Power Clean: A Natural Progression

Power cleans have a mythical reputation. They are frequently referred to as the “gold standard” of power development training; the thing "real" athletes do; the Holy Grail of strength and conditioning.

However, they are rarely seen - if ever - in most training facilities. If they are seen, they are reserved for a select group of elite athletes.

Intimidating images of Olympic competitors throwing crazy loads of weight, a daunting list of technical knowledge needed to do them correctly, and concern of injury all re-enforce the mythology surrounding the power clean.

In many ways, the power clean is the unicorn of strength and conditioning. (OK ... maybe I went too far. Maybe Sasquatch is a better image to present).

Power Cleans

Like unicorns and Sasquatch – Power Cleans are rarely seen in the wild, but everyone knows about them.

The purpose of this article is to help coaches teach power cleans in a straight-forward, easy to follow progression to beginners. We, at IMPACT Performance Training, want to bring power cleans out from its mythical state into the light of day. We want everyone to enjoy power cleans, not just the elite or
extreme athletes. This article isn’t a substitute for good coaching (nothing is). Hopefully, however, our progression, the coaching cues, and the video clips will help you feel more comfortable teaching power cleans to the general population. Our end goal, to get more people doing power cleans as a part of their regularly training program.

A coach should be able to take a beginning athlete from zero to a solid power clean pattern in a relatively short amount of time (1 – 4 sessions). We focus is on grooving the correct movement pattern and laying a foundation which future power development can grow and flourish. Adding weight and increasing load will come later. Results come from hard work over time; period.

The value of a power clean is profound. It requires explosive hip and shoulder strength coupled with total body coordination. It’s an innately dynamic, athletic movement and why they are so coveted by serious athletes looking to optimize their power development.

“The power clean teaches timing and athletic synchronization of complex, multi-joint movement; the commitment involved in getting under the bar ... it trains rate of motor unit recruitment, thus improving neuromuscular efficiency; and it teaches explosion, the mental cue for highly efficient motor unit recruitment.”


Guiding Principles

1. Safety
The challenge of cleans is that a lot of things going on in a short amount of time. A beginner should focus on grooving the correct movement pattern before worrying about weight. (We can’t emphasize this enough ... which is why we’ve said it twice.)

Quality movement done safely is the key to reaping the benefits from this dynamic and explosive movement. Using Gray Cook’s and Lee Burton’s Functional Movement Screen (FMS) and corrective exercises is pivotal in the early stages of learning the clean. We do not want to put fitness on-top of dysfunction. We must correct any poor movement patterns before we can go too far with the power clean.

Also critical in teaching combination lifts such as the power clean, is showing beginners how to “miss” safely. While the load goes up, the likelihood of injury should not also increase.

2. Sharp, Precise Movement
Power cleans are beautiful total body exercises. They help an athlete develop greater hip explosiveness, muscular coordination, and efficiency. We want to emphasize sharp, precise movements with a high degree of coordination. Two additional benefits are increased range of motion as the athlete develops and the application of “super-stiffness” concept to the athletic movement.

Super stiffness is a term used by Stuart McGill. He explains it as:

When all muscles at a joint stiffen together a “super stiffness” phenomenon generally occurs. The total stiffness at a joint suddenly becomes more than the sum of individual muscle stiffnesses... For those activities that demand high core or torso stability, all muscles must be activated -- never isolate one. Furthermore, as will be shown later, high performance in athletics requires rapid muscle activation onset and force development, together with equally rapid reduction of muscle force. Super stiffness needs only to occur briefly in such cases, but if it needs to be brief, the motor control system must be highly tuned to ensure optimal super stiffness.
Consider a lifter ... the core must be extraordinarily stiff to minimize energy losses and ensure that the torso will not buckle. Super stiffness is required with all muscles contributing.


### 3. Heaviness with Quickness

Heaviness with Quickness is a huge focus AFTER the correct movement pattern of the power clean has been established. Letting athletes get success – repeatedly - and proficiency with the movements before going anywhere near a 1 rep max is key to long-term success. Heavy loads can be introduced when the athlete has “earned it” through clean technical execution.

We need heaviness *with quickness*. This is a tough relationship to balance. If we are training athletes from many disciplines for power, we must be committed to reinforce the importance of quickness and explosiveness. A one rep max is not what we are interested in. Being able to consistently generate powerful athletic movements is. Explosiveness is what we are after. The cue “Quick. Move quickly,” should be heard frequently during training sessions.

### 4. Continuum Approach

An important mantra we have during training sessions is “stopping is not an option; modifying is.” We need to apply this principle to cleans as well. We need to take our athlete as far as he or she can go on the continuum of exercise. Load can go up, but we must constantly be mindful of quality movement. Lower weight at a faster speed is better than a heavy weight moving at a slow, grinding speed. If while doing a workout, an athlete begins to miss consistently or form begins to deteriorate, then it is up to you as the coach to either lower the weights and / or regress the exercise; in order to keep the quality of movement and quickness component intact. Falling back and working a prep movement from our progress is better than doing nothing.
Pre-cursors to the Power Clean Progression

Kettlebell / Dumbbell series

We begin athletes with kettlebells and dumbbells early in their programs because they allow us to start working key patterns in a manner that most athletes find easier to manage than a barbell.

1. Swings KB

Focus: Big hips, double extension
Verbal Cues:

- Big chest
- Shoulder blades down and back
- Tall, tight back
- Relaxed arms / tethers
- Hips hinge back, shoulders out over toes
- “Pop” hips
- Full extension
- Find "weight-less-ness"

Video:

http://www.youtube.com/watch?v=HipS5pMEujU

2. Snatches DB

Focus: Follow-through, complete motion
Verbal Cues:

- Hip drive
- “Rip it” – big pull on the DB
- Elbow pulls up
- Keep DB close to body
- Snap / punch hand to sky

Video:

http://www.youtube.com/watch?v=4_3whKffqew
**Power Clean Progression**

**Barbell Series**

Once comfort with the pre-cursor movements is achieved, an athlete is ready to work through the barbell progression for a power clean.

When using a barbell, we start all athletes from the hang position – we get there by having athletes take the barbell off of blocks. Pulling the barbell off the floor tends to be challenging for most beginners. Initially, our focus is on learning the power clean motion, which takes the weight from an athletic posture up to the shoulders. The benefit / risk ratio and time utilization don’t justify working through the challenges of coming off the floor at the early stage of learning. We see coming off the floor to clean as part of a progression and can be an athlete’s focus at a later date.

1. Hands-Free Front Squat *

Focus: Teaching the athlete to hold the barbell on shoulders. Also, keeping chest and elbows up during the squat motion.

Verbal Cues:

- Tall, tight back
- Chest out
- Barbell racked on shoulders
- Elbows up
- Hips back

Video:

[http://www.youtube.com/watch?v=6kMkQMNAQDo](http://www.youtube.com/watch?v=6kMkQMNAQDo)

* Not all exercises in the progression are meant to be used long-term. Some are included as a teaching tool to illustrate a concept or mechanic to a new athlete. Once the movement is understood, there won’t be a need to keep it in a workout. Examples are the hands-free squat, the jump shrug and the drop squat.

2. Clean Grip Front Squat

Focus: Squat pattern

Verbal Cues:

- Tall, tight back
- Chest out
- Elbows up
- Deep squat
- Controlled down + drive up

Video:

[http://www.youtube.com/watch?v=1yjvC6iasak](http://www.youtube.com/watch?v=1yjvC6iasak)
3. Romanian Deadlift (RDL)

Focus: Setting the ready position and super-stiffness of the back with hip flexion and extension

Verbal Cues:

- Tall, tight back
- Shoulder blades down and back, pinched together
- Curl wrists / bending the bar
- Hips move back
- Bar slides down leg – maintaining contact
- Bar to just above the knees (hang clean position)
- Drive hips forward

Video:

http://www.youtube.com/watch?v=qjm3_ckibdc

4. Power Shrug *

Focus: Triple extension

Verbal cues:

- Stand tall
- Drive through heels and drive up
- Extend hips
- Pull shoulders to ears
- Arms remain relaxed

Video:

http://www.youtube.com/watch?v=SwAsHTVQsdE

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5. High Pulls

Focus: Triple extension and pull

Verbal cues:

- Slide bar down thighs – get into an athletic stance
- Explode bar off of high thighs
- Full extension with hips
- Big Pull – driving elbows up
- Keep the bar close to your body
- Quick, move quickly

Video:
6. Flip Cleans

Focus: Integration and sequencing of movements
Verbal cues:

- Start from the hang position
- Explode bar off of high thighs
- Big pull
- Keep it close to body
- Elbows around bar and up
- Quick, move quickly
- Legs remain straight

Video:

http://www.youtube.com/watch?v=h9L79orBB3s

7. Drop Squat *

Focus: Squat pattern, getting under the bar, timing
Verbal Cues:

- Stand tall
- Drop quickly into squat position
- Back tall, tight throughout
- Stick bottom position

Video:

http://www.youtube.com/watch?v=eXJ6cowyr_Q
8. Power Clean

Focus: Integration of movements and explosiveness

Verbal Cues:

- Back tall and tight
- Shoulders and hips move together
- Bar hits high thigh
- Full hip extension
- Bar close
- Big pull
- Quick, move quickly
- Move feet
- Drop into athletic stance/bent knees
- Fast elbows

Video:

http://www.youtube.com/watch?v=op4_HW-Tw30
http://www.youtube.com/watch?v=g3odZ9FXxRE
http://www.youtube.com/watch?v=9jipvSV55Tg

Getting good extension with explosive power

Once an athlete can consistently execute the power clean pattern correctly, then conversations about reps, sets, loads, progressions, and including power cleans into workouts / program design can occur.

Become brilliant at the basics. Everything else will work itself out.

More to follow!

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In good health,

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