

### Intended Purpose

Ideal for home use to independently improve range of shoulder movement and coordination following conditions such as stroke, injury or surgery.

### Indications

Loss of shoulder range of motion associated with surgery, injury or stroke.

### Contraindications

Avoid use for hemiplegic shoulder, shoulder subluxation or if pain occurs or increases during use.

### Precautions

1. Consult your healthcare provider before beginning any exercise program.
2. The Norco® Shoulder Pulley is to be used for intended purposes only.
3. Good grip strength in both hands is required to hold the handles.
4. Before each exercise session, inspect the pulley mechanism for nicks or cracks. Examine the handles for cracks or other defects.
5. Make sure the rope is firmly knotted to the handles.
6. Does not support full body weight.
7. Place the web strap only over the top or along the hinged side of the door.
8. Remove pulley when not in use and put in a safe place to avoid accidental damage.
9. Consult your healthcare professional if pain is experienced while performing exercises or condition worsens.
10. This product is not a toy and should be kept out of reach of small children. Consult your physician or therapist before allowing children to use and only use under adult supervision.

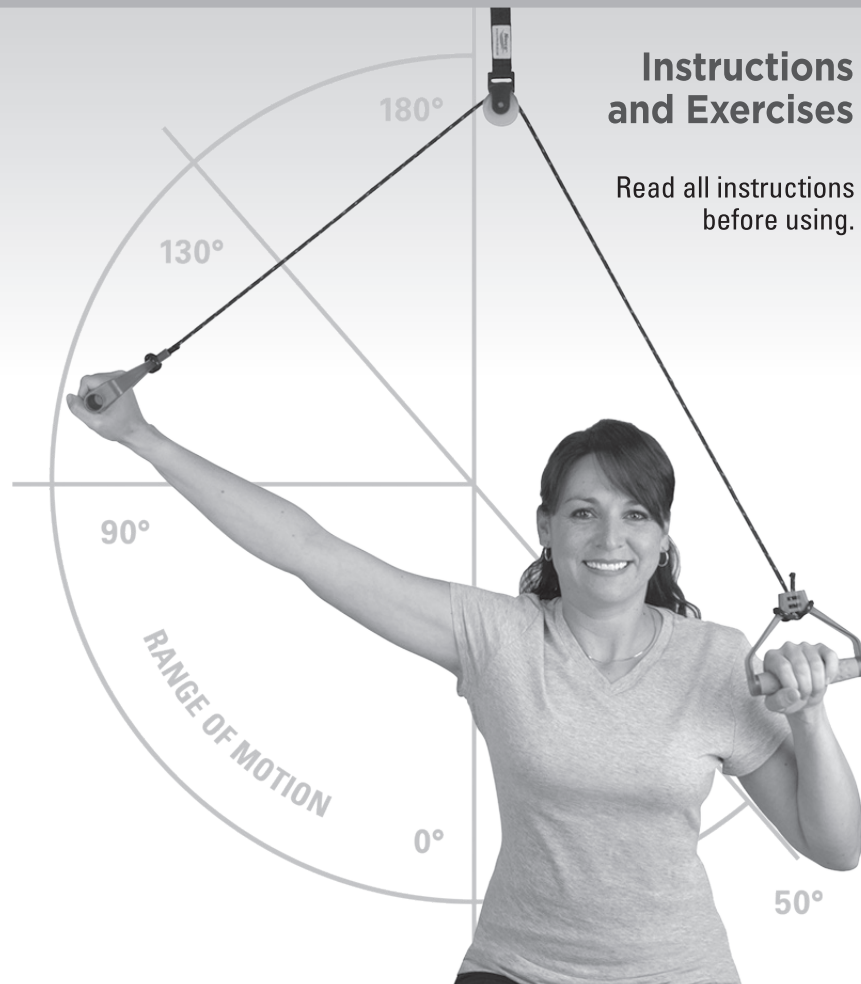
### Instructions for Care

Wipe with soft cloth and mild detergent. Air dry.

# Shoulder Pulley

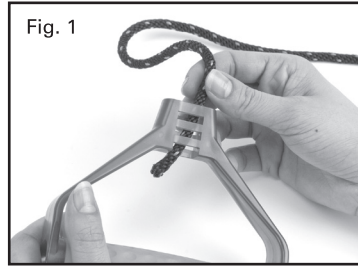
## Instructions and Exercises

Read all instructions before using.



**How to attach pulley cord to handles**

1. Slide one end of cord down through the center of opening (Fig. 1). Pull enough cord through to accommodate a figure-eight weave, as follows.



2. (Fig. 2) Direct cord under and over the left side of handle (a) toward the center (b). Continue weaving cord under and over the right side of handle (c) toward the center (b). This will create a figure-eight (Fig. 3a).

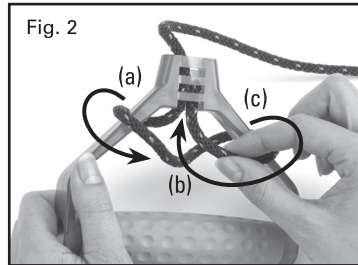
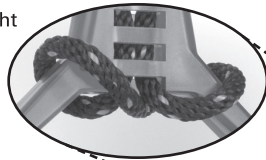
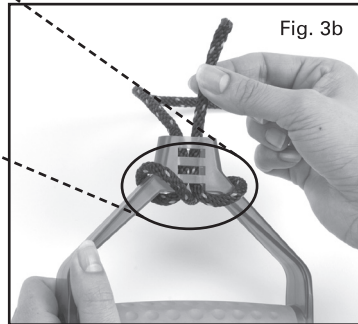


Fig. 3a - Figure eight



3. Slide end of cord back up through the center of opening (Fig. 3b).

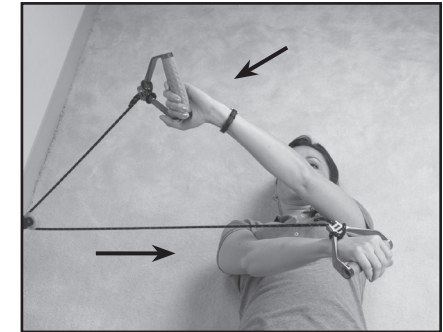


**Shoulder Horizontal Adduction**

1. Secure web strap on side of door about 2" to 3" (5.1 to 7.6 cm) above the floor. It should be at shoulder level.
2. Lie on back approximately 2 ft. (61 cm) from the door with involved shoulder farthest from the door.
3. Position both straight arms out in front at shoulder level, pointing toward the ceiling with shoulders on floor.
4. Pull with opposite arm down and across the body, to cause the involved arm to move above and across your chest. Try to keep shoulder blades down and pulled back together.
5. Do not let the shoulders move up toward the ears. Breath out as arm is stretched across chest. Keep involved wrist and elbow straight.
6. Repeat:

\_\_\_\_\_ times

\_\_\_\_\_ sessions/day



**Shoulder External Rotation**

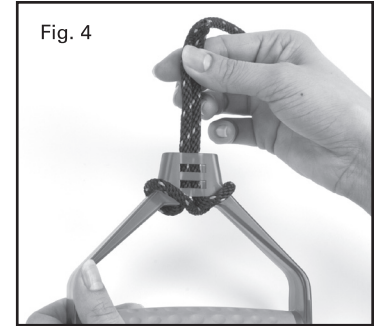
1. Secure web strap on the side of the door about 2" to 3" (5.1 to 7.6cm) above the floor.  
Lie on back with the side of the involved arm facing door, approximately 2 ft. (61 cm) from the door.
2. Bend knees and pull shoulder blades together and down so they are flat against the floor.
3. Bend elbows to 90° and keep them against your sides throughout motion. Relax shoulders.
4. Gently pull the cord away from the body with opposite hand. The involved hand will move toward the door, rotating at the elbow on the floor. Keep wrist straight. Do not allow the elbow to move away from the body. Pull to the point of stretch, not pain.
5. Hold.
6. Repeat:

\_\_\_\_\_ times  
\_\_\_\_\_ sessions/day



**How to attach pulley cord to handles, continued**

4. Grasp both ends of the cord and pull until the loops are tight and secure around the base of handle (Fig. 4).
5. Lengthen or shorten by simply loosening the cord.

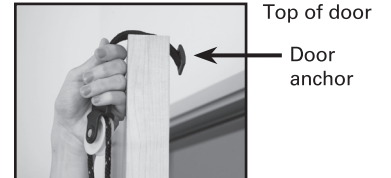


**Securing the Norco® Shoulder Pulley to your door**

- Select a door in your home where there is little or no traffic.
- Be sure the door is closed and secured before starting to exercise.

**Web Strap Placement -**

With door open, place web strap between door and door frame – either over the top of door or along side of door. Place door anchor completely through door gap, with the buckle piece on the other side of the door. With strap in desired position, close door. Locking door is recommended. Finally, tug on strap to securely hold it in place.



**WARNINGS:**

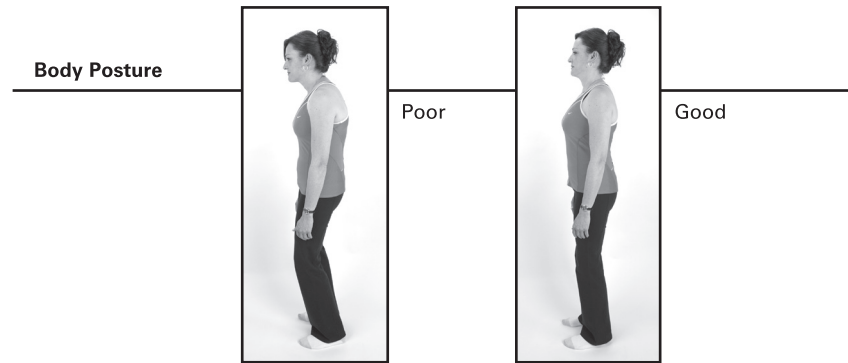
**Place web strap only over top or along hinged side of door.**

**Keep out of reach of small children.**

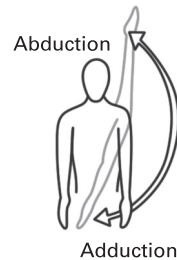
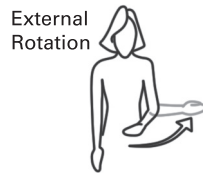
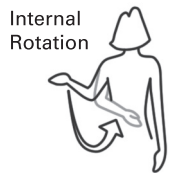
**Key factors to remember**

**Posture** - Good posture while performing your exercises can greatly improve the results of your exercise program. Whether standing, sitting or lying on back (supine), try to follow these postural guidelines:

1. Align your body so that your ears, shoulders and hips fall in a straight line.
2. Keep the pelvis tucked to flatten your back by tightening the stomach and slightly bending the knees.
3. Relax the shoulders so they rest down away from your ears, with your shoulder blades pulled back to naturally lift the chest.



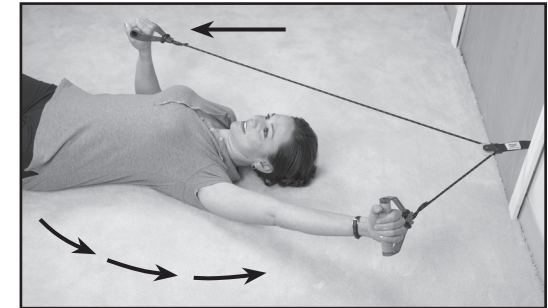
**Understanding Shoulder Range of Motion**



**Shoulder Abduction**

1. Secure web strap on side of the door above the involved shoulder about 6" to 12" (15 to 30 cm) from the ground.
2. Lie on back with head toward door approximately 2 to 4 ft. (61 to 122 cm) from the door. Pull shoulder blades together and down so they are flat against the floor. Tuck stomach in to flatten back. Bend knees if needed for comfort.
3. Hold handles comfortably. Place the involved arm on the floor, straight along the side of the body.
4. Pull cord down (toward feet) with opposite hand, sliding involved straight arm out to the side, along the floor up toward door. Pull to point of stretch, not pain.
5. Repeat:

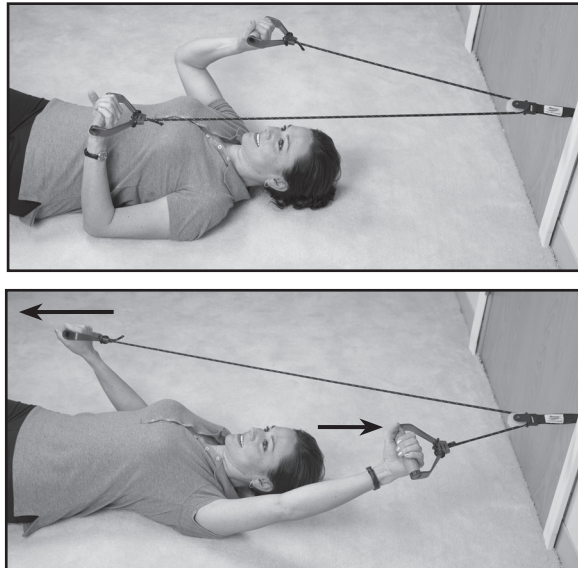
\_\_\_\_\_ times  
\_\_\_\_\_ sessions/day



**Shoulder Flexion**

1. Secure web strap on side of door above the involved shoulder about 6" to 12" (15 to 30 cm) from the ground.
2. Lie on back with head toward door approximately 2 to 4 ft. (61 to 122 cm) from the door. Pull shoulder blades together and down so they are flat against the floor. Tuck stomach in to flatten back. Bend knees if needed for comfort.
3. Hold handles comfortably with elbows bent.
4. Pull cord down (toward feet) with opposite arm. This will lift the involved arm up over head. Pull to point of stretch, not pain.
5. Repeat:

\_\_\_\_\_ times  
\_\_\_\_\_ sessions/day



**Targeting the problem area** - If you experience pain, weakness and/or stiffness, other muscles and joints may try to "help out" the affected area. These compensatory movements prevent proper functioning and can delay healing. Targeting the correct area limits compensations, promotes optimum recovery, and minimizes pain and irritation. Your therapist or doctor is your best guide for proper targeting.

1. Relax all muscles in the injured extremity except those that are targeted.
2. Perform exercises in a slow controlled manner to target specific muscles/joints.
3. Avoid movements that cause or increase pain. Although discomfort is normal, pain should not be experienced at the end range of motion. Pain at the end range of motion may be the result of improper positioning. If you experience pain, contact your therapist or doctor.
4. Avoid typical shoulder compensations. Pull shoulder blades (scapulae) back and down to keep them in a stable position. Your therapist may start your rehabilitation program using only exercises that strengthen the supporting muscles between the scapula and the spine until proper position of the scapula can be maintained during arm motions.

**Shoulder Posture**



Scapulae Down



Scapulae Back

**Shoulder Forward Flexion  
(Facing Door)**

1. Secure web strap at the top of door, positioned directly over involved shoulder.
2. Stand or sit, facing door with toes 8" to 10" (20 to 25cm) away from the door.
3. Hold the handles with a relaxed grip, thumbs pointing behind you.
4. Allow your shoulders to drop down from your ears. The scapula stabilization muscles must be engaged before pulling the involved arm up.
5. Pull the involved arm up in front of the body using the opposite arm, while maintaining good scapula posture.
6. Repeat:

\_\_\_\_\_ times \_\_\_\_\_ sessions/day



**Note:**  
All examples in this instruction booklet show the left arm as the involved shoulder being exercised.

**Shoulder Internal Rotation (Advanced)**

1. Secure web strap at top of door directly over non-involved arm.
2. Stand or sit with non-involved side next to the door.
3. Place the cord behind you.
4. Place the involved straight arm with hand against the back, palm facing out and shoulder blades together.
5. With the opposite hand, gently pull the cord down to bring the involved hand up along the back. Remember to keep shoulder back and down during exercise.
6. Stop at point of resistance. Rest, allowing involved hand to drop slightly. Then pull cord gently for additional stretch.
7. Repeat:

\_\_\_\_\_ times \_\_\_\_\_ sessions/day

**Note:** This exercise helps stretch the arm up behind the back – often the most difficult motion to regain.



**Shoulder External Rotation (with supported upper arm)**

1. Secure web strap at the top of door, positioned directly over involved shoulder.
2. Stand or sit with back flat against the door, with shoulder blades down and together. Keep lower back straight and shoulders as level as possible.
3. Position a tall, stable support (stool or table) at shoulder height, next to and under the arm of the involved shoulder.
4. Rest bent elbow and forearm of the involved shoulder on the support. Hold handle with palm down.
5. With the opposite hand, gently pull the cord down to bring the involved hand and forearm up from the support, back toward the door while keeping elbow in place.
6. Repeat:

\_\_\_\_\_ times \_\_\_\_\_ sessions/day

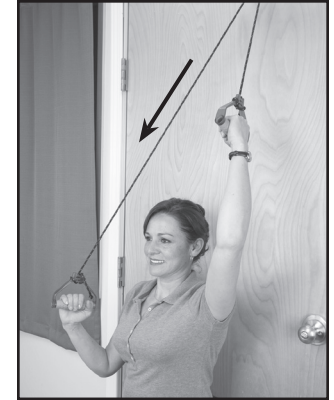
**Note: Place a pillow under the arm of the involved shoulder for comfort.**



**Shoulder Forward Flexion, (Back to Door)**

1. Secure web strap at top of door, positioned directly over involved shoulder.
2. Stand or sit with back toward door.
3. Hold the handles with a relaxed grip, thumbs pointing behind you.
4. Lower your shoulder. Pull shoulders back.
5. Using opposite arm, gently pull the involved arm up, in front of body.
6. Maintain scapular stabilization by squeezing the shoulder blades together.
7. Repeat:

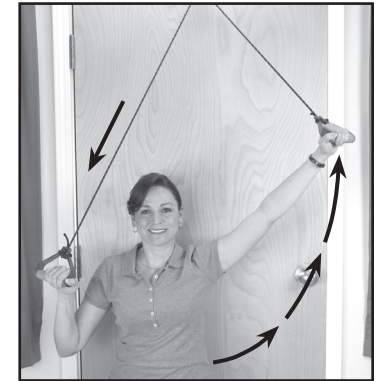
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**Shoulder Abduction**

1. Secure web strap at the top of door, positioned directly over involved shoulder.
2. Stand or sit with back flat against the door, with shoulders down and back. Keep lower back straight and shoulders as level as possible.
3. Hold pulley handles in both hands, along side of body, keeping elbow of the involved arm straight and relaxed next to door.
4. Lift involved arm up along door by pulling cord down with the opposite hand. Hand may rotate as motion continues toward end range. Pull to a point of stretch, not pain.
5. Repeat:

\_\_\_\_\_ times \_\_\_\_\_ sessions/day



### Shoulder Flexion / Abduction

1. Secure web strap at top of door, positioned directly over involved shoulder.
2. Stand or sit, with back to door, keeping light contact between the door and your shoulder blades.
3. Grip handles comfortably. Place involved wrist about 2 ft. (61 cm) away from the door with elbow straight and shoulders as level as possible.
4. Hold shoulder blades together and down. Tuck stomach in to flatten back.
5. Use opposite arm to pull involved arm up, midway between the front and side of body. Go to the point of stretch, not pain.
6. Repeat:

\_\_\_\_\_ times \_\_\_\_\_ sessions/day



### Shoulder External Rotation

1. Secure web strap in side of door near the involved arm and level with the elbow.
2. Stand or sit with your side about 2 ft. (61 cm) next to the door with shoulder blades down and together, stomach in to flatten back.
3. Place upper arm against your side with elbow bent 90°. Keep shoulder relaxed.
5. Hold handle on involved side with thumb facing up. Keep wrist as straight as possible.
6. Slowly pull with the opposite arm, keeping bent elbow next to body. This will rotate the hand of the involved arm toward the door.
7. Repeat:

\_\_\_\_\_ times \_\_\_\_\_ sessions/day

