The low pulley

Andrew Fry, C.S.C.S.
Editorial Assistant
NSCA Journal

The low pulley station is found in most weight rooms, and in many programs it is a well-used piece of equipment. It can be part of a large multi-station weight machine or it can be an individual unit, either free-standing or wall-mounted. Most of these units use weight stacks for resistance, but plate loading machines are available. A number of very effective exercises can be performed with the low pulley station. To fully utilize this machine, several different types of detachable handles are recommended. They include 1) a straight bar, 2) close-grip handles, 3) canvas straps, 4) E-Z curl bar, 5) single revolving handles, and 6) padded ankle straps.

Arm Curl (biceps brachii) - The arms can be exercised very effectively on the low pulley. The athlete stands squarely facing the machine. Using no body motion, the forearm is flexed while the elbow remains stationary. A straight or E-Z curl bar can be used for this, or one arm curls can be performed with a single revolving handle. Preacher curls can also be done by placing the curling stand in front of the low pulley. A slightly different angle of resistance can be obtained this way.

Upright Rows (trapezius, deltoid) - Facing the machine, the athlete grasps a straight or E-Z curl bar with a fairly narrow grip. Keeping the elbows high and the bar close to the body, the bar is brought up to chin level. No body motion is to be used for this exercise.

Shrugs (trapezius) - Once again, a straight or E-Z curl bar can be used for shrugs. Using a shoulder width grip, the athlete holds the bar with arms straight down. Using no arm action, the shoulders are lifted upward as the athlete attempts to raise them as close to the ears as possible. The shoulders can also be rotated toward the back.

Seated Rows (latissimus dorsi, teres major, rhomboids) - The lifter sits facing the low pulley with both legs extended in front. Be sure to keep the knees slightly flexed. Both feet should be braced against something solid. If the low pulley station does not have a place to support the feet, several 2x6 boards can be placed against the base of the unit. A close-grip, straight bar, or E-Z curl bar can be used for this motion. Maintaining an upright position, the arms are completely extended out front, and then the bar is pulled to the lower ribs. As the bar is pulled toward the lifter, the shoulder blades are pulled together as much as possible.

Back Extensions (erector spinae, gluteus maximus, hamstrings) - The athlete assumes the same position as for the seated rows. Without using any arm action; the hip is flexed as the lifter leans forward until a slight stretch is felt in the muscles involved. The hips are then extended until the torso is slightly past vertical. This
motion must be executed in a controlled manner, no jerky motions allowed. The exercise can be incorporated with seated rows, but care must be taken to avoid sloppy technique. The weight must be under control at all times.

**Shoulder Raises** (deltoids) -
The lifter either sits on a bench or stands. A canvas strap or a single revolving handle can be used. All three heads of the deltoid muscle groups can be effectively worked by altering the position of the athlete in relation to the machine. The elbows must be kept slightly flexed throughout the entire range of motion.

**Cross-Overs** (pectoralis major) -
Assuming a bent-over position, the athlete uses a canvas strap or a single revolving handle. Keeping the elbow slightly bent, the arm is horizontally adducted. The chest can be worked from various angles by altering the bent-over position.

**Tricep Extensions** (triceps brachii) -
The triceps can be worked several different ways with the low pulley machine. Lying on a bench with the head next to the weight stack, the lifter grabs the straight or E-Z curl bar above the head. With both elbows pointing straight up, the arms are straightened until fully extended. Care must be taken to clear the head with the cable. This exercise can also be done in a seated or standing position as the athlete faces away from the machine. Using a single revolving handle, a canvas strap or rope handle, one arm french curls can be done.

**Hip Exercises** - Extensions, abductions, and adductions can be performed by using a padded ankle strap on the low pulley. Standing in front of the low pulley with the knee slightly flexed, the thigh is either extended, abducted or adducted. Something stable to hold onto is helpful for maintaining balance.

**Side Bends** (external and internal obliques) - Using a single revolving handle, the lifter stands sideways to the machine. With the arm held straight, the lifter bends laterally at the waist. Each side of the waist must be exercised separately.●

**Shoulder raises work the deltoid muscle groups.**

**Keep the elbows flexed throughout the entire range of motion.**

**Side bends exercise each side of the waist separately.**

**Hold the arm straight and bend laterally at the waist.**

**Tricep extension can be done either seated or lying down.**

**With elbows pointing up, straighten the arms to full extension.**

NSCA Journal, Volume 8, Number 4, 1986