***Intent of the following workout: To improve athletic performance by***

1. ***Increasing the amount of forcer per pound an athlete can create***
2. ***Maximal motor unit recruitment of large muscles***
3. ***Strength work for stabilizing and postural muscles, especially in core***
4. ***Emphasizing mobility work***

Points to consider from the National Strength and Conditioning Association (NSCA):

“Neural adaptations are fundamental to optimizing athletic performance, and increased neural drive is critical to maximizing the expression of muscular strength and power.”

“Gains in maximal strength and power of agonist muscles are generally associated with (a) an increase in recruitment; (b) an increased rate of firing; (c) greater synchronization of neural discharge, which acts to coordinate the activity of multiple muscles in synergy; or (d) a combination of all these factors.”

“Maximal force production not only requires the recruitment of a maximum percentage of available motor units, including the high-threshold motor units, but also relies on the recruitment occurring at very high firing frequencies, which promotes the summation of activated motor units and as a consequence augments the magnitude of contractile activity.”

***This all means: lift heavy weights that promote the recruitment of as many muscle fibers as possible. This is why we focus so much on the Trap Bar Deadlift….the number one lift for promoting as much motor unit recruitment as possible.***

For more on the Trap Bar Deadlift and how to use it for sport performance, check out the following articles and podcast on Ryan Flaherty, the Senior Director of Performance at Nike.

<http://www.stack.com/a/how-your-deadlift-max-will-make-you-faster>

<http://www.mensfitness.com/sports/football/money-lift-how-top-flight-trainer-discovered-most-important-exercise-every-athlete>

<http://tim.blog/2017/05/07/ryan-flaherty/>

“Form has almost zero to do with speed,” Flaherty says. “Speed has everything to do with how much force you create. The two main factors in speed are stride frequency and stride length, and both are products of how much force your body creates with the ground. So, if I can improve the amount of force an athlete creates on every step, in turn I’m going to greatly affect his or her speed.”

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| **Day 1** | **Week 1** | **Week 2** | **Week3** | **Week 4** |
| **Trap Bar Deadlift Warm Up**Weight lifted | Trap Bar Deadlift 2x6 (full! All the way up and down) | Trap Bar Deadlift 2x6 (full! All the way up and down) | Trap Bar Deadlift 2x6 (full! All the way up and down) | Trap Bar Deadlift 2x6 (full! All the way up and down) |
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| **Glute Medius Activation** | Clam Shell2x8 each direction | Clam Shell2x8 each direction | Clam Shell2x8 each direction | Clam Shell2x8 each direction |
| **Quad Activation** | Bench Step Ups 2x6 each direction | Bench Step Ups 2x6 each direction | Bench Step Ups 2x6 each direction | Bench Step Ups 2x6 each direction |
| **Core Activation**  | All Out Planks2x15 seconds | All Out Planks2x15 seconds | All Out Planks2x15 seconds | All Out Planks2x15 seconds |
| **Trap Bar Deadlift, *Concentric Only*:**  *lift from ground, then drop weight at the top, above knees*Weight Lifted | Trap Bar Deadlift 4x8 (around 65% of Max) | Trap Bar Deadlift 4x7 (around 70% of Max) | Trap Bar Deadlift 4x6 (around 75% of Max) | Trap Bar Deadlift 4x5 (around 80% of Max) |
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| **Explosive Lower Body**  | 4x5 Squat Jumps (as high as possible every jump!) | 4x5 Squat Jumps (as high as possible every jump!) | 4x5 Squat Jumps (as high as possible every jump!) | 4x5 Squat Jumps (as high as possible every jump!) |
| **Anti-Rotation Core** | Palloff Press Iso-Hold 3x20 seconds each side | Palloff Press Iso-Hold 3x20 seconds each side | Palloff Press Iso-Hold 3x20 seconds each side | Palloff Press Iso-Hold 3x20 seconds each side |
| **Knee-dominant, *Single leg*** Weight Lifted | Bulgarian Split Squat 2x6 ea. leg | Bulgarian Split Squat 2x8 ea. leg | Bulgarian Split Squat 3x6 ea. leg | Bulgarian Split Squat 3x8 ea. leg |
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| **Single Leg Explosiveness**  | 2x5 ea. side Single Leg Seated Box Jumps | 2x5 ea. side Single Leg Seated Box Jumps | 2x5 ea. side Single Leg Seated Box Jumps | 2x5 ea. side Single Leg Seated Box Jumps |
| **Vastus Medialis Obliquus Strength**Slow! 3 secs down, 3 secs up | Single Leg Step Downs 2x10 ea. leg (10 sec hold on bottom on reps 5 and 10) | Single Leg Step Downs 2x12 ea. leg (10 sec hold on bottom on reps 6 and 12) | Single Leg Step Downs 2x12 ea. leg (10 sec hold on bottom on reps 6 and 12) | Single Leg Step Downs 2x14 ea. leg (10 sec hold on bottom on reps 7 and 14) |
| **Hip Dominant*, Straight Leg*** Weight lifted | Single Leg RDL 2x10 (5 each) | Single Leg RDL 2x10 (5 each) | Single Leg RDL 2x12 (6 each) | Single Leg RDL 2x12 (6 each) |
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| **Hip Strength and Stability** | 2x “7 Way Hips”: 5 reps of everything | 2x “7 Way Hips”: 5 reps of everything | 2x “7 Way Hips”: 7 reps of everything | 2x “7 Way Hips”: 7 reps of everything |
| **Humerus Curl with Vertical Press**Weight Lifted | SL Curl to Press 2x8 | SL Curl to Press 2x8 | SL Curl to Press 2x8 | SL Curl to Press 2x6 |
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| **Rotational Chop/Lift** Weight Lifted | Kneeling Plate Chops 2x8 | Kneeling Plate Chops 2x8 | Tire Chops 2x14 | Tire Chops 2x16 (All out!) |
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| **Day 2** | **Week 1** | **Week 2** | **Week3** | **Week 4** |
| **Explosive-Olympic** ***Hang Clean***Weight lifted | Hang Clean 3x6 | Hang Clean 4x4 | Hang Clean 5-3-3-1 | Hang Clean 4x3 |
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| **Posterior Chain Flexibility** | Jefferson Curls 3x4 | Jefferson Curls 3x4 | Jefferson Curls 3x5 | Jefferson Curls 3x5 |
| **Hip-stability**  | SL Glute Bridges 3x10 (5 ea) | SL toe touches on Bosu 3x10 each leg | SL Glute Bridges 3x10 (5 ea) | SL toe touches on Bosu 3x10 each leg |
| **Horizontal Press, *Supine*** Weight Lifted | DB Bench 3x8 | DB Bench 3x8 | Alt. DB Bench 3x10 (5 each) | Alt. DB Bench 3x6 (3 each) |
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| **Explosive Press** Weight Lifted | MB Alternating Push Ups 3x8 (4 each) | MB Alternating Push Ups Ball moves 3x10 (5 each) | MB Explosive Push Ups onto ball 3x6 |  |
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| **Vertical Pull**Weight Lifted | Pull Ups 3x8 | Pull Ups 3x8 | Pull Ups 3x10 | Pull Ups 3x6 weighted |
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| **Gleno-Humeral, *stability*** Weight Lifted | Shoulder Alphabet 3x5 each | PB Shoulder Alphabet w/ DB’s 3x6 each | DB Linear, Y, Lateral, Upright rows 3x5/5/5/5 | DB Shoulder Linear/Y/Lateral 3x5 each |
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| **Knee-dominant +Hip Mobility, *Single leg*** Weight Lifted | Cossack Squats 2x12 (6 ea) | Cossack Squats 2x12 (6 ea) | Cossack Squats 2x12 (6 ea) | Cossack Squats 2x12 (6 ea) |
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| **Hip-dominant, *bent* leg** | PB Single Leg Curls 2x12 (6 each leg) | SL Glute Bridge with 3 sec. hold at top 2x10 (5 each) | PB Single Leg Curls 2x12 (6 each leg) | SL Glute Bridge with 3 sec. hold 2x10 (5 each) |
| **Humerus double joint extension with Vertical Press**Weight Lifted | SL Curl to Press 2x8 | SL Curl to Press 2x8 | SL Curl to Press 2x8 | SL Curl to Press 2x6 |
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| **Rotational Chop/Lift** Weight Lifted | Standing or Kneeling Plate chops 2x8 | Standing or Kneeling Plate chops 2x8 | Standing or Kneeling Plate chops 2x10 | Standing or Kneeling Plate chops 2x10 |
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| **Day 3** | **Week 1** | **Week 2** | **Week3** | **Week 4** |
| **Explosive-Olympic** ***KB Swing or*** ***DB Snatch***Weight Lifted | DB Snatch 3x6 (3 ea arm) | DB Snatch 4x6 (3 ea arm) | DB Snatch 3x8 (4 ea arm) | DB Snatch 4x8 (4 ea arm) |
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| Core Power | SL Rotational MB Wall Slams 4x10 (5 ea) | SL Rotational MB Wall Slams 4x10 (5 ea) | SL Overhead MB slams 4x10 (5 ea leg) | Tire Chops 3x10 (5 ea) |
| **Knee-Dominant Press, *Lunge*** Weight Lifted | Walking Plate Lunges w/ Twist 3x12 (6 ea) | Backward Overhead Plate Lunge 3x12 (6 ea) | Walking Plate Lunges w/ Twist 3x12 (6 ea) | Backward Overhead Plate Lunge 3x12 (6 ea) |
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| **Split Jumps** | Skater Jumps 2x8 (4 each side) | Skater Jumps 2x8 (4 each side; Stick ea. landing for 2 sec.) | Skater Jumps 2x8 (4 each side) | Skater Jumps 2x8 (4 each side; Stick ea. landing for 2 sec.) |
| **Horizontal Pull** Weight Lifted | Single Leg, Single Arm DB Row 3x16 (8 ea) | DB Row 3x8 (Two DB’s at the same time) | Single Leg, Single Arm DB Row 3x16 (8 ea) | DB Row 3x8 (Two DB’s at the same time) |
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| **Vertical Pull, *slams*** Weight Lifted | Overhead MB Slams 3x8 | Overhead MB Slams 3x10 | Overhead MB Slams 3x10 | Overhead MB Slams 3x12 |
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| **Horizontal Press, *stability***Weight Lifted | Cable Chest Flies 2x10 | Alternating Cable Chest Press 2x8 ea. side | Cable Chest Flies 2x10 | Alternating Cable Chest Press 2x8 ea. side |
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| **Plyo horiz. press**  | MB Alternating Push Ups 2x8 Ball moves (4 each) | MB Alternating Push Ups 2x8 Ball moves (4 each) | MB step Chest Pass to wall 2x12 (6 ea. leg fwd) | MB Alternating Push Ups 3x8 Ball moves (4 each) |
| **Hip-dominant, *bent* leg** | Nordic Hamstring Curls 2x6 | Nordic Hamstring Curls 2x6 | Nordic Hamstring Curls 2x6 | Nordic Hamstring Curls 2x6 |
| **Gleno-Humeral, *stability***  | Band or Cable: “Sword Draws” and “Uppercuts” 2x6 each arm | Band or Cable: “Sword Draws” and “Uppercuts” 2x6 each arm | Band or Cable: “Sword Draws” and “Uppercuts” 2x6 each arm | Band or Cable: “Sword Draws” and “Uppercuts” 2x6 each arm |
| **Rotational Chop/Lift*, stability*** | Torture Twists2x3 each directionHold for 5 seconds | Torture Twists2x3 each directionHold for 5 seconds | Torture Twists2x4 each directionHold for 5 seconds | Torture Twists2x4 each directionHold for 5 seconds |

Video Links

Trap Bar Deadlift: <http://www.stack.com/a/how-your-deadlift-max-will-make-you-faster> (watch video to see Trap Bar variation)

Palloff Press IsoHold <http://www.stack.com/a/pallof-press>

Single Leg Box Jumps from Seated Position <https://www.youtube.com/watch?v=PrbCcRc9814&feature=youtu.be>

Single Leg Step Downs <https://www.youtube.com/watch?v=2gfo60j-tHA&feature=youtu.be>

“7 Way Hips” <https://www.youtube.com/watch?v=YdenOdoz-MI> (do 10 reps of each!)

Jefferson Curls <https://www.youtube.com/watch?v=-AYwOuNBzqk>

Cossack Squat <https://www.youtube.com/watch?v=tpczTeSkHz0>

Band/Cable Sword Draws <https://www.youtube.com/watch?v=Xpn656LpNbA>

Bulgarian Split Squat <https://www.youtube.com/watch?v=7Aqeb8UHl4k>

Nordic Hamstring Curls <http://www.stack.com/a/nordic-hamstring-curl-exercises>



# Warm-Up: Dynamic Stretching EXAMPLE (1 set of every exercise)

*Hip Crossover (10 Reps each side)*: Lie face up on the floor, arms and shoulders extended out at your sides and flat (Crucifixion style). Bend knees to a 90 degree angle feet off the floor. Twist your bent legs to the right until they reach the floor, then twist to the left. Keep your abs drawn in and shoulders, torso, and feet in contact with the floor.

*Laying Knees-to-Elbows (10 Reps each side)*: Lie face up on the floor, arms and shoulders extended out at your sides and flat (Crucifixion style). Drive your right knee up towards your left elbow…keeping your upper back on the ground for the entire movement. Return leg to starting position and repeat on other side (left knee to right elbow).

*Scorpion (10 Reps each side)*: Lie face down on the floor, with your arms and shoulders pinned in the “Spread ‘em” position. Thrust your left heel toward your right hand by firing your left glute while keeping your right hip glued to the ground. Alternate legs.

*Calf Stretch (10 Reps each side)*: From the push-up position, place your left foot over your right heel. Your weight should be on the ball of your right foot. Pull your toes up toward your shin while you push your right heel down toward the ground with your left foot. Exhale as you lower your heel. Hold for a one count and raise your right heel again, and repeat on other leg.

*Forward Lunge/Forearm-to-instep (5 reps each side)*: Take a large step forward with your left leg, as if doing a lunge. Place and support weight on your right hand, even with your left foot. Take your left elbow and reach down to your instep (Forward leg) while keeping your back knee off the ground. Then move your left hand outside your left foot and push your hips straight to the sky, pulling your toe up toward your shin. Finally, step forward into the next lunge.

*Inverted Hamstring (5 Reps each side)*: Balance on your right foot with perfect posture (stomach tight, shoulders back, and down). Bending at the waist, and maintaining perfect posture, grab your right foot with your left hand, extending your left leg back as you fire the left glute. Your shoulder and heel should move as one, forming a straight line. Take a step back at the end of each rep as you alternate legs.

*Lateral Lunge (5 reps each side)*: Stand with perfect posture. Step out to the right, keeping your toes pointed straight ahead and feet flat. Squat by sitting back and down onto your right leg, keeping your left leg straight and the weight on your right leg’s midfoot to heel. Squat as low as possible, keeping your left leg straight and hold this position for 2 seconds. Return to the standing position and repeat.

*Drop Lunge (5 reps each side)*: Stand balanced with your arms extended. Turn your hips to the left and reach back with your left foot until it’s about 2 feet to the outside of your right foot, your left toes pointing to your right heel. Rotate your hips back so they’re facing forward again and square with your shoulders and feet. You want your chest up and stomach tight, and the majority of your weight on the right leg. Drop into a full squat by pushing your hips back and down, keeping your right heel on the ground. Now drive hard off your right leg, moving to your right for the allotted number of reps. Switch legs. Return to left. *Note: This exercise can be combined with the Lateral Lunge*

*Hand Walk (5 Reps)*: Stand with your legs straight and your hands on the floor. Keeping your legs straight and belly button drawn in, walk your hands out. Still keeping your legs straight, walk your feet back up to your hands.

*Back Lunge with a twist (5 reps each side)*: With your feet together, step back with your right leg into a lunge. Arch your back slightly while twisting your torso over your left leg and while reaching your right head to the sky. Push back and out of position into the next lunge.

*Sumo Squat-to-Stand (10 Reps)*: Stand tall, with your feet outside your hips. Bend at the waist, grabbing under your big toes. Keeping your arms straight and inside your knees, pull your hips down until they’re between your ankles, and lift your chest up. Then tuck your chin and try to straighten your legs, holding on to your toes as you straighten out your hips and knees.

**Core Strength (do all of these 2-3x per week, minimum)**

*Glute Bridge*: Lie face up on the floor, with your knees bent 90 degrees and feel flat on the floor. With your belly button drawn in, bridge your hips toward the ceiling by firing your glutes. Only your shoulders and heels remain on the ground. Maintain a strong hip contraction throughout the range of motion. Hold for 5 seconds, then lower your hips toward the floor without touching it and then repeat for a total of 15-20 reps. Do 2 sets.

*Side-lying adduction and abduction*: Lie on your side, resting your head on your arm. Your legs should be straight out, with the top leg slightly behind your hips with your toes pointed ahead. Lift your leg skyward. This is called ABDUCTION. For ADDUCTION, take the top foot and cross it over the bottom. Then lift your bottom leg by firing (squeezing) the inner muscles of the leg. Do 2 sets of 20 reps each.

*Quad Circles*: Set up on your hands and knees with your belly button drawn in and your shoulders protracted (extended, and pushed away from each other). Tuck your right knee to your chest. Fire the glute and lift the leg out to the side of your hip (think of a dog hosing down a fire hydrant), and rotate it in a circle until your leg is tucked back into your chest. Reverse the motion for the same number of reps and then repeat with your other leg. Do 2 sets of 8 reps on both legs in each direction.

*Pillar Bridge Front*: Lie facedown in push-up position with your forearms resting on the floor. Your elbows are under your shoulders and bent 90-degrees. Push up off your elbows. Tuck your chin so your head is in line with your body, and pull your toes toward your shins. Protract your shoulder blades with keeping your belly button drawn in. Keep your head in line with your spine – your body should form a straight line from ears to heels. Hold for 45 seconds…try to work up to holding for 90 seconds.

*Pillar Bridge Side (Right/Left)*: Lie on your side with your forearm on the ground and your elbow under your shoulder. Your body should be in a straight line with your toes pulled toward your shins. Push up off your elbow, creating a straight line from your ankle to your shoulder. Be sure to push your hips off the ground and keep your toes up. Only the side edge of you bottom foot and your elbow should be in contact with the ground. Keep your hips pushed forward and body straight. Don’t sag or bend. Hold for 30 seconds…try to work up to holding for 75 seconds.