MANUAL RESISTANCE EXERCISES

1. **NECK FLEXION** – (Neck Flexors)
   
   **Start:** Lying face up on a bench with your shoulders slightly over the edge of the bench. The top of the head should be parallel to the floor. At the beginning of each rep the neck muscles should be totally relaxed.

   **Movement:** Flexing only the neck muscles, raise the head forward and upward so that the chin is resting on the chest – pause momentarily and resist the negative to the starting position.

   **Spotting:** Place the dominant hand on the lifter’s forehead and your other hand on the lifter’s chin. Apply as much pressure as needed to accommodate for the strength curve of the neck flexors.
2. **NECK EXTENSION** - (Neck Extensors)
   **Start:** Lying face down on a flat bench with your head hanging over the edge of the bench. Neck should be totally relaxed with your chin touching your chest and hands resting behind your back.

   **Movement:** Raise your head upward and backwards until in is fully extended. Pause momentarily and resist the negative to the start position.

   **Spotting:** Form a web with your hands and place them on the back of the lifters head. Begin the exercise with mild pressure and allow the lifter to raise their head in an arc that resembles a half moon. Adjust resistance according to the strength curve of the neck flexors.

3. **UPRIGHT ROW** – (Deltoids, Trapezius, Biceps)
   **Start:** On a bench or standing with arms fully extended holding a towel on the outside with both hands. Head should be level.

   **Movement:** Pull the towel upward keeping it tight to your body and your elbows high. Pause momentarily when your hands reach your shoulders and resist the negative.

   **Spotting:** Sitting under the lifter – grasp the middle of the towel and provide resistance.
4. **SHOULDER PRESS** – *(Deltoids, Triceps)*

**Start:** Sitting with a natural arch in your back and slightly leaning back with your arms bent.

**Movement:** Extend your arms upward until you reach full extension. Pause momentarily and resist the negative to the starting position.

**Spotting:** Position one leg against the lifter’s back to add support. Grasp the lifter’s hands with the thumbs interlocking and apply pressure.

5. **LATERAL RAISE** – *(Medial Deltoids)*

**Start:** Standing erect with a slight bend in your elbows and your palms facing inward.

**Movement:** Raise your arms laterally until your hands reach shoulder height. Make sure at the top your palms are facing down. Pause at the top and resist the negative.

**Spotting:** Stand behind the lifter with your hands on the lifter’s wrists. Do not allow the lifter to cheat by leaning back, increasing the bend in the elbows, or turning the thumbs up.
6. **FRONT RAISE – (Anterior Deltoid)**

   **Start:** Standing erect with your feet staggered and your arms extended with a slight bend in your elbows. Palms should be facing down.

   **Movement:** Raise your arms forward and upward until your hands reach eye level. Pause at the top and resist the negative.

   **Spotting:** Place your hands over the lifter’s wrists. Do not allow the lifter to cheat by leaning back, increasing the bend in the elbows, or turning the thumbs up.

7. **REAR DELT – (Posterior Deltoids)**

   **Start:** Place on knee on a flat bench. Position the hand on the same side on the bench at a distance from your knee that will allow you to keep your back flat. Drop and bend the opposite elbow so that it rests under your shoulder.

   **Movement:** Raise your elbow to the side keeping it even with your shoulder. Pause momentarily when your elbow reaches shoulder height and resist the negative.

   **Spotting:** Stand to the side of the lifter and place your hand on the lifter’s elbow to apply resistance.
8. SABERS – (Deltoids)

Start: Sit tall on a bench. Take one arm and cross it over to your opposite hip. Your palm should be facing back.

Movement: Raise your arm up and across your body. Keep your arm straight as you pull from one hip and finish fully extended over the opposing shoulder.

Spotting: Stand behind the lifter and place one hand on the wrist of the lifter’s motion arm. Use your other arm to brace the lifter and keep their shoulders square.
9. INTERNAL/EXTERNAL ROTATION – (Internal/External Shoulder Rotators)

Start: Lean up against a wall for support. Make a fist with your off hand and place it under the elbow of the arm that is being trained. This should separate it slightly forward and away from the body. The elbow should be bent slightly less than 90 degrees. For internal rotations start with your arm away from your body even with your shoulder. For external rotations start with your arm across your chest.

Movement: Internal Rotation – Keeping your shoulder blades back and your chest up, rotate at the shoulder bringing your fist to your chest. Pause at your chest and resist the negative. External Rotation – Again with your shoulder blades back and chest up, rotate at the shoulder pushing your fist away from your chest until it is even with your shoulder. Pause and resist the negative.

Spotting: Internal Rotation – Grab the hand of the lifter and resist in as the lifter pulls to their body. Pull away during the negative. External Rotation – Place your hand on the outside of the lifter’s hand. Resist as they rotate away from the body and push in as they rotate back to the start.
10. **PUSH-UPS (Chest, Shoulders, Triceps)**

**Start:** Assume the push-up position with only hands and feet touching the floor (head up and abs/low back tight). Hands should not be out in front of shoulders and they should not be positioned too wide.

**Movement:** Lower your chest (do not touch thighs or stomach) to a position just short of the floor and recover to the starting position. Do not let your hips sag.

**Spotting:** Straddle the lifter and place both hands on the upper back to apply resistance. When the lifter is unable to lift up on their own, assist them up and still apply pressure on the negative.

11. **CHEST FLY – (Chest, Anterior Deltoid)**

**Start:** Lying face up on a bench with your feet on the floor. Extend your arms straight out to your side at chest level with palms up and keep a slight bend in your elbows.

**Movement:** Bring hands together directly over your chest. Pause momentarily and resist the negative.

**Spotting:** Stand directly behind the lifter and place your hands on the inside of their wrists. Apply pressure through the wrists and do no over stretch the lifter at the bottom.
12. **BENT-OVER ROW – (Latissimus Dorsi)**

Start: Place one knee on a flat bench. Position the opposite hand on the bench at a distance from your knee that will allow you to keep your back flat. Drop your free arm and let it hang so that it rests under your shoulder.

Movement: Bend your arm while driving your elbow upward to a position that leaves your hand even with your chest. Pause momentarily and resist the negative. Keep your back flat throughout the motion.

Spotting: Stand behind the lifter and place one hand on their elbow and the other hand on their back to make sure that it is flat. Apply resistance to the elbow.

13. **PULLOVER – (Latissimus Dorsi)**

Start: Lying face up on a flat bench extend one arm (with a slightly bent elbow) over your head.

Movement: Keeping a slight bend in your arm, drive back with your elbow until it is even with your side. Pause momentarily and resist the negative to the starting position.

Spotting: Kneel on the side of the arm in action. Place your hand under the elbow of the movement arm. Apply resistance to the elbow.
14. BICEPS – (Biceps)
Start – Stand tall with a towel hanging downward with your arms fully extended by your side. Rest your upper body and lower back against a wall.

Movement: Raise the towel forward and upward and pause momentarily when your hands reach your upper chest. Resist the negative.

Spotting: Holding the outside of the towel. Alter the resistance as the lifter goes through the motion (they will be strongest at the midpoint – 90deg). Do not allow the elbows to leave the lifter’s side.

15. TRICEPS – (Triceps)
Start: Lying on your back with arms bent and elbow pointing toward the sky. Upper arm must remain perpendicular to the body throughout the exercise.

Movement: Raise the forearm forward and upward until the arm is fully extended. Pause momentarily and resist the negative to the starting position.

Spotting: Straddle the lifter with your legs resting against the lifter’s upper arm. This will stabilize the lifter. Place your hands on the outside of the lifter's wrists and apply resistance.
16. **LEG EXTENSION** – *(Quadriceps)*

**Start:** Sitting on a bench or a chair so that your feet do not touch the ground. Have a slight lean back with your upper body and use your arms to brace yourself.

**Movement:** Extend your leg up as high as possible (leg should be straight at the top). Pause at the top and resist the negative.

**Spotting:** Kneel along side the lifter and apply resistance against the ankle of the leg in motion.

17. **LEG CURL** – *(Hamstrings, Gastrocnemius)*

**Start:** Lying face down on the floor or on a flat bench. The active leg starts straight with the toes pointing up.

**Movement:** Keeping your thigh in contact with the floor or the bench, curl your leg by bringing your heel as close to the buttocks as possible. Pause momentarily at the top and resist the negative.

**Spotting:** Kneel or stand along side the lifter and place your hand on the ankle of the active leg. Resist from the ankle and keep with the strength curve of the motion (the lifter will be strongest in the midpoint of the exercise).
18. LATERAL HIP – (Hip Abductors)
   **Start:** Lying on one side on either a flat bench or the ground. Upper body and lower body should be in a straight line.

   **Movement:** Raise the leg performing the exercise as high as possible. Keep that leg straight as you come up and do not rotate your hips. Pause momentarily at the top and resist the negative.

   **Spotting:** Stand or kneel behind the lifter and one hand right above the knee and the other on the ankle. Apply the majority of the pressure using the hand above the knee and guide the motion with the hand on the ankle.

19. HIP FLEXOR – (Hip Flexors)
   **Start:** Lying face up on the ground or on a flat bench. Keep your body straight and use your hands on the ground or the bench to stabilize your body.

   **Movement:** With one leg, bend and drive your knee up to your chest. Keep your other leg straight and in contact with the ground/bench. Pause momentarily at the top and resist the negative.

   **Spotting:** Stand or kneel beside the lifter. Place a hand on the lower thigh of the leg in motion and add resistance.
20. **HIP ADDUCTION – (Hip Adductors)**

**Start:** Lying on your back with the leg to be trained lifted slightly off the ground and stretched out to the side. The off leg is left straight in line with the rest of your body.

**Movement:** With a slight bend in your knee, squeeze your leg toward the midline. Bring the leg all the way to the midline, pause and resist the negative.

**Spotting:** Grab the inside of the ankle and add resistance. You may have to brace the off leg of the lifter with your ankle to eliminate and extraneous movements.
21. HIP EXTENSION – (Hip Extensors)

**Start:** Lying flat on the ground or on a bench, lift one leg up with a slight knee bend as high as you can without the spotter adding any additional stretch.

**Movement:** Keeping the slight knee bend, push your leg down to the ground. Pause at the bottom and then bring the leg back up without any resistance.

**Spotting:** Grab the ankle of the leg that is up in the air. Resist as the lifter squeezes down to the floor. Do not reply any resistance in the negative. Allow the lifter to lift their leg back up on their own without adding any additional stretch at the top.
22. **DORSIFLEXION – (Ankle Dorsiflexors)**

**Start:** Sit on the middle of a flat bench or table with one leg straight so that your foot is completely hanging off the bench/table. Your toes should be pointed forward. Place your hands behind your body and your opposite foot on the ground for support.

**Movement:** Bring your toes up as far as you can toward your shin by flexing your ankle. Pause when you have reached a full range of motion and resist the negative.

**Spotting:** Kneel in front of the lifter. Interlock your hands and place them over the top of the lifter’s toes. Allow the lifter to move in a half-circle motion.