

Workstation

ergonomics

**How to create
a comfortable working
environment**



Sun™ systems are designed to meet international standards for

ergonomics and safety. Sun systems offer all the power,

expandability, and connectivity you need. However, no interface is

more important than the one between you and your SPARC station™ system.

Properly set up equipment, combined with smart work habits, will lead to a

more comfortable work environment and can help protect you from work-related ailments.

the right fit



er•go•nom•ics - the study of the problems

of people in adjusting to their environment:

working conditions to suit the worker.

Comfortable Computing

Repetitive movements, combined with restrictive posture, can pinch nerves, irritate tendons, and inhibit blood flow. Conditions that have been associated with frequent, uninterrupted workstation use and poor work habits include pain, tingling, or numbness in the hands; headaches and neck pain; soreness in the legs, arms, and back; and eyestrain. These conditions fall into a class of injuries commonly known as Repetitive Strain Injuries.

The guidelines presented in this brochure can help you create a safer and more comfortable work environment.

We recommend that you read the entire brochure before making any adjustments, because all the variables need to work in harmony.

Since everyone's needs differ, you are the only one who can properly set up your work area to suit your needs and protect against repetitive strain injuries.

As a first step, **clear enough room** to work efficiently, and place materials or supplies where they don't interfere with your movements. Be sure to arrange your work area so that you can face the display and keyboard directly, without having to twist your body.

If **overhead lighting** is uneven or insufficient, use **task lighting** to shed light on hard copy or high-use areas of your desk to minimize eyestrain.

If you use the telephone often, don't cradle it between your neck and shoulder. See if a headset can be adapted to your phone, or try a receiver shoulder rest.

Making the right **ergonomic adjustments** to your chair, keyboard, and display are important, too. Remember, comfort is the key, so don't think you must adhere rigidly to the following guidelines. If you find the results uncomfortable or painful in any way, alter your position slightly.

For additional information contact your company's safety department or refer to the *American National Standard for Human Factors Engineering of Visual Display Terminal Work-stations*, published by The Human Factors Society, Inc. ANSI/HFS 100-1988.

Adjusting the **fit, tilt, and height**

of your chair is very important

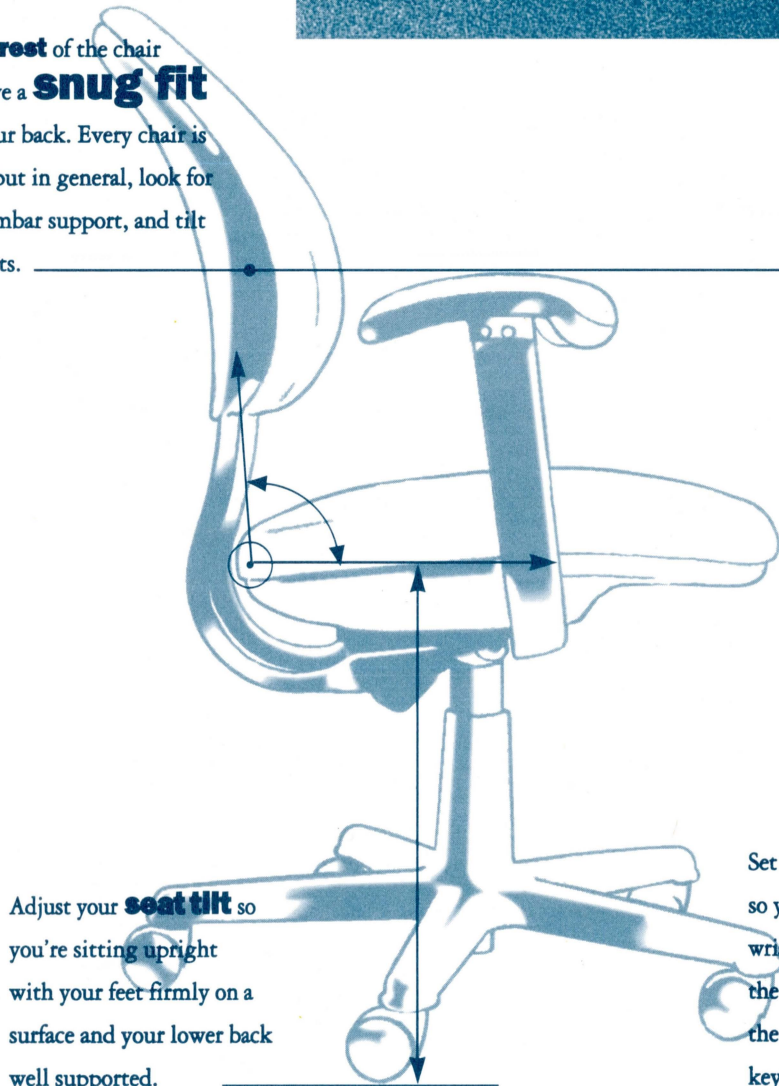
for proper posture and comfort.

the chair

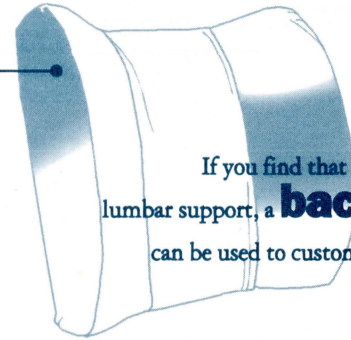




The **backrest** of the chair should have a **snug fit** against your back. Every chair is different, but in general, look for height, lumbar support, and tilt adjustments.

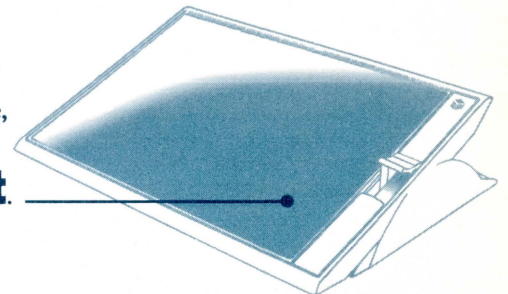


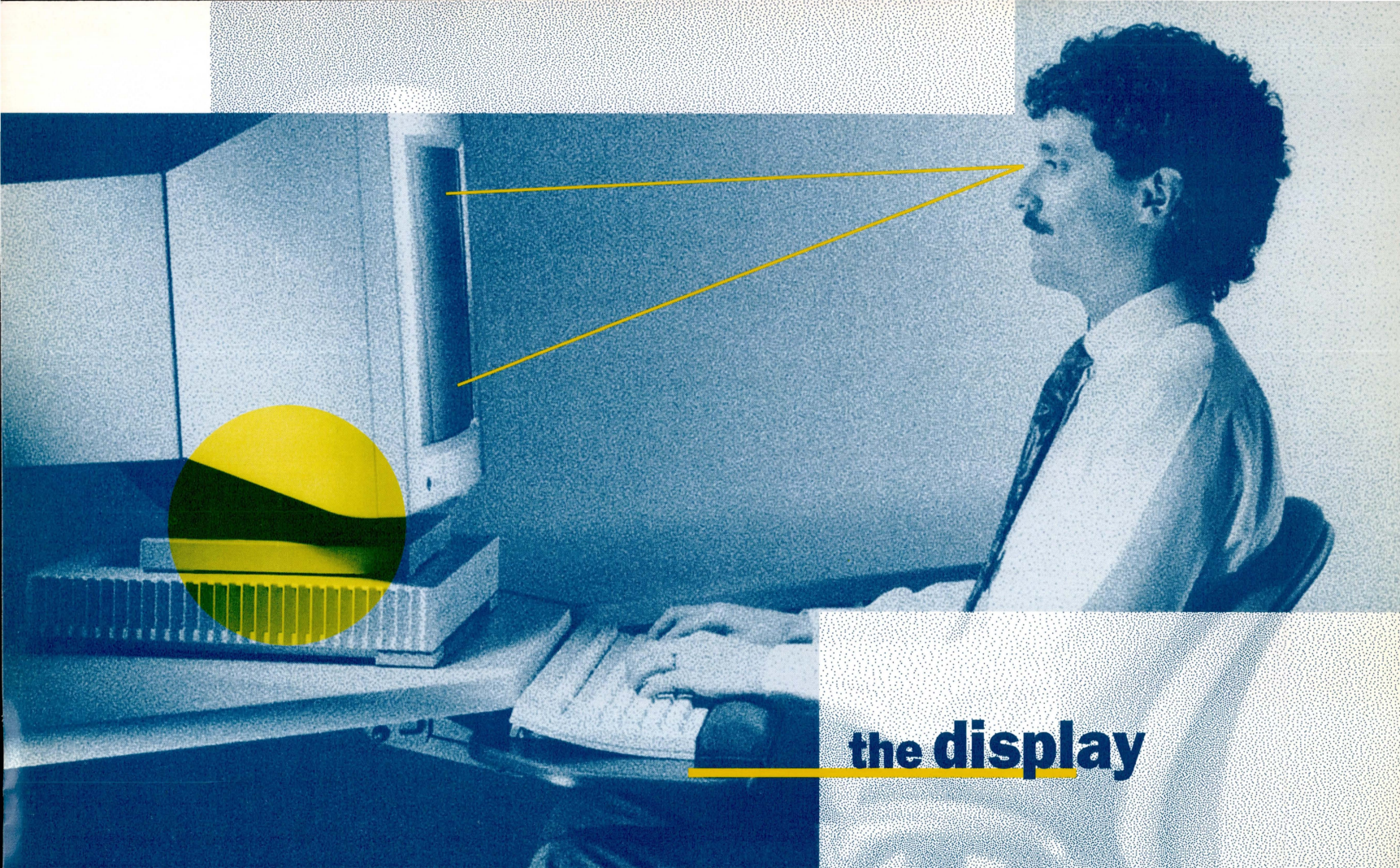
Adjust your **seat tilt** so you're sitting upright with your feet firmly on a surface and your lower back well supported.



If you find that you need additional lumbar support, a **back cushion** can be used to customize your chair.

Set **chair height** so your hands and wrists are at about the same level as the home row on the keyboard. If these adjustments cause your feet to dangle, you'll need a **foot rest**.





the display

The **recommended viewing distance** is about one arm's length away from the screen.

The top of the screen should be at about eye level or slightly lower.

Remember to look off toward distant objects several times each hour.

If you frequently type from hard copy, use a **copy stand** and place it at the **same height and distance**

from your eyes as the computer screen. The copy stand should be next to the screen with the text at about **eye level**. Refocusing exercises the muscles of your eyes and reduces visual fatigue. As an ongoing precaution, have your vision checked periodically. Be sure to tell your doctor that you work on a computer.

if glare is a

problem, there are

several possible

solutions. Position the

screen at right angles

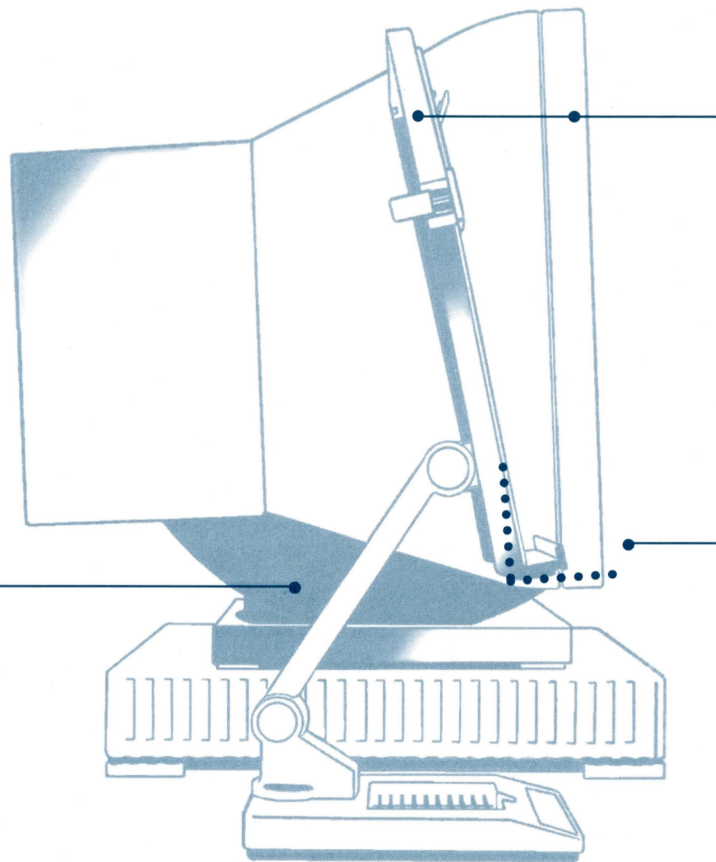
to bright light sources.

Do not face a window.

Keep the screen clean.

Use an **antiglare**

screen.



If you have trouble reading what's on the screen, adjust the **brightness** and **contrast** controls. Troublesome reflections may be eliminated by **tilting** the display.

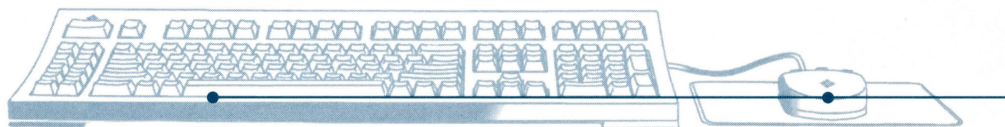


the keyboard

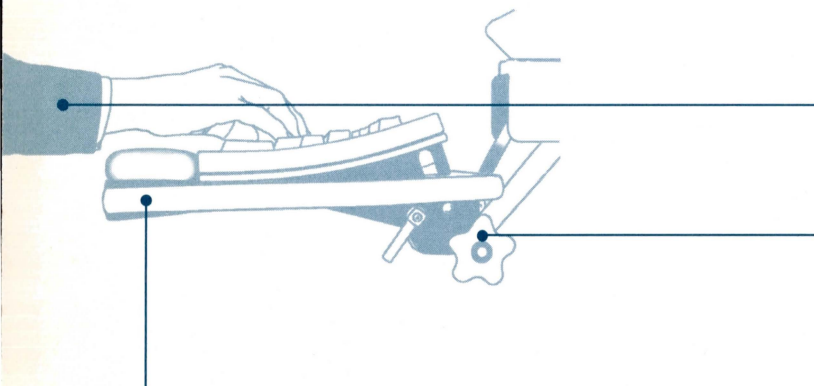
Consider **your keyboard technique**. If you learned to type on a manual typewriter, you may be using too much force.

With computer keys, a light touch is all you need.

When **moving the mouse**,
use your whole arm, not just your wrist.



Your **mouse** or
trackball should
be at the **same**
height
as your keyboard and
within easy reach.



A **wrist rest** allows you to rest
your wrists while **not** typing.

When typing, your
wrists should be as
straight as possible,
your **forearms**
parallel to the
floor. If they're not,
adjust your **keyboard**
tray, desk height, or
chair accordingly.

Your hands should float
over the keys: **don't**
reach too far
with just your fingers.



breaks & stretches

Retrieving a document from the printer, using the copy machine, or walking down the hall

to confer with a colleague are simple, productive ways to break up your computer tasks. Such **task breaks**

are one of the most effective actions you can take to prevent the discomforts of prolonged

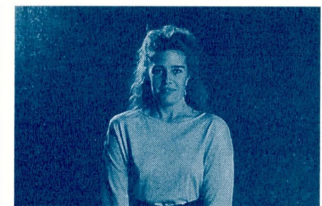
computer use.

Remember to get up and **move around periodically.**

If you type continuously, a good rule of thumb is to do other tasks for ten minutes every hour. If you do lighter work at the computer, do other tasks for fifteen minutes every two hours. **The following exercises can help** you release muscle tension and reduce the risk of aches and pains: (Do stretches gently. Don't do any stretch that causes pain. Hold each stretch 15-20 seconds.)

Shoulder rolls

Gently roll shoulder forward, up and drop back. Do slowly and rhythmically 5-10 times.



Finger stretch

Gently open and close hand, stretching fingers while hand is in the open position.

Trap stretch

Sit on hand to help stabilize. Tip head down as if looking in your shirt pocket. Hold.

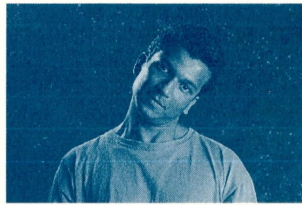
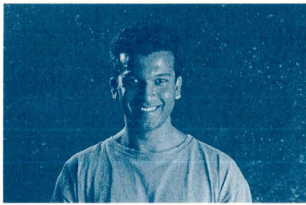




shoulders relaxed, raise palms together over head. Slowly bring arms down, staying together, until you feel a good stretch on the underside of your forearms.

Side bending head

Lower ear toward shoulder. Repeat other side.



Shoulder blade pinch

Rotate arms to back, pinching shoulder blades together. Palms will naturally rotate back – let them.

Hug stretch

Grasp arm at elbow. Pull arm forward and across body as if you are hugging somebody.

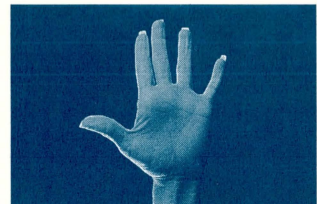
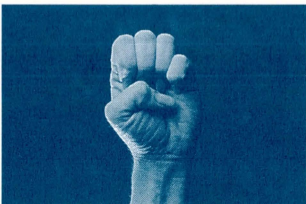


Chin tuck

Keeping head level, slide chin back making a double chin. Hold two seconds and release.

Hand stretch

Make a gentle fist. Open hand at first joint keeping fingers bent. Open hand straightening fingers all the way.



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