

THE SHOULDER PLAYBOOK

Mobility • Activation • Dynamic Progressions



UNITED STATES
OLYMPIC & PARALYMPIC
COMMITTEE

Understanding Your Shoulder

The shoulder girdle is a highly mobile and flexible joint that is composed of the humerus (upper arm bone), scapula (“shoulder blade”) and clavicle (“collar bone”). Its unique but shallow design balances mobility with support while also achieving a large range of motion.

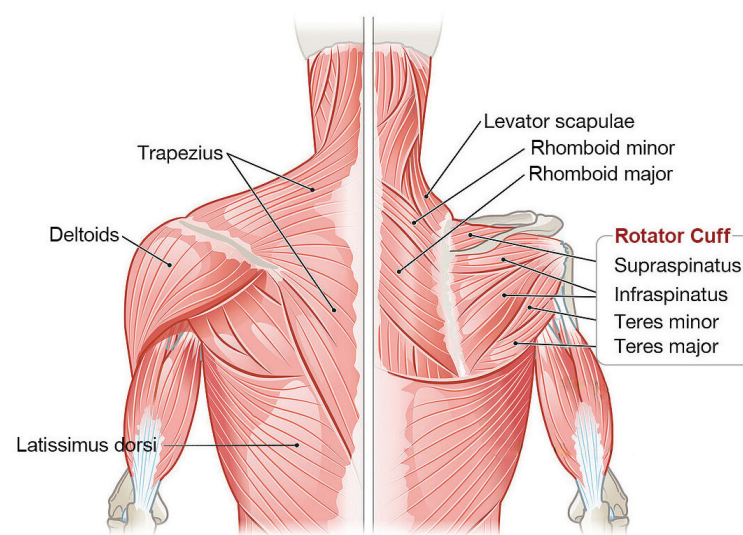
The Primary Stabilizers are:

Dynamic (i.e., Muscles):

1. Rotator Cuff (Supraspinatus, Infraspinatus, Subscapularis, Teres minor)
2. Biceps Brachii
3. Periscapular Muscles (Trapezius, Rhomboids, Levator scapulae)

Static:

1. Labrum
2. Joint Capsule
3. Glenohumeral ligaments



Dynamic Shoulder Warm-Up

Improving the overall shoulder mobility, activation, and dynamic movement patterns will help with injury prevention. These exercises effectively move your shoulder to ensure proper activation before activity.

Mobility Exercises (1 x 10 mobilizations, 2 x 30s stretches)	Activation Exercises (2 sets x 10 reps)	Dynamic Exercises (2 sets x 6 reps)
<ol style="list-style-type: none"> 1. Sleeper stretch 2. Cross body stretch 3. Thoracic mobility (extension, rotation) 	<ol style="list-style-type: none"> 1. Banded D2 pattern 2. External rotation 3. Scapular protraction 	<ol style="list-style-type: none"> 1. Banded D2 pattern*: Perform diagonal pull with explosive speed. 2. External rotation: Execute rapid external rotation, mimicking a throw. 3. Scapular protraction: Engage powerful, quick protraction (e.g., ball toss).

*For dynamic movements, progress by increasing weight (medball), moving from supine to upright (seated or standing), and, if able, utilizing a split stance position for altered center of balance and increased core activation.



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I. MOBILITY EXERCISES

1. SLEEPER STRETCH (Perform 2x30s)



Lie on the side you want to be stretched, extend the bottom arm in front of you, keeping it perpendicular to your body. Bend the bottom elbow to achieve 90-degree angle (fingers should be pointed to the ceiling). With opposite hand, gently but firmly press down until you begin to feel a stretch in the back of the bottom shoulder.

2. CROSS BODY STRETCH (Perform 2x30s)



Maintain good upright posture, cross one arm across your chest and use other arm to gently pull it closer to your chest to feel stretch in back of crossed arm.

Alternative Cross Body Stretch



3. THORACIC MOBILITY (Perform 1x10)

1. Thoracic Extension on Foam Roller



Place hands behind neck to support spine, place foam roller under mid to upper back. Arch your spine over top of foam roller to feel extension, then return to starting position. Repeat 5 times, then find another tight spot and repeat 5 more repetitions.

2. Thoracic Extension on Wall in Chair



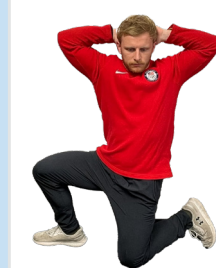
Place hands behind neck to support spine, come close to the wall and keep elbows narrow. Begin to reach upwards and slide your elbows up the wall to feel extension through upper back.

3. Quadruped Thoracic Rotation



Start in quadruped position with knees under hips and hands under shoulders. Place one hand behind your head and rotate the trunk to bring the bent elbow toward the ceiling. Return to start position and repeat. Perform on other side.

4. Half Kneeling Thoracic Rotation on Wall



In half kneeling position, maintain your knee and hip against the wall. Place your hands behind your head and maintain an open chest as you begin to rotate top elbow toward the ceiling and into upright position. Repeat.

5. Sidelying Banded Resistance Thoracic Rotation



Start lying on your side with your hips and knees bent at 90/90. Facing the same way as your knees, hold a band in both hands. Begin to rotate your trunk to the opposite side, while keeping knees together until back is flat on the ground. If you can not reach the opposite side without knees coming apart, stop rotation just before knees separate.

This movement can be performed without a band as needed.

II. ACTIVATION EXERCISES

1. BANDED D2 FLEXION PATTERN (Perform 2x10s)

1. Gravity Minimized (Isometric Banded D2 Flexion)



Maintain one arm over chest, other arm pulls band down toward opposite hip, then return to initial position. Ex. left arm still, right arm pulls toward right hip.

Tip: Maintain thumb pointed toward the ceiling.

2. Gravity Resisted (Supine Banded D2 Flexion)



Supine banded or with dumbbell (in this case the right arm is stationary at the right hip and the left arm actively lifts to the left shoulder).

Tip: Maintain thumb pointed toward the ceiling.

3. Gravity Resisted

While standing or seated, maintain one arm by your side. With the opposite arm, pull the band or lift the dumbbell diagonally upward across the body toward the opposite shoulder, then return to the initial position. Ex. Left arm remains still while the right arm pulls diagonally up toward the left shoulder.

Tip: Maintain thumb pointed toward the ceiling.

(Seated Dumbbell D2 Flexion)

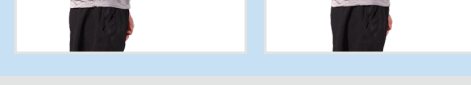
(Standing Banded D2 Flexion)



2. EXTERNAL ROTATION (Perform 2x10s)

1. Gravity Assisted

Begin in neutral at side, progress to 90-90 as able. Seated or standing, keeping elbows in tight to body, move band away from stationary arm, hold, then return to starting position with control.



While standing, maintain an upright position and tight core, keep elbow at 90/90 position and externally rotate shoulder. If feeling is in low back, reposition with hips underneath torso.

2. Gravity Resisted (Added Resistance)



Sidelying External Rotation: squeeze shoulder blade back, keep elbow tight to side and rotate forearm up toward ceiling. If feeling is in back, bring torso forward, in line with hips to maintain 90/90 position. Begin with light weight (1-2 lbs).

3. Gravity Resisted (Prone External Rotation)

Lying face down, bring shoulder and elbow to 90-90 position. Isometrics: Begin with isometric holds with light weight for desired time (10 seconds - 30 seconds as tolerated), 3 rounds. Isotonics: Move through full range of motion internal to external rotation. Optional: Addition of light weight as tolerated.



3. SCAPULAR PROTRACTION/BEAR HUG (Perform 2x10s)

1. Gravity Minimized (Supine Banded Punch)

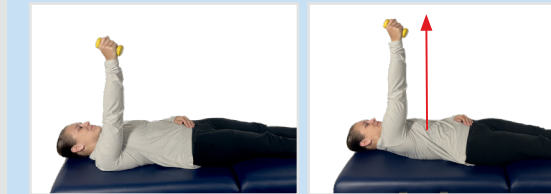
If athlete does not have core control to move both arms at the same time, can modify any level to unilateral movements



Place band behind back, stretch band to desired resistance and hold in each hand. Reach arms forward against resistance then slowly return to starting position.

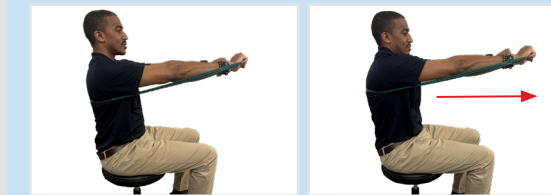
*Progressions: a. Increase strength with addition of heavier weight
b. Increase stability with addition of balance challenge: upside down kettle bell.*

2. Gravity Minimized (Supine Dumbbell Punch)



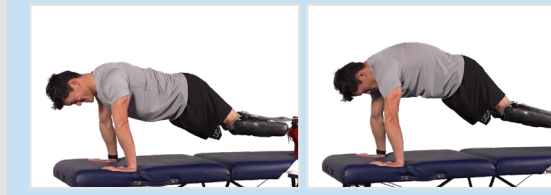
Holding a dumbbell in one or both hands, have shoulder in 90/90 position and reach dumbbell towards ceiling. Slowly return shoulder blade back to table. Repeat.

3. Gravity Resisted (Seated or Standing Position)



Place band behind back, stretch band to desired resistance and hold in each hand. Reach arms forward against resistance then slowly return to starting position.

4. Gravity Resisted (Push Up Position)



Keep core tight, push upper body away from your hands and slightly round your upper back. Slowly reverse the motion and return to neutral starting position.

Can add resistance such as band around back or weight vest.

III. DYNAMIC EXERCISES For the Banded D2 Flexion exercises, apply from the II. Activation Exercises section, focusing on performing the diagonal pull with explosive speed.



Scan for Dynamic Movement Videos

EXTERNAL ROTATION (DYNAMIC PROGRESSION)

Lie flat on your stomach with your arm out to the side as shown. Rotate your arm down as you release the ball and stabilize before catching the ball and returning to the start position. Increase speed to mimic a throw.



SCAPULAR PROTRACTION (BALL TOSS)

Can be performed in supine or upright. Begin with ball at your chest then powerfully explode it away from you. Catch and return to starting position with control. For added resistance, progress by using a medicine ball.

