

# NSCA Lifting Proficiencies for Various Strength Movements

## Leg Exercises

### Power Clean



Setup



1<sup>st</sup> Pull



2<sup>nd</sup> Pull



Recovery

#### Setup

- Feet approximately shoulder width apart
- Feet flat on the floor
- Bar touching the shins
- Close overhand hooked grip
- Arms straight and elbows pointed out to the sides
- Thighs parallel to the ground
- Chest up and out
- Back arched in the ready position and held throughout lift

#### First Pull

- Bar pulled slowly off the floor
- Bar comes up straight
- Bar stays close to the body
- Hips extend as the knees extend

#### Second Pull

- Knees move back under the bar into the power position in a “scoop” action
- Bar touching the top of the thighs
- Athlete explodes in a jumping action
- Hips and torso extend fully as traps are forcefully shrugged
- Bar stays close to the body

#### Recovery

- Wrists turn over as the bar reaches its peak height
- Legs spread slightly to the sides as athlete “jumps down” into a squat
- Elbows are pointed high, shoulders elevated and protracted
- Bar is racked across the top of the deltoids
- Athlete bends at the hips and knees to absorb the force
- Chest held high and back arched throughout
- Athlete stands up under control

Note: No spotter should be used due to the ballistic nature of the lift. Injury may occur to the spotters or lifter if the path of the bar is impeded in any way. Bumper plates are recommended when performing any Olympic style lift such as the clean so that the bar may be released without damage to the lifting area.

## **Back Squat**

### **Beginning Position: Athlete**

- Grasp the bar with a closed, pronated grip (width depends on bar position)
- Step under the bar and position the feet parallel to each other
- Place the bar in a balanced position on the upper back and shoulders in one of two locations
  1. Low bar position – across the posterior deltoids at the middle of the trapezius (using a hand grip only slightly wider than shoulder-width)
  2. High bar position – above the posterior deltoids at the base of the neck (using a hand grip only slightly wider than shoulder-width)
- Lift the elbows up to create a “shelf” for the bar using the upper back and shoulder muscles
- Hold the chest up and out
- Pull the scapulae toward each other
- Tilt the head slightly up
- Once in position, signal the spotter for assistance in moving the bar off the supports
- Extend the hips and knees to lift the bar
- Take one or two steps backward
- Feet shoulder-width apart (or wider), even with each other, toes pointed slightly outward
- All subsequent repetitions begin from this position

### **Beginning Position: Two Spotters**

- Stand erect at opposite ends of the bar, feet shoulder-width apart, knees slightly flexed
- Grasp the end of the bar by cupping the hands together with the palms facing upward
- At athlete’s signal, assist with lifting and balancing the bar as it is moved off the supports
- Release the bar smoothly
- Hold the hands 2 to 3 in. (5-8 cm) below the ends of the bar
- Move sideways in unison with the athlete as the athlete moves backward
- Once the athlete is in position, assume a hip-width stance, knees slightly flexed, torso erect

### **Downward Movement Phase: Athlete**

- Allow the hips and knees to slowly flex while keeping the torso-to-floor angle relatively constant (some torso flexion is appropriate)
- Maintain a position with the back flat, elbows high, and the chest up and out
- Keep the heels on the floor and the knees aligned over the feet
- Do not flex the torso or round the back
- Continue flexing the hips and knees until the thighs are parallel to the floor
- Do not accelerate the bar or relax the torso at the bottom of the movement

### **Downward Movement Phase: Two Spotters**

- Keep the cupped hands close to—but not touching—the bar as it descends
- Slightly flex the knees, hips, and torso to keep a flat-back position when following the bar

### **Upward Movement Phase: Athlete**

- Extend the hips and knees at the same rate (to keep the torso-to-floor angle constant)
- Maintain a position with flat back, high elbows, and the chest up and out
- Keep the heels on the floor and the knees aligned over the feet
- Do not flex the torso forward or round the back
- Continue extending the hips and knees to reach the beginning position
- After the set is completed, step forward toward the rack
- Squat down until the bar rests on the supports

### **Upward Movement Phase: Two Spotters**

- Keep the cupped hands close to—but not touching—the bar as it ascends
- Slightly extend the knees, hips, and torso and keep the back flat when following the bar
- After the set is completed, move sideways in unison with the athlete back to the rack
- Simultaneously grasp the bar and assist with balancing the bar as it is racked
- Release the bar smoothly

## **Front Squat**

### **Beginning Position: Athlete**

- Step under the bar and position the feet parallel to each other
- Place the hands on the bar in one of two arm positions;
  1. Parallel arm position
    - Grasp the bar with a closed, pronated grip at shoulder-width
    - place the bar on top of the anterior deltoids with elbows fully flexed, arms parallel to floor
  2. Crossed arm position
    - Flex the elbows and cross the arms in front of the chest holding the bar in place on deltoids
    - place the bar on top of the anterior deltoids and clavicles
    - Lift the elbows to position the arms parallel to the floor
- Hold the chest up and out
- Pull the scapulae toward each other
- Tilt the head slightly up
- Once in position, signal the spotter for assistance in moving the bar off the supports
- Extend the hips and knees to lift the bar
- Take one or two steps backward
- Position the feet shoulder-width apart (or wider), toes pointed slightly outward
- All subsequent repetitions begin from this position

### **Beginning Position: Two Spotters**

- Stand at opposite ends of the bar, feet shoulder-width apart and the knees slightly flexed
- Grasp the end of the bar by cupping the hands together with the palms facing upward
- At the athlete's signal, assist with lifting and balancing the bar as it is moved off the supports
- Release the bar smoothly
- Hold the hands 2-3 in. (5-8 cm) below the ends of the bar
- Move sideways in unison with the athlete as the athlete moves backward
- Once the athlete is in position, assume a hip-width stance, knees slightly flexed, torso erect

### **Downward Movement Phase: Athlete**

- Allow the hips and knees to slowly flex while keeping the back angle relatively constant
- Maintain a position with the back flat, elbows high, and the chest up and out
- Keep the heels on the floor and the knees aligned over the feet
- Do not flex the torso forward or round the back
- Continue flexing the hips and knees until the thighs are parallel to the floor
- Do not accelerate the bar or relax the torso at the bottom of the movement

### **Downward Movement Phase: Two Spotters**

- Keep the cupped hands close to—but not touching—the bar as it descends
- Slightly flex the knees, hips, and torso and keep the back flat when following the bar

### **Upward Movement Phase: Athlete**

- Extend the hips and knees at the same rate (to keep the torso-to-floor angle constant)
- Maintain a position with the back flat, elbows high, and the chest up and out
- Keep the heels on the floor and the knees aligned over the feet
- Do not flex the torso forward or round the back
- Continue extending the hips and knees to reach the beginning position
- After the set is completed, step forward toward the rack
- Squat down until the bar rests on the supports

### **Upward Movement Phase: Two Spotters**

- Keep the cupped hands close to—but not touching—the bar as it ascends
- Slightly extend the knees, hips, and torso and keep the back flat when following the bar
- After the set is completed, move sideways in unison with the athlete back to the rack
- Simultaneously grasp the bar and assist with balancing the bar as it is placed back on the supports

## **Hip sled**

### **Beginning Position**

- Sit in the machine with the lower back, hips, and buttocks pressed against their pads
- Place the feet flat on the platform hip-width apart with the toes slightly angled out
- Position the legs parallel to each other
- Grasp the handles or the sides of the seat and move the hips and knees to a fully extended position, but do not forcefully lock the knees
- Keep the hips on the seat and the back against the back pad
- Remove the support mechanism from the foot platform and grasp the handles or the seat again
- All subsequent repetitions begin from this position

### **Downward Movement Phase**

- Allow the hips and knees to slowly flex to lower the platform
- Do not allow the platform to be lowered rapidly
- Keep the hips and buttocks on the seat and the back flat against the back pad
- Do not shift the hips or allow the buttocks to lose contact with the seat
- Keep the legs parallel to each other
- Do not release the hand grip during the descent
- Allow the hips and knees to flex until the thighs are parallel to the platform (or the body loses firm contact with the pads)

### **Upward Movement Phase**

- Push the platform up by extending the hips and knees
- Push to a fully extended position, but do not forcefully lock out the knees
- Maintain the same hip and back position; do not shift the hips or allow the buttocks to rise
- Keep the heels in contact with the platform and the legs parallel
- Do not allow the knees to shift in or out
- After the set is completed, replace the supports, remove the feet, and exit the machine

## **Deadlift**

### **Beginning Position**

- Stand with feet flat, placed between hip- and shoulder-width apart, toes pointed slightly outward
- Squat down with the hips lower than the shoulders, grasp bar with a closed, alternated grip
- Hands are slightly wider than shoulder-width apart, outside of the knees, with elbows straight
- Place the feet flat on the floor and position the bar approximately 1 in (3 cm) in front of the shins and over the balls of the feet, feet flat on the floor
- Position the body with the
  - back flat or slightly arched, shoulders over or slightly in front of the bar
  - eyes focused straight ahead or slightly upward
  - trapezius relaxed and slightly stretched, scapulae retracted, with chest held up and out
  - head in line with the vertebral column or slightly hyperextended,

### **Upward Movement Phase**

- Lift the bar off the floor by extending the hips and knees
- Keep the torso-to-floor angle constant
- Do not let the hips rise before the shoulders
- Maintain a flat-back position
- Keep the elbows straight, head neutral, and the shoulders over or slightly ahead of the bar
- As the bar is raised, keep it as close to the shins as possible
- As the bar rises just above the knees move the hips forward to move the thighs against and the knees under the bar
- At full knee and hip extension, establish an erect body position

### **Downward Movement Phase**

- Allow the hips and knees to flex to slowly lower the bar to the floor
- Maintain the flat-back body position; do not flex the torso forward

## **Forward Lunge**

### **Beginning Position: Athlete**

- Grasp the bar with a closed, pronated grip (width depends on bar position)
- Step under the bar and position the feet parallel to each other
- Place the bar in a balanced position on the upper back and shoulders above the posterior deltoids at the base of the neck
- Lift the elbows up to create a “shelf” for the bar using the upper back and shoulder muscles. Hold the chest up and out
- Pull the scapulae toward each other
- Tilt the head slightly up
- Once in position, signal the spotter for assistance in moving the bar off the supports
- Extend the hips and knees to lift the bar
- Take two or three steps backward
- All subsequent repetitions begin from this position

### **Beginning Position: Spotter**

- Stand erect and very close to the athlete (but not close enough to be a distraction)
- Place the feet shoulder-width apart with the knees slightly flexed
- At athlete’s signal, assist with lifting and balancing the bar as it is moved out of the rack
- Move in unison with the athlete as the athlete moves backward to the beginning position
- Assume a hip-width stance with the knees slightly flexed and the torso erect
- Position the hands near the athlete’s hips, waist, or torso

### **Forward Movement Phase: Athlete**

- Take one exaggerated step directly forward with one leg (the lead leg)
- Keep the torso erect as the lead foot moves forward and contacts the floor
- Keep the trailing foot in the beginning position, but allow the trailing knee to slightly flex
- Plant the lead foot flat on the floor pointing straight ahead or slightly inward
- Allow the lead hip and knee to slowly flex
- Keep the lead knee directly over the lead foot
- Lower the trailing knee—still slightly flexed—until it is 1-2 in (3-5 cm) above the floor
- Balance the weight evenly between the ball of the trailing foot and the whole lead foot
- Keep the torso perpendicular to the floor by “sitting back” on the trailing leg

### **Forward Movement Phase: Spotter**

- Step forward with the same foot as the athlete
- Keep the lead knee and foot aligned with the athlete’s lead foot
- Plant the foot 12-18 in (30-46 cm) behind the athlete’s foot
- Flex the lead knee as the athlete’s lead knee flexes
- Keep the torso erect
- Keep the hands near the athlete’s hips, waist, or torso
- Assist only when necessary to keep the athlete balanced

### **Backward Movement Phase: Athlete**

- Forcefully push off the floor by extending the lead hip and knee
- Maintain the same torso position; do not jerk the upper body
- Bring the lead foot back to a position next to the trailing foot; do not stutter-step backward
- Stand erect in the beginning position, pause, then alternate lead legs
- After the set is completed, step toward the rack
- Squat down until both ends of the bar are resting on the supports

### **Backward Movement Phase: Spotter**

- Push backward with the lead leg in unison with the athlete
- Bring the lead foot back to a position next to the trailing foot; do not stutter-step backward
- Keep hands near the athlete’s hips, waist, or torso
- Stand erect in the beginning position, pause to wait for the athlete, and alternate lead legs
- Assist only when necessary to keep the athlete balanced

## **Step-Up**

### **Beginning Position: Athlete**

- Grasp the bar with a closed, pronated grip (width depends on bar position)
- Place the bar in a balanced position on the upper back and shoulders above the posterior deltoids at the base of the neck (using a hand grip only slightly wider than shoulder-width)
- Lift the elbows up to create a “shelf” for the bar using the upper back and shoulder muscles
- Hold the chest up and out
- Pull the scapulae toward each other
- Tilt the head slightly up
- Once in position, signal the spotter for assistance in moving the bar off the supports
- Extend both knees to lift the bar
- Walk toward the box, stopping about 12-18 in (30-46 cm) away
- All subsequent repetitions begin from this position

### **Beginning Position: Spotter**

- Stand erect and very close to the athlete (but not so close as to be a distraction)
- Place the feet shoulder-width apart with the knees slightly flexed
- At athlete’s signal, assist with lifting and balancing the bar as it is moved out of the rack
- Move in unison with the athlete as the athlete moves to the beginning position
- Assume a hip-width stance with the knees slightly flexed and the torso erect
- Position the hands near the athlete’s hips, waist, or torso

### **Upward Movement Phase: Athlete**

- Step up with one leg (the lead leg) to place the entire foot on the top of the box
- Keep the torso erect; do not lean forward
- Keep the trailing foot in the beginning position, but shift the body weight to the lead leg
- Forcefully extend the lead hip and knee to move the body to a standing position on top of box
- Do not push off or hop up with the trailing leg or foot
- At the highest position, stand erect and pause before beginning the downward movement phase

### **Upward Movement Phase: Spotter**

- Lean the torso forward and reach with the arms (but do not take a step) toward the athlete as the athlete steps up on the box
- Keep the hands as near as possible to the athlete’s hips, waist, or torso
- Assist only when necessary to keep the athlete balanced

### **Downward Movement Phase: Athlete**

- Shift the body weight to the same lead leg
- Step off the box with the same trailing leg
- Maintain an erect torso position
- Place the trailing foot on the floor 12-18 in (30-46 cm) away from the box
- When the trailing foot is in full contact with the floor, shift the body weight to the trailing leg
- Step off the box with the lead leg
- Bring the lead foot back to a position next to the trailing foot
- Stand erect in the beginning position, pause, then alternate lead legs
- After the set is completed, step forward to the rack
- Squat down until both ends of the bar rest on the rack

### **Downward Movement Phase: Spotter**

- Follow the athlete with the arms as the athlete steps back down to the floor
- Keep the hands near the athlete’s hips, waist, or torso
- Stand erect in the beginning position and pause to wait for the athlete
- Assist only when necessary to keep the athlete balanced
- After the set is completed, help the athlete rack the bar

Note: The box used should be 12-18 in (30-46 cm) high, or high enough to create a 90° angle at the knee joint when the foot is on the box.

## **Stiff-Leg Deadlift**

### **Beginning Position**

- Grasp the bar with a closed, alternated (or pronated) grip
- Grip should be approximately shoulder-width
- Assume a hip-width stance with the knees slightly flexed and the toes pointed straight ahead
- Stand erect with the bar touching the front of the thighs and the elbows extended

### **Downward Movement Phase**

- Allow the torso to slowly flex forward and the bar to lower toward the floor
- Keep the knees slightly flexed and the torso in a flat-back position
- Lower the bar until the weight plates touch the floor (or to a point just prior to where the knees extend or the back begins to round)

### **Upward Movement Phase**

- Extend the hips and torso
- Keep the knees slightly flexed and the torso in a flat-back position
- Do not jerk the torso or flex the elbows for assistance

## **Heel Raises**

- Machines, barbells, or dumbbells may be used
- If using dumbbells, hold weights resting against both sides of the body
- If using machines or barbells rest the weight across the traps and deltoids
- Maintain normal spinal curvature throughout
- Approximately hip width stance should be used
- Toes should be pointed directly forward
- Raise and lower body through a full range of motion
- A controlled, constant speed should be maintained throughout
- Avoid bouncing during the lift
- Avoid knee hyperextension and hip flexion during the lift

# **Chest, Shoulder, and Tricep Exercises**

## **Flat Bench Press (and Dumbbell Version)**

This exercise can also be performed using two dumbbells and a closed, pronated grip. The spotter assists by spotting the athlete's forearms instead of the bar.

### **Beginning Position: Athlete**

- Assume a supine position on a bench in a five-point body contact position
- Place the body on the bench so that the eyes are below the edge of the supports
- Grasp the bar with a closed, pronated grip
- Grip should be slightly wider than shoulder-width
- Signal the spotter for assistance in moving the bar off the supports
- Place the bar over the chest with the elbows fully extended
- All subsequent repetitions begin from this position

### **Beginning Position: Spotter**

- Stand erect and very close to the head of the bench (but not so close as to distract the athlete)
- Place the feet shoulder-width apart with the knees slightly flexed
- Grasp the bar with a closed, alternated grip inside the athlete's hands
- At athlete's signal, assist with moving bar off the supports
- Guide the bar to a position over the athlete's chest
- Release the bar smoothly

### **Downward Movement Phase: Athlete**

- Lower the bar to touch the chest at approximately nipple level
- Keep the wrists rigid and directly above the elbows
- Maintain the five-point body contact position

### **Downward Movement Phase: Spotter**

- Keep the hands in the alternated grip position close to—but not touching—the bar as it descends
- Slightly flex the knees, hips, and torso and keep the back flat when following the bar

### **Upward Movement Phase: Athlete**

- Push the bar upward until the elbows are fully extended
- Keep the wrists rigid and directly above the elbows
- Maintain the five-point body contact position
- Do not arch the back or raise the chest to meet the bar
- After the set is completed, signal the spotter for assistance in racking the bar
- Keep a grip on the bar until it is racked

### **Upward Movement Phase: Spotter**

- Keep the hands in the alternated grip position close to—but not touching—the bar as it ascends
- Slightly extend the knees, hips, and torso and keep the back flat when following the bar
- At the athlete's signal after the set is completed, grasp the bar with an alternated grip inside the athlete's hands
- Guide the bar back onto the supports
- Keep a grip on the bar until it is racked



## **Incline Dumbbell Bench Press (and Barbell Version)**

This exercise can also be performed using a barbell and a closed, pronated grip slightly wider than shoulder-width. The spotter assists by spotting the bar instead of the athlete's forearms.

### **Beginning Position: Athlete**

- Grasp two dumbbells using a closed, pronated grip
- Assume a supine position on a bench in the five-point body contact position
- Signal the spotter for assistance in moving the dumbbells into the beginning position
- Press the dumbbells in unison to an extended-elbow, parallel-arm position above the head and face
- All subsequent repetitions begin from this position

### **Beginning Position: Spotter**

- Stand erect and very close to the head of the bench (but not so close as to distract the athlete)
- Place the feet shoulder-width apart with the knees slightly flexed
- Grasp the athlete's wrists
- At athlete's signal, assist with moving dumbbells to a position over the athlete's head and face
- Release the athlete's forearms smoothly

### **Downward Movement Phase: Athlete**

- Lower the dumbbells in unison alongside the chest near the armpits and aligned with the nipples
- Keep the wrists rigid and directly above the elbows with the dumbbell handles aligned with each other
- Maintain the five-point body contact position

### **Downward Movement Phase: Spotter**

- Keep the hands near—but not touching—the athlete's forearms as the dumbbells descend
- Slightly flex the knees, hips, and torso and keep the back flat when following the dumbbells

### **Upward Movement Phase: Athlete**

- Push the dumbbells upward until the elbows are fully extended
- Keep the wrists rigid and directly above the elbows with the dumbbell handles aligned with each other
- Maintain the five-point body contact position
- Do not arch the back or raise the chest to meet the dumbbells

### **Upward Movement Phase: Spotter**

- Keep the hands near—but not touching—the athlete's forearms as the dumbbells ascend
- Slightly extend the knees, hips, and torso and keep the back flat when following the dumbbells

## **Flat Dumbbell Fly (and Incline Version)**

### **Beginning Position: Athlete**

- Grasp two dumbbells using a closed grip
- Assume a supine position on a bench in the five-point body contact position
- Signal the spotter for assistance in moving the dumbbells into the beginning position
- Press both dumbbells in unison to an extended-elbow position above the chest
- Rotate the dumbbells to a neutral grip
- Slightly flex the elbows and point them out to the sides
- All subsequent repetitions begin from this position

### **Beginning Position: Spotter**

- Position one knee on the floor with the foot of the other leg forward and flat on the floor (or kneel on both knees)
- Grasp the athlete's wrists
- At athlete's signal, assist with moving dumbbells to a position over the athlete's chest
- Release the athlete's forearms smoothly

### **Downward Movement Phase: Athlete**

- Allow the dumbbells to lower in a wide arc until they are level with the shoulders or chest
- Keep the dumbbell bars parallel to each other as the elbows move downward
- Keep the wrists rigid and the elbows held in a slightly flexed position
- Keep the dumbbells in line with the elbows and shoulders
- Maintain the five-point body contact position

### **Downward Movement Phase: Spotter**

- Keep the hands near—but not touching—the athlete's forearms as the dumbbells descend

### **Upward Movement Phase: Athlete**

- Pull the dumbbells up toward each other in a wide arc back to the beginning position
- Keep the wrists rigid and the elbows held in a slightly flexed position
- Keep the dumbbells in line with the elbows and shoulders
- Maintain the five-point body contact position

### **Upward Movement Phase: Spotter**

- Keep the hands near—but not touching—the athlete's forearms as the dumbbells ascend

## **Seated Shoulder Press**

### **Beginning Position: Athlete**

- Sit down on a vertical shoulder-press bench and lean back to assume the five-point body contact position
- Grasp the bar with a closed, pronated grip
- Grip should be slightly wider than shoulder-width
- Signal the spotter for assistance in moving the bar off the supports
- Press the bar over the head until the elbows are fully extended
- All subsequent repetitions begin from this position

### **Beginning Position: Spotter**

- Stand erect on the step at the back of the bench with the feet shoulder-width apart and the knees slightly flexed
- Grasp the bar with a closed, alternated grip inside the athlete's hands
- At athlete's signal, assist with moving bar off the supports
- Guide the bar to a position over the athlete's head
- Release the bar smoothly

### **Downward Movement Phase: Athlete**

- Allow the elbows to slowly flex to lower the bar toward the head
- Keep the wrists rigid and directly above the elbows
- Extend the neck slightly to allow the bar to pass by the face as it is lowered to touch the clavicles and anterior deltoids
- Maintain the five-point body contact position

### **Downward Movement Phase: Spotter**

- Keep the hands in the alternated grip position close to—but not touching—the bar as it descends
- Slightly flex the knees, hips, and torso and keep the back flat when following the bar

### **Upward Movement Phase: Athlete**

- Push the bar upward until the elbows are fully extended
- Extend the neck slightly to allow the bar to pass by the face as it is raised
- Keep the wrists rigid and directly above the elbows
- Maintain the five-point body contact position
- Do not arch the back or rise off the seat
- After the set is completed, signal the spotter for assistance in racking the bar
- Keep a grip on the bar until it is racked

### **Upward Movement Phase: Spotter**

- Keep the hands in the alternated grip position close to—but not touching—the bar as it ascends
- Slightly extend the knees, hips, and torso and keep the back flat when following the bar
- At the athlete's signal after the set is completed, grasp the bar with an alternated grip inside the athlete's hands
- Guide the bar back onto the supports
- Keep a grip on the bar until it is racked

## **Lying Triceps Extension**

### **Beginning Position: Athlete**

- Assume a supine position on a bench in the five-point body contact position
- Grasp the bar from the spotter with a closed, pronated grip about 12 in (30 cm) wide
- Position the bar over the chest with the elbows fully extended and the arms parallel
- Point the elbows away from the face (not out to the sides)
- All subsequent repetitions begin from this position

### **Beginning Position: Spotter**

- Stand erect and very close to the head of the bench (but not so close as to distract the athlete)
- Place the feet shoulder-width apart with the knees slightly flexed
- Grasp the bar with a closed, alternated grip
- Hand the bar to the athlete
- Guide the bar to a position over the athlete's chest
- Release the bar smoothly

### **Downward Movement Phase: Athlete**

- Allow the elbows to slowly flex to lower the bar toward the face
- Keep the wrists rigid and the elbows pointing away from the face
- Keep the upper arms parallel to each other and perpendicular to the floor
- Lower the bar to touch the top of the head or forehead
- Maintain the five-point body contact position

### **Downward Movement Phase: Spotter**

- Keep the hands in the alternated grip position close to—but not touching—the bar as it descends
- Slightly flex the knees, hips, and torso and keep the back flat when following the bar

### **Upward Movement Phase: Athlete**

- Push the bar upward until the elbows are fully extended
- Keep the wrists rigid and the elbows pointing away from the face
- Keep the upper arms parallel to each other and perpendicular to the floor
- Maintain the five-point body contact position
- Do not arch the back or raise the chest
- After the set is completed, signal the spotter to take the bar
- Keep a grip on the bar until the spotter removes it

### **Upward Movement Phase: Spotter**

- Keep the hands in the alternated grip position close to—but not touching—the bar as it ascends
- Slightly extend the knees, hips, and torso and keep the back flat when following the bar
- At the athlete's signal after the set is completed, grasp the bar with an alternated grip, take it from the athlete, and set it on the floor

# **Back, Shoulder, and Bicep Exercises**

## **Bent-Over Row**

### **Before Beginning**

- Grasp the bar with a closed, pronated grip
- Grip should be wider than shoulder-width
- Lift the bar from the floor as described later in the deadlift or power clean exercises

### **Beginning Position**

- Assume a shoulder-width stance with the knees slightly flexed
- Flex the torso forward to be slightly above parallel to the floor
- Assume a flat-back torso position
- Focus the eyes a short distance ahead of the feet
- Allow the bar to hang with the elbows fully extended (without the bar touching the floor)
- All subsequent repetitions begin from this position

### **Upward Movement Phase**

- Pull the bar up toward the lower chest or upper abdomen
- Point the elbows up
- Keep the torso rigid, back flat, and knees slightly flexed
- Do not jerk the torso for assistance
- Touch the bar to the chest

### **Downward Movement Phase**

- Allow the elbows to slowly extend back to the beginning position
- Keep the torso and knees in the same position
- After the set is completed, place the bar on the floor and stand up

## **Seated Row**

### **Beginning Position**

- Assume a seated position facing the chest pad of the machine
- Place the feet on the machine frame or foot supports
- Sit erect and press the torso against the chest pad (may adjust the chest pad to position the torso perpendicular to the floor)
- Grasp the handles with a closed, pronated grip (may adjust the seat height to position the arms about parallel to the floor)
- Allow the elbows to extend fully

### **Backward Movement Phase**

- Pull the handles toward the chest or upper abdomen
- Maintain an erect torso position and keep the elbows next to the ribs
- Pull the handles as far back as possible
- Do not jerk the torso for assistance

### **Forward Movement Phase**

- Keeping the elbows next to the ribs, allow the handles to move back to the beginning position
- Keep the torso in the same position

## **Lat Pulldown**

### **Beginning Position**

- Grasp the lat pulldown bar with a closed, pronated grip
- Grip should be wider than shoulder-width
- Sit down on the seat facing the machine
- Position the thighs under the pads with the feet flat on the floor (may adjust the seat and thigh pad)
- Lean the torso slightly backward
- Extend the elbows fully
- All subsequent repetitions begin from this position

### **Downward Movement Phase**

- Pull the bar down and toward the upper chest
- Maintain the slight torso backward lean; do not jerk the torso for assistance
- Touch the bar to the chest

### **Upward Movement Phase**

- Allow the elbows to slowly extend back to the beginning position
- Keep the torso in the same position
- After the set is completed, stand up and return the bar to its resting position

## **Biceps Arm Curl**

- Stand or sit with a neutral spine position
- Feet are placed at least shoulder width apart for a wide, stable base
- For standing curls, knees should be slightly flexed
- A shoulder width closed supinated grip should be used
- Elbows should remain fixed to the sides of the torso throughout the lift
- Bar should be raised and lowered through a full normal range of motion
- Bar should be raised and lowered at a controlled speed
- No body swing or assistance from excessive body movements should be allowed
- Neutral spine position perpendicular to the base should be maintained throughout