Jerk

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TYPE OF EXERCISE:
Total body/power (explosive exercise)

MUSCLES USED:
Gluteus maximus, hamstrings (semimembranosus, semitendinosus, biceps femoris), quadriceps (vastus lateralis, vastus intermedius, vastus medialis, rectus femoris), soleus, gastrocnemius, erector spinae, trapezius, and deltoids (anterior, medial, and posterior).

Starting Position

• Position a standard Olympic bar at chest level in a squat or power rack.
• Load bar evenly with bumper plates and/or weights on both sides and secure with collars.
• Use a closed, pronated grip slightly wider than shoulders.
• Lift bar from supports.
• If bar is placed in front of the body, position the head slightly back with chin tucked in, shoulders elevated with elbows high/in front of bar. If bar is placed behind the head, position the head in a neutral position or tilted forward slightly (Figure 1).
• Assume a natural stance (heels at shoulder width, toes pointing slightly outward).
• Firmly position feet on training platform with weight distributed between heel and forefoot.
• Keep torso rigid and upright.

Figure 1. Starting position.
Ascent
- Dip 6–8” (10% of body height) by flexing hips and knees, achieving the power position while maintaining complete foot contact with the platform (Figure 2).
- Immediately reverse direction with explosive extension of hips and legs; weight may shift to forefoot.
- Complete the upward drive by jumping and pushing explosively enough to completely extend the body and lift the feet off the platform.
- Drive the barbell overhead with powerful leg action (not pressed with shoulders/arms).

Descent
- Unless maximal or near-maximal loads are used, lower the barbell to the shoulders and then replace it on the rack (or platform) in a controlled manner (a rapid drop or release should be avoided with a submaximal resistance).

Variation Ascent—Split Jerk
- Explosively split legs front/back as barbell leaves torso and feet lift off platform (Figure 3).
- Dynamically place frontside foot 1–2 foot lengths ahead of hips (complete foot contact with platform is maintained)
- Keep shin vertical.
- Place backside foot 2–3 foot lengths behind hips, supported on forefoot (heel off platform); slightly flex knee.
- Maintain hip-width stance to maintain stable base.
- Push under the bar, straighten arms, and lock barbell overhead (Figure 4).
- Shift head to neutral position; catch bar directly above hips, shoulders, and elbows. Note:
Once the basic mechanics of the lift are mastered, the split allows the athlete to receive the bar in a lower overhead position.

- Push off front leg first, bringing it back under hips.
- Bring rear leg forward under hips.
- Position barbell, elbows, shoulders, hips, knees, and ankles in same vertical plane (final position) (Figure 5).
- Assume a natural stance (heels at shoulder width, toes pointing slightly outward).
- Plant feet firmly on training platform with weight distributed between heel and forefoot.
- Fully extend hips and knees.
- Keep torso rigid and upright.
- Elevate shoulders with arms fully extended and locked, supporting barbell overhead.
- Keep head in neutral position.
- Focus eyes straight ahead, not looking up at bar.
- Keep barbell under control.

**Safety Technique on How to Miss**

- If control of the bar is lost or a rep cannot be completed for any reason, quickly get out from underneath the bar and let it drop (don’t try and save it on the way down).
- Use the barbell’s downward momentum to move out of the way (instruct the athlete to “keep your grip and push yourself away from the bar as it falls”).
- Stay between the plates (this does not mean to remain under a falling barbell but rather move backward or forward, not sideways, to escape). ▲

**Steve Plisk** is the Head Strength and Conditioning Coach at Yale University, and he also serves as an Associate Editor for the *Strength and Conditioning Journal*. 

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**Figure 4.** Split jerk (variation).

**Figure 5.** Recovery.