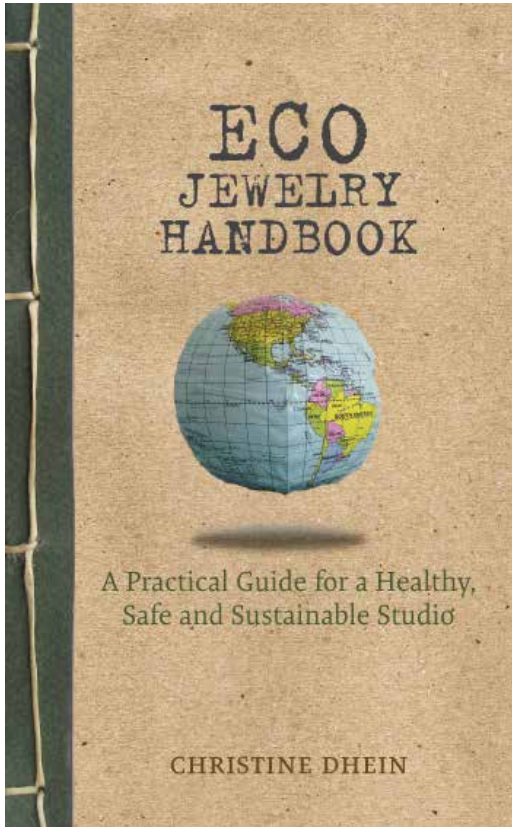
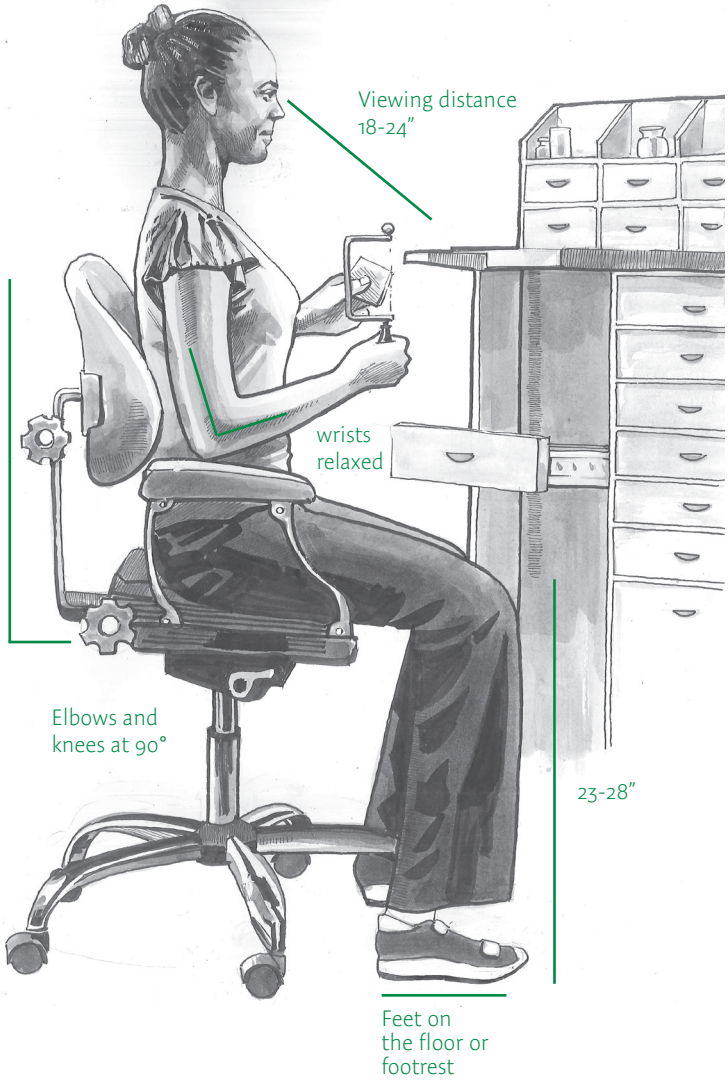


## er·go·nom·ics

noun: ergonomics is the  
the study of people's efficiency in  
their working environment.



*The following pages are extracted from  
this book, used with permission.*



Seat back at 90°

Viewing distance 18-24"

wrists relaxed

Elbows and knees at 90°

23-28"

Feet on the floor or footrest

# Stretching for Jewelers

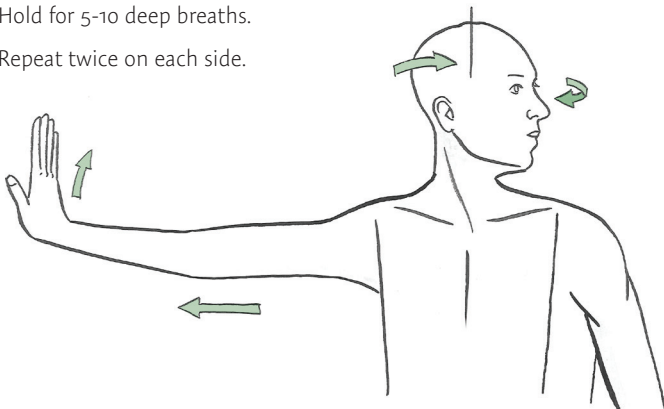
The exercises that follow are specifically designed to target muscles of common concern for jewelers. They can be performed seated or standing. If you usually work seated, stand while stretching. Start with stretches targeted to those work areas where you feel tightness or discomfort. Stretches that feel difficult are likely those most needed. Try to relax and breathe, even when a stretch is difficult. One side of the body may feel tighter than the other. In this case, start stretching on the tight side, then switch to the more flexible side, and finish by performing the stretch a second time on the tighter side.

Jewelry techniques require a high level of concentration. Many jewelers enjoy their work, become absorbed, and do not notice time passing. Such high levels of working concentration can make it difficult to remember to take breaks or change positions. Use a timer set at regular intervals.

## CHEST STRETCH

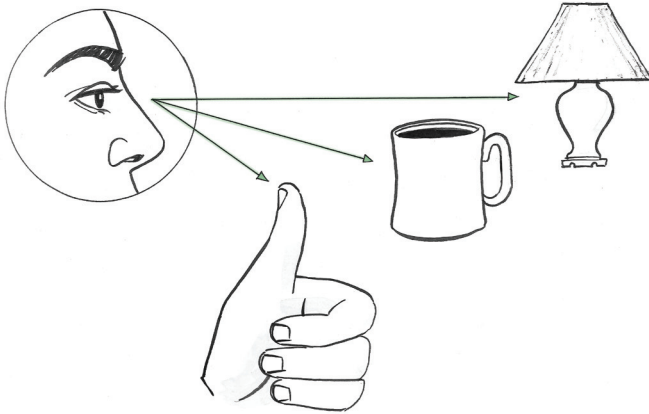
1. Extend an arm away from your body, parallel to the floor.
2. Rotate your arm and shoulder back.
3. Press the palm of the outstretched arm against the wall, fingertips pointed away from the wall. Relax shoulders and allow them to drop.
4. Turn your feet, legs and torso away from the outstretched arm.
5. Turn your head away from the outstretched arm to add a neck stretch.
6. Look (with eyes) behind you, away from the outstretched arm to add an eye stretch.
7. Hold for 5-10 deep breaths.

➤➤ Repeat twice on each side.



**EYE EXERCISE – NEAR AND FAR FOCUSING**

1. Place your thumb 10 inches in front of your face. Focus on it for 10–15 seconds.
  2. Focus for 10–15 seconds on an object 5–10 feet away without moving your head.
  3. Focus for 10–15 seconds on a distant object (for instance out a window or on a distant wall) without moving your head.
  4. Refocus on your thumb held in front of your face for 10–15 seconds.
- Repeat the cycle five times.



## NECK ROLLS

1. Gently clasp hands behind your back.
  2. With head centered, inhale and lengthen your spine and the back of your neck.
  3. Exhale and drop your chin toward your chest.
  4. Inhale and smoothly roll your head and neck to the right, bringing your right ear toward your right shoulder.
  5. Exhale and return to center.
  6. Inhale and smoothly roll your head and neck to the left to bring your left ear toward your left shoulder.
- Repeat 5-10 times in each direction.



*Hands are clasped behind the back as the head rolls side to side.*

**NECK ROTATION STRETCH**

1. Gently clasp hands behind your back.
  2. With your head centered, inhale and lengthen the spine and back of your neck.
  3. Exhale and gently turn your head to the right side.
  4. Look over one shoulder to add an eye stretch.
  5. Inhale and bring your head back to center.
  6. Repeat in the opposite direction.
- Repeat 5-10 times in each direction.

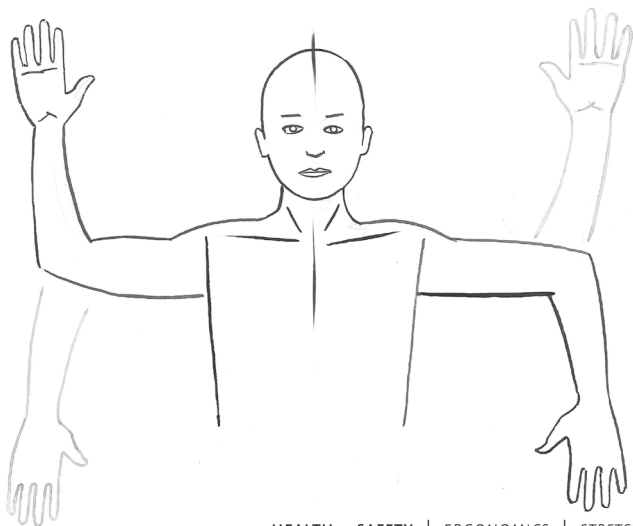


*Hands are clasped behind the back as the head rotates side to side.*

### SHOULDER ROTATION STRETCH

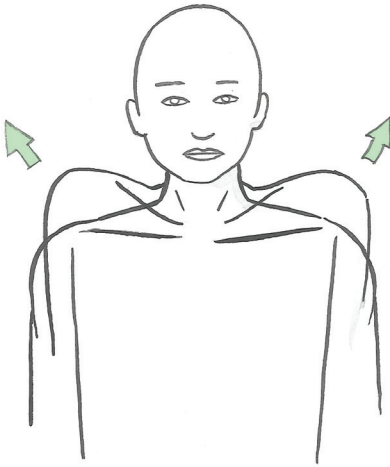
1. Stand with your heels close to a wall, with your pelvis and shoulder blades touching the wall.
2. Brace your abdominals and pull the back of your rib cage toward the wall. Your lower back will naturally curve slightly away from the wall.
3. Bend your elbows to 90°.
4. Raise your upper arm perpendicular to your body; wrists straight, palms facing down, fingertips pointed forward and elbows pressing against the wall.
5. Pull your shoulder blades together and down, keeping them flat against the wall.
6. Keeping your elbows in place, wrists straight, and the top of your shoulders close to the wall, rotate your right shoulder to point the fingertips of your right hand up and left shoulder to point fingertips of left hand down. Ideally, the back of your right hand will touch the wall and your left forearm will form a 45° angle with the wall below.
7. Reverse the motion and rotate shoulders so fingertips point in the opposite direction.
8. Breathing deeply, slowly rotate your shoulders back and forth 5–10 times.
9. Hold static stretch with one hand pointing up and the other pointing down for five deep breaths.

➤➤ Reverse and repeat on the other side.



## SHOULDER ROLLS

1. Relax your arms at sides, palms facing the body.
  2. Shrug your shoulders up toward your ears, pull your shoulder blades back, then squeeze them together and push them down. The effect is an exaggerated circle.
  3. Repeat 5-10 times.
- Reverse the direction of circle and repeat 5-10 times.

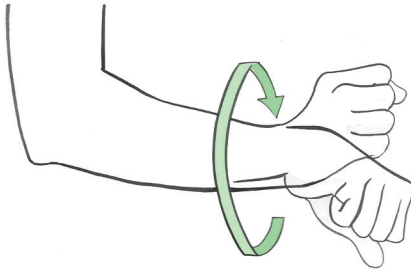




### WRIST CIRCLES

1. Relax your arms at your sides, palms facing the body.
2. Make fists with both hands and slowly move your wrists in 10 clockwise circles without moving your elbows or shoulders.

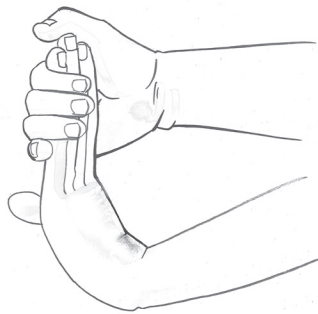
➤➤ Repeat movement counterclockwise.



### WRIST FLEXION STRETCH

1. Extend one arm to the front, elbow straight.
2. Point fingers up and flex wrist. (As if telling someone to “stop.”)
3. Use your opposite hand to gently pull the thumb and fingers back.
4. Hold for five deep breaths.
5. Gently move head side-to-side, as necessary to release tension from neck and shoulders.

➤➤ Repeat on the other side.



## Sample Stretching Program

All muscles of the body, including those required to support good posture, experience the greatest benefits in strength and flexibility from regular and consistent exercise. A regular routine maintains or improves the current level of fitness. Maintain a routine that includes taking breaks to stretch at regular intervals, three to five times a day. Select a variety of exercises for each break. Include some that feel good and others that are challenging. Use gentle stretches at the end of the workday to release accumulated muscle tension.

- Before you start to work: neck rolls, shoulder rolls, wrist circles and a chest stretch.
- Stretch break #1: Perform a couple exercises that target problem areas, including an eye exercise.
- Stretch break #2: Repeat the warm-up stretches and add a new one.

➤➤ Repeat as many times as practical, ideally stretching every hour.

*Change work positions  
and take stretch breaks  
at regular intervals.*

