

Ergonomics is the science of designing the job, equipment, and workplace to fit the worker

Protecting the hands by Pooa Bloomberg OTR/L

Three main injuries to avoid: (i) Burns from hot iron or injury to the skin in other ways; (ii) strain to wrist or other joint of the hand; and (iii) nerve related injury.

In General: Make sure you take a break from quilting or piecing every 45-50 minutes or less. Move around for 5-10 minutes. A good idea from 'Moonlight Quilters' is to place your ironing board on the opposite side of the room so you have to walk over to it from time to time, especially when piecing your quilt. Use equipment according to manufacturer's guidelines.

(i) To protect your hands from burns and other skin injuries

1. Protect your hands from burns by having a reliable easy to control iron. Use the small specially designed triangular iron (such as the Clover Mini) to press difficult corners so you don't have to use your hands in awkward situations under or close to the hot iron.
2. Use thimbles on all fingers that are involved in pushing, rocking or stopping the needle. Using the thumb (with a thimble) when changing quilting direction, it takes stress off other fingers and saves turning-the-quilt-around time.
3. To protect your fingers when sewing, make sure that your machine pedal is easy to control to avoid sewing sooner and faster than you intend and thus eliminate the risk of sewing over your fingers as they hold difficult corners for sewing under the needle. Always take your foot off the pedal when not stitching.
4. Make sure your table's edges are smooth and rounded, not rough or sharp edged, thus avoid scraping your arm or hand on a rough edge or cutting circulation. You can pad the edge of your table to protect your forearm.

(ii) To protect your joints

5. Rotary cutter is easier on the hands than scissors. Use it with force coming from your shoulder down to your hand and not with force from the wrist. Cut with motions away from your body.
6. If you do a lot of scissor cutting, use ergonomically correct scissors to limit the need to bend the wrist. Finding the right scissors takes some experimenting.

7. Plan your work in such a way that you can rotate between the different quilt making stages and not spend hours doing a single task.
8. If you do a lot of ironing/pressing at one time, set the board height at 6” below your bent elbow. This height is least likely to cause postural injuries during long, repetitive ironing motion.
9. If you experience pain in any part of your hand, arm or shoulder, stop what you are doing or change hands. Try to do the same activity in a different way or do something else that does not cause pain. If pain persists long after you stopped activity – see your doctor.
10. Another tip from ‘Moonlight Quilters: Place a rubber doorstop under the back of your sewing table legs to slightly tilt machine so you can easily see across your work.
11. Use “Supreme Slider” or something similar on top of your quilting table so your work slides smoothly under the foot of your machine.
12. Use quilting gloves when machine quilting to provide traction between your hand and the fabric, to reduce strain on your hands when pushing work under the needle. Alternate between pushing the fabric with hands placed flat on quilt and gripping the quilt in your hands.

(iii) To avoid nerve injuries

13. During machine quilting, be sure your wrists are in a straight, neutral position not bent forward or backwards to avoid compressing the carpal tunnel (and the Median nerve) which is in the front area of your hand just past the wrist crease.
14. When sewing on the machine or by hand, be sure to have your elbow free, not leaning on the hard surface of the table or arms of a chair, and thus avoid irritating the Ulnar nerve near the inside of your elbow (the Funny Bone).
15. Position your cutting table so you can walk all around it. That way you will not have to over reach with your arm to cut the end of the fabric far away from you.