor, you might be ready to pull some big weights but you're still not out of the danger zone. A big mistake is waiting to claim you.

We have already established what the correct torso position is when starting on the ground-roughly 30 degrees above horizontal- that same position is also the angle that the torso should be in when the bar is above the knees, and the first pull is complete (1).

The second mistake of snatching, is getting out of the correct torso position by letting your hips pop up too early. Doing so will put the bar too far in front of you and will effectively put your chances of making a good lift on par with that of Carrot Top winning an Oscar.

The initial lift off from the floor should be done by extension of the knees. Driving the knees back while lifting the torso is what we are aiming for.

The feeling you need to look for you is PUSHING with your legs.

The torso should remain in the same relationship to the ground (30 degrees above horizontal) throughout the first pull. In this way we are looking to translate the position of the torso vertically through space. This will maintain the powerful RDL/hips loaded position above the knee. The knees should continue driving back until almost reaching extension as the bar begins to pass the knee.

Mistake #13: Not keeping the bar tight to the body

Just like if you told me you saw a bad movie recently I would say that it probably featured sparkling vampires and some bad acting, if you were to tell me that you miss a lot of reps in the snatch I would immediately think that mistake three would be the culprit.

Up to this point we have spoken much about the position and movement of the body in the snatch, but there are two dogs in this fight and the movement of the bar is just as important as your body.

The third sin of the snatch is letting the bar get too far from your body during any part of the lift. One of the basic concepts of weightlifting is: once the bar breaks from the floor the

body and the bar must act as one unit. This unit, or lifter/barbell system, functions optimally when the bar is close to the body.

There are two instances in which the bar can get away from you when you snatch:

1st pull/off the floor

If the bar gets drifts away from the body during the first pull you are pretty well screwed. The lifter/barbell system is loose, and you will have a hard time recovering in the lift.

To correct this, try pulling the bar tight to the body as you start the lift in a sweeping motion.

2nd pull-

Once the bar passes the knees, this is another point in which the bar can get away from people. If this happens you no longer have a chance at making any decent weight. When the bar gets too far in front of the body in the 2nd pull phase you are no longer in control of the bar. As the bar drifts out away from the body you must move away from your upward motion path and jump forward to catch the bar.

Mistake #14: Not closing the “triangle”

Mistake 4 goes by a number of names: a short pull, leaving the hips out, or not finishing with extension. Regardless of what you call it, we call it not “closing the triangle” and it is mistake 4 on our list.

The triangle is the position that you achieve when the bar is above the knees. This position is important to form: The hips are away from the bar, the arms are directed back towards the thighs, and the chest over the bar forming 3 sides of a “power triangle.”

The triangle stores a ton of potential power, the hips are primed and ready to explode with force on the bar. It is difficult to not achieve any sort of triangle above the knees, but all too often people are able to form the triangle but unable to shut it.

Focus on driving the hips to the bar as soon as the bar passes your knees. Let the knees come under the bar, and then put the hips into the bar.

Finish the 2nd pull and shut the triangle with force and finality to get the most out of your snatch. If you leave it open you have left a lot of power on the platform that could have been used to lift bigger weights.

Mistake #15: Being a swinger

In snatching there are two types of people:

-Swingers

-Pullers

Although the term swingers brings to mind the fast lifestyle of a 70's era playboy complete with shag carpeting and wild parties. Despite the allures of how nice shag carpeting sounds, being a swinger is not a good thing when it comes to the snatch.

Swingers routinely miss weights as the bar flies forward at the end of the 2nd pull. No, it is not because of loose morals that swingers miss weights. The term swingers is used to describe the approach taken to finishing the second pull.

Efficient weightlifters finish the second pull with a vertical spike of power. Swingers finish the second pull with a forward spike of power leading the bar to “pop” off their hips in a distinct forward arc. While big weights can be lifted in this way because you are still reaching full, powerful hip extension, it is far from being efficient, and will likely lead to more missed lifts than you would care to have.

Focus on getting achieving a vertical finish to the bar, know that by actively pulling yourself under the bar you will be able to get around the bar rather than making the bar move around your own body.

Mistake #16: Not being a “Jerk”

Many programs include a clean of some sort, fewer programs include the snatch, and only a select few programs include the jerk in programming. This is a big mistake.

The jerk is the most explosive “quad dominant” exercise that athletes can perform and develops both lower body and upper body fast twitch muscle fiber. When incorporating the split jerk athletes gain even more from dynamically changing their foot position in the receiving position of the lift (more on that later).

Actually adding the jerk to your program is fairly simple. Start by familiarizing athletes with the skills it takes to press overhead. Once athletes are comfortable with the bar overhead it is necessary to add in the dip portion of the lift. After dipping, move to push pressing. Next, make the movement explosive by adding power jerks, and finally add the split jerk.

Mistake #17: Being a Generalist

Generalists, or dabblers, do things once in awhile. They use TRX's one day, do some kettlebells, jump on some boxes, and even clean or snatch once per week. Generalists are not great at the Olympic lifts.

To truly be good at the Olympic lifts, it is important to do the lifts everyday in some amount. They do not have to dominate your entire weightroom session, but including these explosive lifts will improve your ability to move quickly and explosively on the field.

Here is a simple way to include Olympic lifts in your program each day.

Monday: Push Day

Snatch, and lower body push

Tuesday: Pull Day

Clean pulls or assistance exercises, and upperbody pull

Thursday: Push Day

Snatch pulls or assistance exercises, and total body push

Friday: Pull Day

Full cleans, and lower body pull

The greatest weightlifting countries of the last half century have known that generalists are not the most explosive athletes out there. These nations would lift up to 9x each day (you shouldn't do that) to make sure that athletes were ready to perform on the platform. Frequency was their secret, and now it can be yours (but seriously not 9x in one day).

Mistake #18: Not learning the movements

In the same vein as the previous mistake is mistake 19, "not learning the movements." Let me first take you back to my intro to the O lifts in a formal fashion. At the time I had done some cleans, never done the jerk, or the snatch. I thought I was pretty strong, but had a ways to go. For the first 2 months after being introduced to the movements I was not allowed to go over 40 kilos for the clean or the snatch, even though I was plenty strong enough to do so.

Instead I started each session with 30 movements with just the bar. These movements were to be done to the best of my technical knowledge. I did this 3-4 days per week to start each session. Think about this, there is no strength gain going on, and very little demand on my body physically.

Within 1 month of being allowed to go over 40 kilos in either lift, I had cleaned almost 90 lbs over my previous PR in the clean, jerked that weight, and had also snatched over 200 lbs for the first time.

I make all my lifters do the same thing before each session. Perfect imitations of the lifts for 30-50 reps. It takes nothing out of your body physically, but trains you to be a specialist with some serious skills.

Mistake #19: Not splitting your feet often

Very little in athletics happens in a perfect bilateral, balanced stance. Weight transfer, force production, and force absorption happens constantly on 1 leg or a combination of 2 legs. Training then should often be the same.

Rather than receiving all of your lifts in a comfy and cozy 2 feet stance, try adding in some split cleans, split snatches, and split jerks to achieve a more athletic and stable body.

I use split jerks often, and use split snatches and split cleans for athletes when they need to lighten the load or move a bar with even greater speed. These movements are particularly important for sprinters and athletes that need to sprint, or jump from one foot.

Mistake #20: Dipping to your toes

A common refrain from coaches is “stay on your toes” or “be athletic.” While this is vital on the playing field it often carries over into the weight room with bad side effects.

When supporting a bar, “staying on your toes” is not such a good thing. A stable and strong base is important to create the most power. The pull on the snatch and clean are definitely examples of times when athletes tend to get on their toes but the most common time I see this problem is when athletes are completing the jerk.

Coach athletes to dip (initiate the jerk movement) from flat feet. An equal amount of pressure should be placed between the big toe, small toe, and heel. Drive through the movement and only finish on the toes. Going to your toes too soon can cause the bar to drift forward, and the lift to be missed.

Wrapping it up

There are plenty more mistakes that I see all the time when it comes to the Olympic lifts, but these top 20 are the ones that keep most people like you from hitting big weights. Correct these mistakes and you will be on your way to putting some serious weight over your head, and will get you on your way to athletic domination.

References:

- 1) Y. Ikeda, Jinji T, Matsubayashi T, et al. *Comparison of the snatch technique for female weightlifters at the 2008 Asian Championships*. J. S&C Res. 2012 26(5). 1281-1295.



Wil Fleming, (CSCS, USAW-2) is a sports performance coach and expert on being a more explosive athlete. His expertise comes from years of training and coaching athletes in multiple sports. His athletes are routinely the most explosive, fastest, and strongest on the field. He is also one of the strongest medium sized guys you will ever run into boasting some pretty decent numbers on the platform and in the weight room.

Wil is the co-owner of Force Fitness and Performance and Athletic Revolution Bloomington, in Bloomington, IN. Force Fitness just turned 4 years old and is already

one of the most successful training facilities in the Midwest with nearly 400 clients, 30 athletes earning Division I scholarships and nearly 75 athletes moving on to compete at the NCAA level in Division I, II, III.

In addition to being a business owner, Wil was one of the authors of the IYCA's Essentials of High School Strength and Conditioning, along with other noted performance experts Eric Cressey, Mike Robertson, and Dr. Toby Brooks and also authored the IYCA's Instructor Course: Olympic Lifting.

Wil's teaching methods for the Olympic lifts were also featured in the DVD Complete Olympic Lifting.

Wil is a regular contributor to the IYCA blog, STACK (a magazine for high school athletes), and T-Nation where he writes about the being an explosive athlete/dude.

Wil is a sought after speaker on the topics of power development, speed, and strength training for athletes. He has spoken at the IYCA International Summit (2010-12), the Midwest Performance Enhancement Seminar (2011), Building Better Athletes Seminar (2012) and the College of the Canyons Strength and Conditioning Clinic (2012), St. Vincent's Sports Performance Seminar (2013, Keynote), Enhancing Athletic Performance Seminar (2013).

Prior to being a business owner, he was an Olympic Trials participant, an all-American athlete, and the school record holder at Indiana University as a hammer thrower. Wil was a resident athlete at the Olympic Training Center in Colorado Springs for Olympic weightlifting after winning a Jr. National Championship in the same sport.