How to Adjust Your Equipment for a Better “Fit”

1. Check the chair seat tilt. The seat should be level, or tilted forward higher in the back if you prefer.

2. Adjust the chair seat height for the comfort of your wrists, arms, neck and shoulders.
   - Wrists should be straight
   - Elbows close to your body
   - Shoulders relaxed
   - Feet not bent over too far

3. Next, support your feet for the comfort of your legs and back.
   - Foot controls should be at a comfortable height and distance.
   - Feet that are not on a foot control can be raised using a foot rest.

4. Move your hips back in the chair.

5. Adjust the back rest to support your lower back.

6. Adjust or pad the knee control.

For More Information

- HESIS (Hazard Evaluation System and Information Service) - www.dhs.ca.gov/ohb
- HESIS answers questions about workplace hazards and has many free publications available.
- For information on workplace hazards: (510) 622-4317.
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Guidelines for Getting Medical Care for Job-Related Pain That Won’t Go Away

- Helps workers recognize symptoms that need treatment, choose a doctor, and work with health care providers, employers, and the workers’ compensation system.

HESIS Publications Ltd. Pamphlets and fact sheets on workplace hazards including chemicals, repetitive motion, and infectious diseases. Visit our website, call or write for the list. A guide for health care providers treating work-related musculoskeletal disorders is also available.

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- Other publications about ergonomics and safety in the garment industry:
  - Improving Working Conditions and Productivity in the Garment Industry. 5SH 02-110-049 X (from the International Labor Office, (301) 638-3152. $19.95 plus shipping $4.50.
  - Stop the Pain! A Workers’ Guide to Job Design, from UNITE!, in English and Spanish (212) 691-1691. $1.00

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The publication may be copied in its entirety for educational use.
Is your job causing you pain?

- Pain, numbness, or tingling in the shoulders, neck, back and hands affect many sewing machine operators. These symptoms may be related to your job.
- Symptoms may start gradually. Many people try to ignore them at first. But if you ignore them, symptoms can get worse and become harder to treat. Inform your employer and get medical care right away if you have symptoms.
- These symptoms may indicate a serious injury that can interfere with your work and personal activities. They can even lead to permanent disability.

Why do sewing machine operators have these problems?

- An uncomfortable work position. Sewing work forces you to hold your body in one position for long periods. If it is an uncomfortable position, pain and injury can result. Your position is determined by the "fit" of your chair and foot control, your need to see the work, and your need to grasp or hold materials in place.
- Repeated or forceful motions. Reaching, stitching, pinching, pulling... hundreds of times a day. Employers need to learn how to work the equipment to "fit" your body.
- Long work hours and few breaks mean less time for muscles and joint injuries to heal.
- Hard edges. If the edge of your chair, worktable or table legs press into your body for long periods, it can damage nerves or other soft body parts.

How Can Injuries Be Prevented?

By law, your employer is responsible for providing a safe and healthy workplace. Here are some things you and your employer can do to prevent injuries:

- Talk with others at work. Do workers have symptoms? Are the causes of injury present? Does the employer know about preventive actions to take?
- Use adjustable chairs. Employers should get durable industrial chairs that have:
  - adjustable seat heights
  - padded seats
  - swivel bases with five legs (not four)
  - padded adjustable backrests
- Use foot supports. Foot supports are an important part of the seated workstation. Employers may need a mechanic to adjust, install, or build-up foot supports in the right position for each worker (height, forward/back and left/right).
- Adjust your equipment to "fit" your body. (see box on overhead)
- Improve lighting. Employers should provide "gooseneck" lamps (in addition to general room light) for each sewing machine, if possible. Don't use extension cords; they can cause tripping or fire hazards. Older individuals need brighter light. Point the light so there are no shadows where you stitch or prepare work.
- Check your vision. Prescription eyeglasses or contact lenses may help you at work. Employers can help by providing time off and vision care insurance.
- Make reaching easier. Avoid twisting your back, or long reaches.
- Stack your materials and finished pieces close to you.
- Place bins and carts as close as possible.
- Install convenient shelves or tool holders if needed.
- Provide training. A trainer/consultant should help each operator adjust her entire workstation, including chair and foot supports. Operators need to learn how to work the chairs, and what adjustments to make. Also have the consultant train a few operators to assist their co-workers. Each worker should know the early warning symptoms of injury.
- Take tiny breaks. Take frequent, short breaks. Just lean back, stretch, and take a deep breath at least every 15 minutes. In addition, get up and walk around every half hour or so. You will probably find that you get more done, and feel better, too.
- Get medical care for symptoms.

Taking Action to Prevent Injuries

- Form a safety committee. It can be a big help in keeping your workplace safe. Get key people from labor and management to participate. A successful committee is one that has strong employer support. An experienced ergonomic consultant can provide technical assistance. Here’s what a safety committee can do:
  - Talk to workers and inspect jobs to find conditions that can cause injuries.
  - Encourage workers to report work-related injuries and symptoms to their supervisor.
  - Identify the jobs that have caused injuries.
  - Figure out how particular jobs may be causing injuries.
  - Develop practical solutions and recommend that management try them out on a few individuals.
  - Check to see if the changes are effective before recommending them for all affected jobs.
  - Monitor employees using new equipment and making other job changes.

What does the law say?

- Your employer may have to follow a California rule about repetitive work. Find out:
  - Were two or more workers injured within the last 12 months? The injured workers must have done the same type of work.
  - Did a doctor report that each injury is mainly caused by the job? Each worker can have a different diagnosis, as long as it's related to the same kind of repetitive work.
  - If the answer to both questions is “Yes,” the employer must change the work or equipment to prevent injuries. Worker training also is required.

This rule is called Repetitive Motion Injuries (General Industry Safety Order 5110). It is enforced by Cal/OSHA.

- What is Cal/OSHA? It is California’s Division of Occupational Safety and Health. This government agency investigates workers’ complaints and answers questions about workplace safety rules. Complaints are confidential. Find the phone number in the Blue Government Pages near the front of the phone book. Look under: State of California, Industrial Relations, Division of Occupational Safety and Health. Compliance or Enforcement.
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- Repeated or forceful motions. Reaching, stitching, pinching, pulling… hundreds of times a day. Each motion can cause small injuries to muscles and joints.
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  - padded adjustable backing
- Carefully evaluate chairs with built-in footrests and arm rests to make sure they fit workers and the movements they make. If these parts don’t fit, adjust or remove them.
- Use foot supports. Foot supports are an important part of the seated workstation. Employers may need a mechanic to adjust, install, or build up foot supports in the right position for each worker (height, forward/backward and left/right).
- Adjust your equipment to “fit” your body. (see box on overleaf)
- Improve lighting. Employers should provide “gooseneck” lamps (in addition to general room light) for each sewing machine, if possible. Don’t use extension cords; they can cause tripping or fire hazards. Older individuals need brighter light. Point the light so there are no shadows where you stitch or prepare work.
- Check your vision. Prescription eye glasses or contact lenses may help you at work.
- Employers can help by providing time off and vision care insurance.
- Make reaching easier. Avoid twisting your back, or long reaches.
- Stack your materials and finished pieces close to you. Place bins and carts as close as possible.
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- Hard edges. If the edge of your chair, or table legs press into your body for long periods, it can damage nerves or other soft body parts.
- Hard reaches. If you have to reach or lean over to work, your joints are under stress. Avoid twisting your back, or long reaches. Make reaching easier.

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- Make reaching easier. Avoid twisting your back, or long reaches.
- Stack your materials and finished pieces close to you. Place bins and carts as close as possible.
- Install convenient shelves or tool holders if needed.
- Acquire new equipment to prevent injuries.

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3. Next, support your feet for the comfort of your legs and back.
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For More Information

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Fact Sheet #1: What Every Worker Should Know

Fact Sheet #2: After You Get Hurt on the Job

Cal/OSHA Consultation Service helps employers to improve safety and health conditions without triggering enforcement inspections. Call 1-800-963-9424 for assistance or to ask for the booklet, Easy Ergonomics, or the booklet, Fitting the Tool to the Person: Ergonomics for Very Small Businesses.

Other publications about ergonomics and safety in the garment industry

- Guide to Getting Medical Care for Job-Related Pain That Won’t Go Away
- Easy Ergonomics
- Fitting the Tool to the Person: Ergonomics for Very Small Businesses

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How to Adjust Your Equipment for a Better “Fit”

- Make your chair and foot controls support your body. If you can adjust your equipment for a comfortable position, many injuries can be prevented.
- Adjustable chairs are needed to do this right. If your chair is not adjustable, you still may be able to make a few of these changes.
- Team up with a buddy. Help each other to adjust your chairs and other equipment. It’s way to see another person’s position. It’s hard to see your own!

1. Check the chair seat tilt. The seat should be level, or tilted forward higher in the back if you prefer.
2. Adjust the chair seat height. For the comfort of your wrists, arms, neck and shoulders:
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FEBRUARY 2001

California Department of Health Services • California Department of Industrial Relations