RECORD BREAKING
RAW SQUAT GUIDE

by

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The 900 pound raw squat threshold is a barrier that very few athletes have crossed. Learn from Chad about how you can bring your squat up to record levels.

The raw squat is one of the purest measures of total body strength and power, earning it the moniker of “the king of all lifts”. In August 2011, I became the 14th man in history to break the 900 pound barrier in a belt and knee wraps by squatting 905 pounds in August 2011 at the SPF Powerstation Pro/AM, it not only broke the American Record in the 308 weight class, it also represented a 105 pound PR from my 1st powerlifting meet less than 10 months earlier. Squatting is simple, bar on your back, bend your knees, stand up, with a few finer points thrown in and there is no reason that your training needs to be overly complicated. either I want to take you step by step through my approach to performing the squat and some of my training philosophies that have helped me reach success so quickly in my powerlifting career.

Click here to see video of Chad squatting an American Record 905 pounds!!
**Shoes, Wraps and Belt**

Maximizing your squatting abilities begins before you get under the bar. Choosing proper footwear is the starting point for moving maximum poundages in the squat. At my first powerlifting meet, I squatted 800 pounds while wearing Nike Frees, which garnered me many negative comments from various anonymous internet tough guys, who needed to worry more about their technique and training than footwear and while I still support that type of thinking, if you are going to train to squat big, you should invest in a good pair of shoes to do so in. The type of footwear you select should be dependent on your squatting style. I wear Adidas Ironworks Olympic lifting shoes, which have a fairly large heel and hard sole, these type of shoes are ideal for a lifter with a narrow to medium stance who allows their knees to have some forward movement. Lifters who use a slightly wider stance and focus on forcing their hips back as much as possible will be well served to squat in shoes like Adidas Sambas or Chuck Taylors. The Sambas have a very slight heel on them, which will benefit lifters with poor ankle mobility which limits their ability to get proper depth.

[Click here to see Chad squat 800 at his first meet in Nike Frees!!](image)
The other pieces of equipment to consider for the raw squatter are the belt and knee wraps. When looking for a good belt, I would suggest a single prong powerlifting belt. Single prong belts allow for more flexibility than lever belts and just as much stability. Knee wraps can have a great impact on increasing poundages for raw squatters. The key characteristic to look for when shopping for knee wraps, is rebound power: Geared squatters require stopping power, while raw squatters require more rebound power as they will not receive any pop from a suit. I wear Elite Fitness System’s Heavy Wraps. As a general rule of thumb, striped knee wraps are generally better suited for raw lifters than solid color wraps.

I was fortunate enough to have my good friend Brian Carroll’s handler, Tony Garland, wrap my knees for my record breaking 905 pound squat. Here is the technique he utilized for my squat and Brian’s 1185 multiply world record at 275s...

Click Here to see this record breaking knee wrap technique!!

Kevin Torres, 565 squat at 165 bw and 17 years old, knows the importance of a good knee wrap. Here he is getting wrapped by EliteFTS sponsored athlete, Dave Kirschen before one of his squats at the 2011 SPF Powerstation Pro/Am
Warmup

Once you are properly equipped to squat with the right shoes, wraps and belt, it is time to prepare your body for maximum performance with a proper warmup that improves mobility, prevents injury and prepares you for maximum performance. A well organized warmup will increase core temperature, improve mobility, activate the musculature needed for the training and prepare the central nervous system for maximum performance. A proper warmup is also a simple way to improve the lifter’s general physical preparedness, if you are left gasping for air from a warmup you are either being excessive in your pre training routine, or you are tremendously out of shape, my guess is the later.

My squat training warmup is as follows...
1) Incline Treadmill Walk-5 min
2) Joint Circles x10 for each: neck, shoulders, arms, hips, good mornings. Upper body mobility is also important for squatting, to allow you to get into proper position under the bar.
3) Quadruped Hip Mobility x10 each: Bent leg raise, straight leg raise, donkey kicks, forward and backward knee circles
4) Skipping, shuffling and high knee drills 1-3x10 yds each
5) Glute Activation Drills x10-20 of either Band Resisted Walks or Glute Bridges, if you have issues with your knees collapsing inward during the squat, you need to be doing glute activation work
6) Box Jumps x5-15 total: Jumps will provide a post activation potentiation effect to your squatting through the stimulus it provides to the central nervous system.

Here is Chad warming up before the 2011 SPF Powerstation Pro/AM with EliteFTS sponsored lifters Brian Carroll and Matt Kroc looking on...

[Click here to see a video of a typical squat training warmup for Chad!]
While this amount of warmup may seem daunting to someone with low GPP, it would serve many lifters well by improving their aerobic capacity (which will allow them to perform more high quality work within a training session, not be huffing and puffing while approaching the bar and have some gas in the tank at the end of a meet to pull a big deadlift), enhancing mobility (which will aid in injury prevention and allow you to hip depth more easily), increasing athleticism/kinesthetic awareness (which will make technical adjustments easier to make) and enhancing your explosive power.

After completing this general warmup, I will get under the bar and if let’s say I was going up to 765x3 (in knee wraps) that session my warmup would be as follows...

Bar x15, 135x5, 225x5, 315x3, 405x2, 495x1, Add Belt, 585x1, Add Wraps, 675x1, 765x3

**Setup and Walkout**

One place that too many lifters miss squats, is before they even begin the lift, in the setup and walkout. A good setup is critical to squatting big weights. A simple rule when setting up is that if you are comfortable holding your position, it isn't tight enough. My process of setting up and walking out is as follows...

1) Set your hands, I use a thumbless grip with my thumb set on the rings. This is a relatively narrow grip for a bigger lifter, but I definitely feel that a narrow hand position allows for a tighter upper back.

2) Pull your shoulder blades together before ducking under the bar, then as you duck under the bar, set one shoulder blade and then wedge the other in and then dig the bar into the middle of your traps.

3) Force your chest up as you bring your hips underneath you to bring the bar out of the rack with your hips, not your legs, keeping your eyes up throughout the walkout.

4) Walk your dominant foot out (in my case my right), then in one step set your opposite foot, and in one more step set your dominant foot. You should not need more than 3 steps to walk a weight out and have your feet set properly.

5) Pull as much air into your belly as possible, you should feel like you are stretching your belt with your abdominal pressure. This pressure should feel like it is going to cause your head to explode or eyes to pop out.

*A strong setup and walkout is critical to a big squat. You can’t finish well if you don’t start well.*
Technical Cues

To be elite at any power/speed discipline, your technique must become automatic. If you must think about every aspect of your technical execution during the squat, you will not be able to maximize your force production due to the slower neural firing patterns. For this to happen you must master your technique in every rep of training from an empty bar until your final rep of your work sets at every session, so that when you are on the platform you can shut your brain off and just perform. There are five technical cues that I think about during every training squat; 1) Get Tight, 2) Commit to the Descent, 3) Head into the Bar, 4) Knees Out, and 5) Accelerate.

1) Get Tight-Creating tightness throughout the entire body is a product of three things, proper set up—which I have already addressed, getting big air into your belly-draw as much air into your belly as possible, you should try to stretch your belt with your abs. There is a reason that so many great squatters have big waists, because a larger waist provides a greater base of support for big weight on your back, so expand your waist as much as possible with big air. The 3rd key to tightness is to squeeze the bar down with your hands. You want to squeeze the bar in your hand which will send a neural response of tightness throughout your entire body and pull the bar down onto your back, as if you are at the bottom position of a lat pulldown, this will flex your lats and give you a stronger support for the weight on your back.

2) Commit to the Descent-too many lifters seem to be intimidated by big weight on their backs and slow down their descents when compared to earlier lighter sets, this causes them to waste energy during the eccentric portion of the lift and to not exploit their stretch reflex which diminishes their power out of the hole. You have to figure out how fast YOU can descend and still maintain your tightness and technique. Descending quickly with big weight is a skill and must be practiced.

Shane Haamman, a tremendous squatter and Olympic weightlifter, really knows about committing to the descent. Click here check out this video to see Shane crush some huge weight with a very rapid eccentric phase...
Now I'm not saying that you have to have such a rapid descent, as Shane does, the important idea here is to descend with your max, the same way you do with your first warmup rep.

3) Head into the Bar-The most frequent ways that athletes miss squats is by falling forward due to their chest collapsing. This could be an issue of upper back weakness, poor setup or letting your head fall forward when reversing the weight. Throughout your squat you need to push your head back into your traps, this particularly needs to be cued when you are reversing the weight out of the hole. Pushing your head back will cause your chest to stay up and allow you to maintain a neutral back position. A simple teaching tool to cue this is to put on a baseball hat, backwards and tilt your head back so that the bill of the hat touches your traps.

If you feel solid with your technique in this aspect and feel that strength is lacking in your upper back, you need to be hitting your shrugs, rows and chinups hard. Because it is static/isometric strength required to hold a good upper back position during your squats, try holding the contraction on your final rep for 10-15 seconds (about the time that a ME single takes).

4) Knees Out-Between the meets where I squatted 865 and 905, I decided to slightly widen my stance and as your stance widens, a common physical/technical breakdown is knees collapsing inwards or valgus collapse. Valgus collapse could be a symptom of poor glute strength or just a lack of focus on this technical point. On the downward portion of the lift, you must force your knees out to allow yourself to 'sit between your knees' and on the upward portion of the lift you should force your knees out to allow you to fully utilize your glute and hip strength. If you struggle forcing your knees out you must strengthen your glutes. To do this is simple, I would suggest utilizing band walks, as seen in my warmup video, and band around the knees squats. To perform these, loop a micro mini/mini/monster mini-depending on strength, band once (making it into a circle that is half of its original size) and step through it so that the band so that it is around your knees and step out into your regular stance. Now you will feel the band pulling your knees in and you must actively force them out to stretch the band; I would suggest doing band-around-the-knees squats during all your warmup sets and any submaximal work sets.

5) Accelerate-I have often joked that the reason I squat so much isn’t because I’m so strong, but rather because I’m so fast. A conscious focus on accelerating the bar through the top portion of the lift is the simplest way to avoid sticking points. The more force you can generate at the beginning of the lift, the easier each of the following parts will be. During every rep of your training, blast the weight out of the hole, all the way to the top and when you are in a meet, your body will know to accelerate through your sticking points.
The seated box jump is my favorite method of developing explosive lower body strength for the squat. These do a great job of breaking the stretch shortening cycle and will force you to turn on as many motor units as possible, as quickly as possible to generate force with static overcome by dynamic strength.

Check out Chad doing at 45” seated box jump while wearing a 30 pound weight vest...

Here is a sample 12 week jump training cycle to enhance your speed in the squat...

Week 1-Seated Box Jumps wearing 50# weight vest for 6 sets of 3 jumps to 80% of your maximum box height.
Week 2-Seated Box Jumps wearing 50# weight vest for 5 sets of 2 jumps to 90% of your maximum box height.
Week 3-Seated Box Jumps wearing 50# weight vest for 4 sets of 1 jump up to a new maximum.
Week 4 (Deload)-Seated Box Jump without a vest for 3 sets of 3 jumps to 75% of your new maximum
Week 5-Seated Box Jumps wearing a 25# weight vest for 6 sets of 3 jumps to 80% of your maximum box height.
Week 6-Seated Box Jumps wearing a 25# weight vest for 5 sets of 2 jumps to 90% of your maximum box height.
Week 7-Seated Box Jumps wearing a 25# weight vest for 4 sets of 1 jump up to a new maximum
Week 8-Seated Box Jumps without a vest for 3 sets of 3 jumps to 75% of your new maximum
Week 9-Depth Jumps from an 18” box for 6 sets of 3 jumps
Week 10-Depth Jumps from a 21” box for 5 sets of 2 jumps
Week 11-Depth Jumps from a 24” box for 4 sets of 1 jump
Week 12-Depth Jump from 12” box for 3 sets of 3 jumps
Box Jumps are a great way to build explosive power to enhance your squat.
Training Tips

Here are five training tenets for the raw squatter to follow to maximize their strength.

1) Stay off the Box—This isn’t necessarily just a suggestion to avoid box squatting, as there are situations where I would actually suggest it for the raw lifter, but it is a suggestion that raw lifters need to examine the training information they are reading and understand who it is intended for. Most training articles are tailored for geared lifters and there are many principles that do not transfer from their training. Westside has championed the box squat as the be-all-end-all of squatting for years, but I feel that box squatting as described in many Westside texts isn’t suitable for the raw lifter. The idea of sitting back onto the box is akin to sitting back into a suit and the box and suit will stop you in a similar way, while you are reliant upon your knee wraps and your own reversal strength when lifting raw. Other popular geared training protocols that I don’t feel carryover to raw lifting well are ultra wide stances and focusing on sitting too far back. Extremely wide squat stances, while advantageous from a leverage standpoint, will wreak havoc on the raw lifters hips. Attempting to sit too far back is also detrimental to the raw squatter because they don’t have the suit to sit back into and stop you in the hole, you will be better served to initiate the movement back with the hips and then sit straight down.

Here are some thoughts from Sam Byrd, multiple world record holder and all-around badass, on box squatting and other popular geared training methodologies. “I can count the combined number of times I’ve box squatted, done a Good Morning and used bands/chains on my hands.”

2) Train Your Quads—There has been such a movement towards training the posterior chain in recent years that many have abandoned direct quad training totally. Due to the point I addressed above about not sitting back too far, the quads play a great role in a big raw squat. If you examine the physiques of great raw squatters such as myself, Andrey Malanichev, Peter Petras or the great Don Reinhoudt, you will notice that all share tremendous quad development. My ‘cold’ thigh measurement is 31.5” at 315 pounds bodyweight. Front squats, Safety Squat Bar squats, high rep Olympic stance squats, and single leg work like step ups, lunges and split squat variations are all great ways to build massive quads. Narrower stance squatting for reps has long been part of my training, my bests are 550x11 (belt only) and 635x10 (in wraps). Take some time during an offseason period to hit some rep maxes with between 70-85% of your 1rm and watch your legs explode with size and power.

Legendary bodybuilder, Tom Platz, built massive legs and tremendous strength with high rep, heavy squats. Click here to see Chad squatting 635x10!!
The Juggernaut Method, the program I used to first squat 800 pounds and the Inverted Juggernaut Method are both great programs utilizing higher volumes to help build your special work capacity for the squat and pack on some size onto your tree trunks.

3) Master the Movement-From July 2010 to September 2011, I competed in 3 meets and did 40 training sessions directed towards raising my squat, 37 of which began with the barbell back squat with straight weight. Your technique is paramount to your success as a lifter and while specialty bars, bands, chains, and boxes all have their role in addressing various weakpoints, they also alter your technique to varying degrees. One of the primary reasons that lifters miss squats isn't a lack of strength (unless they are picking their weights poorly), rather it is a lack of technique. The stronger you get, the less things will increase your strength, your training must become focused on only the exercises with the highest correspondence to the competition lifts, which in fact is the competition lift at varying intensities. Instead of changing your main exercise every week, focus your main squat training on the back squat at different intensities and rep ranges, drilling perfect technique on every rep.

Another important thing to consider when working to perfect your technique is to know your cues. Everyone has slightly different technique due to their unique leverages and due to this will naturally do some aspects of their technique well but will need specific cues to ensure they execute the weakpoints in their technique properly. Make sure your spotters and training partners know your technical issues and are cueing you properly. Also it is important to consider how many technical cues you can actually respond to. If you want to squat huge (or run fast, jump big, throw far, etc) you must make the movement an aft brain activity, meaning that you must be able to execute the movement without actively thinking about what you are doing, ie. It but be 2nd nature. I would at most pick one cue for the set up, one for the descent, one for the reversal and one for the ascent.

4) Use Supplementary Lifts to Address Weakpoints-While I’m not an advocate of using different squat variation for your primary work, if all you do is back squat your weakpoints will remain relatively weak. My training for the squat (as well as the bench and deadlift for that matter) is focused on working up to a rep max in the back squat and then using a variety of specialty exercises to address my weak/sticking points. If you have trouble with falling forward try using the safety squat bar (or front squats if you don't have an SSB); if proper depth is your issue squat to a low box (note the difference between a box squat and a squat to a box); if you miss squats because of poor reversal strength give Olympic pause squats a try; if 2-3” above parallel is your sticking point try Dead Squats (or Anderson squats depending on what you call them); if you are weak at the top end, squat with bands and/or chains. All of these exercises have different set/rep ranges that will best develop your strength. You do not need a huge pool of exercises to improve your squat, strategically pick 1-2 supplementary movements and become great at them and you will reap great rewards in your max squat.
5) Be Fast All the Time-One simple way to overcome any weak/sticking point is to blast past them with speed. Every rep, once you are properly warmed up, should move as fast as possible. Even if the bar doesn't actually move fast (due to fatigue or heavy weight) you need to focus on moving it as fast as possible, this will recruit the most muscle fiber and train your body for speed. Weighted jump training is also a great way to improve your force production. Box jumps wearing a weighted vest from a seated position is a great way to increase your speed, by best effort here is a jump onto a 45” box wearing a 30 pound vest at 307 pounds bodyweight. When doing these though it is important to avoid landing in too deep of a squat position because then this becomes an exercise in how quickly you can bring your knees up to your chest, rather than in how high you can jump. Prilepin’s chart is a great way to organize your jump training volume.

Click here to see a video of some of Juggernaut’s high school and college football players, all who squat over 475 in just a belt performing seated box jumps!
Becoming a great squatter is simple, hone your technique through perfect practice from the setup to the execution of every training rep, focus on addressing your weakpoints through strategically selected supplementary exercises and focus on the speed from the descent through the lockout. Train hard, eat big and sleep well, squatting isn’t rocket science it just takes solid, focused and consistent work.

Chad Wesley Smith’s American Record Squat Cycle

Week 1
1) Squat, with knee wraps- Up to 675x3
2) Speed Squat- 545x5x3, 1 minute rest
3) Dead Squat w/ SSB, from 1” above parallel- 495x8x1, 1 minute rest
4) Single Leg Squats Standing on Box- 3x12 with BW
5) Single Leg DB RDLs- 3x5 w/ 80s
6) Hanging Leg Raises- 5x15

Week 2
1) Squat, with knee wraps- Up to 705x3
2) Speed Squat- 545x6x3, 1 minute rest
3) Dead Squat w/ SSB- 525x8x1, 1 minute rest
4) Single Leg RDLs- 3x3 w/ 90s
5) Hanging Leg Raises- 5x15

Week 3
1) Squat, with knee wraps- Up to 735x3
2) Speed Squat- 545x7x3, 1 min rest
3) Dead Squat w/ SSB- 535x8x1, 1 min rest
4) Single Leg RDLs- 3x5 w/ 90s
5) Hanging Leg Raises- 5x15

Week 4 (Deload)
1) Squat- Up to 585x3
2) Hanging Leg Raises- 3x15

Click here to see 17 year old squatting sensation, Kevin Torres. squat 565 at 165 pounds bodyweight in his 1st meet ever!!
Week 5
1) Squat, with knee wraps-Up to 765x2
2) Speed Squat-600x5x3, 90 seconds rest
3) Dead Squat w/ SSB-585x5x1, 90 seconds rest
4) Single Leg RDLs-3x3 w/ 100s
5) Hanging Leg Raises-4x15

Week 6
1) Squat, with knee wraps-Up to 785x2
2) Walkout and 10 Second Hold-860 for 1x10 seconds
3) Speed Squat-615x4x3, 90 seconds rest
4) Dead Squat w/ SSB-545, 575, 605x1, 90 seconds rest
5) Single Leg RDLs-3x4 w/ 100s
6) Hanging Leg Raises-4x15

Week 7
1) Squat, with knee wraps-Up to 805, missed, planned to do 2 reps
2) Speed Squats-635x3x3, 90 seconds rest
3) SSB Dead Squat-555, 585, 615x1, 90 seconds rest
4) Single Leg RDLs-3x5 w/ 100s
5) Hanging Leg Raises-4x15

Week 8 (Deload)
1) Squat-Up to 615x1
2) Hanging Leg Raises-3x15

Week 9
1) Squat, with knee wraps-Up to 815x1
2) Squat-675x3x2
3) Dead Squat w/ SSB-565, 605, 635x1
4) Hanging Leg Raises-3x15

Click here to see some of Chad's training highlights including an EASY 785x2 squat in the gym!!
Week 10
1) Squat, with knee wraps-Up to 825x1
2) Walkout and 10 Second Hold-905 for 1x10 seconds
3) Squat-695x2x2
4) Hanging Leg Raises-3x15

Week 11
1) Squat, with knee wraps-Up to 835x1
2) Hanging Leg Raises-3x15

Week 12
1) Squat-Up to 585x1

Week 13
Off, rest for Meet on Saturday

Meet Day
Squat-Warmups: Bar x10, 135x5, 250x2x3, 340x3, add belt, 470x2, 560x1, 610x1, add knee wraps, 730x1

Squat-1st Attempt: 835, 3 whites, 2nd Attempt: 905, 3 whites, American Record at 308s, 3rd Attempt: 935, no lift

This is my exact training I used in preparation for the SPF Powerstation Pro/AM, where I squatted 905 in belt and knee wraps for the American Record. As you can see, this training is very basic. The Dead Squats were critical in addressing, what Josh Bryant and I viewed as my only weakpoint, 2-3” above parallel. You will also notice that during the final weeks of the training, my training is very minimalistic, focusing on only the competition lift and reducing assistance work to virtually nothing in the final weeks.

Keep checking JTSstrength.com for more great articles and information on how to improve your training.

Chad and Juggernaut are also available for personalized programming help with training and nutrition by clicking [here](http://www.JTSstrength.com).


Look for The 9 Day Work Week, The Juggernaut Method 2.0 and The Juggernaut Football Manual coming soon to JTSstrength.com and EliteFTS.com!!