

Workstation Checklist

Using this checklist is one way an employer or employees can identify, analyze and control MSD hazards in computer workstation tasks.

WORKING CONDITIONS	Y	N
The workstation is designed or arranged for doing VDT tasks so it allows the employee's . . .		
A. Head and neck to be about upright (not bent down/back).		
B. Head, neck and trunk to face forward (not twisted).		
C. Trunk to be about perpendicular to floor (not leaning forward/backward).		
D. Shoulders and upper arms to be about perpendicular to floor (not stretched forward) and relaxed (not elevated).		
E. Upper arms and elbows to be close to body (not extended outward).		
F. Forearms, wrists, and hands to be straight and parallel to floor (not pointing up/down).		
G. Wrists and hands to be straight (not bent up/down or sideways toward little finger).		
H. Thighs to be about parallel to floor and lower legs to be about perpendicular to floor.		
I. Feet to rest flat on floor or be supported by a stable footrest.		
J. VDT tasks to be organized in a way that allows employee to vary VDT tasks with other work activities, or to take micro-breaks or recovery pauses while at the VDT workstation.		
SEATING	Y	N
The chair . . .		
1. Backrest provides support for employee's lower back (lumbar area).		
2. Seat width and depth accommodate specific employee (seat pan not too big/small).		
3. Seat front does not press against the back of employee's knees and lower legs (seat pan not too long).		

4. Seat has cushioning and is rounded/ has "waterfall" front (no sharp edge).		
5. Armrests support both forearms while employee performs VDT tasks and do not interfere with movement.		
KEYBOARD/INPUT DEVICE The keyboard/input device is designed or arranged for doing VDT tasks so that . . .	Y	N
6. Keyboard/input device platform(s) is stable and large enough to hold keyboard and input device.		
7. Input device (mouse or trackball) is located right next to keyboard so it can be operated without reaching.		
8. Input device is easy to activate and shape/size fits hand of specific employee (not too big/small).		
9. Wrists and hands do not rest on sharp or hard edge.		
MONITOR The monitor is designed or arranged for VDT tasks so that . . .	Y	N
10. Top line of screen is at or below eye level so employee is able to read it without bending head or neck down/back. (For employees with bifocals/trifocals, see next item.)		
11. Employee with bifocals/trifocals is able to read screen without bending head or neck backward.		
12. Monitor distance allows employee to read screen without leaning head, neck or trunk forward/backward.		
13. Monitor position is directly in front of employee so employee does not have to twist head or neck.		
14. No glare (e.g., from windows, lights) is present on the screen which might cause employee to assume an awkward posture to read screen.		
WORK AREA The work area is designed or arranged for doing VDT tasks so that . . .	Y	N
15. Thighs have clearance space between chair and VDT table/keyboard platform (thighs not trapped).		
16. Legs and feet have clearance space under VDT table so employee is able to get close enough to keyboard/input device.		
ACCESSORIES	Y	N
17. Document holder , if provided, is stable and large enough to hold documents that are used.		


<p>18. Document holder, if provided, is placed at about the same height and distance as monitor screen so there is little head movement when employee looks from document to screen.</p>		
<p>19. Wrist rest, if provided, is padded and free of sharp and square edges.</p>		
<p>20. Wrist rest, if provided, allows employee to keep forearms, wrists and hands straight and parallel to ground when using keyboard/input device.</p>		
<p>21. Telephone can be used with head upright (not bent) and shoulders relaxed (not elevated) if employee does VDT tasks at the same time.</p>		
<p>GENERAL</p>	<p>Y</p>	<p>N</p>
<p>22. Workstation and equipment have sufficient adjustability so that the employee is able to be in a safe working posture and to make occasional changes in posture while performing VDT tasks.</p>		
<p>23. VDT Workstation, equipment and accessories are maintained in serviceable condition and function properly.</p>		
<p>PASSING SCORE = "YES" answer on all "working postures" items (A-J) and no more than two "NO" answers on remainder of checklist (1-23).</p>		

Height and Orientation

Potential Hazard:

- Improper height and angle of the keyboard, mouse, or working surface can cause employees to bend their wrists or lift their arms for extended periods.

Possible Solutions:

- The work surface may need to be raised or lowered to keep the operator's arms in a comfortable position. This can be achieved by installing an adjustable keyboard extender or tray (Fig. 1), by providing an adjustable table/working surface, or by raising the chair and providing a footrest if needed.
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- The image shows a blue, adjustable keyboard tray mounted under a desk. A white keyboard and a white mouse are placed on the tray. The tray is designed to be raised or lowered to adjust the height of the keyboard and mouse relative to the user's arms.
- Fig. 1 Keyboard tray.**
- Adjust the keyboard and/or chair height so the employee's elbows can hang comfortably at the side of the body, the shoulders are relaxed and the wrist is not bent up or down or to either side during keyboard use (Fig. 1).
 - The angle of the keyboard should also be considered when determining the preferred height. The preferred working position for most keyboard operators is with the forearms parallel to the floor and elbows at the sides; this allows the hands to move easily over the keyboard.

Placement

Potential Hazard:

- A keyboard or mouse that is not directly in front of or close to the body (Fig. 2) forces the employee to repeatedly reach during use.



Fig. 2 Mouse placed too far from the body.



Fig. 3 Mouse placed close to the body.

Possible Solutions:

- Make sure the keyboard is placed directly in front of the user.
- The mouse should be positioned at the operator's side with his or her arm close to the body (Fig. 3). A straight line should be maintained between the hand and the forearm. The upper arm should not be elevated or extended while using the mouse. The employee should not have to reach to use the mouse.

- Consider using a mouse platform that rotates above the keyboard while maintaining about the same plane. This design (Fig. 4) allows the mouse to be used above the 10-key pad, which gives the user a better wrist angle and reduces reach.

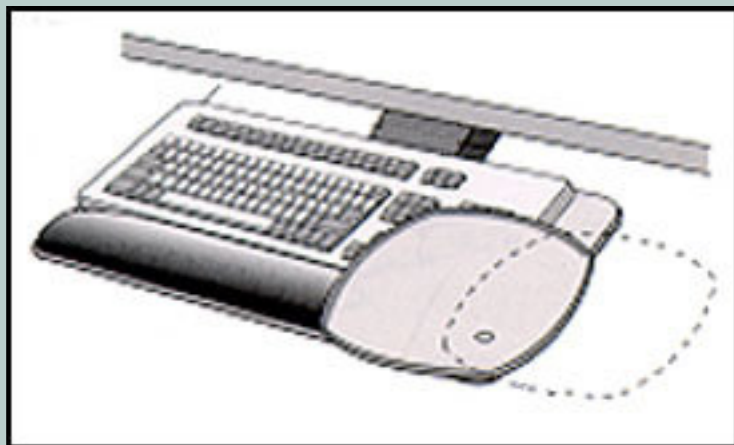


Fig. 4 Rotating mouse platform.

Design and Use

Potential Hazard:

- Bending wrists sideways (Fig. 1) or up and down (Fig. 2) while keying.

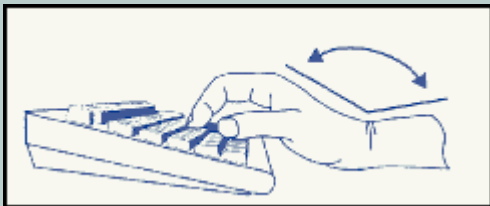


Fig. 2 Bending the wrist upward.



Fig. 1 Hazardous side bending of the wrist.

Possible Solutions:

- Reduce bending of the wrists by moving the entire arm.
- Do not use the feet provided on the back of most keyboards if this causes wrists to bend upward (Fig. 2). If the operator sits lower in relation to the keyboard, the keyboard feet may be used to maintain a neutral wrist (Fig. 3).



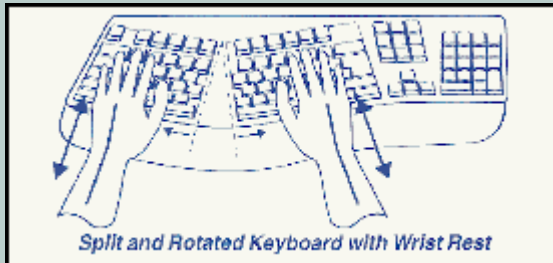
Fig. 3 Straight wrists with a rest.

- Wrists should be extended straight, not bent up or down. A mouse pad or wrist rest can be used to help maintain straight wrists. Wrist/palm rests (Fig. 3) should not be used while keying, but to rest the wrists between periods of keying.

- Consider using alternative pointing devices such as trackballs (Fig. 4), or touch pads. [Alternative keyboards](#) (Fig. 5,6) may also be helpful in allowing the worker to maintain a neutral wrist position.

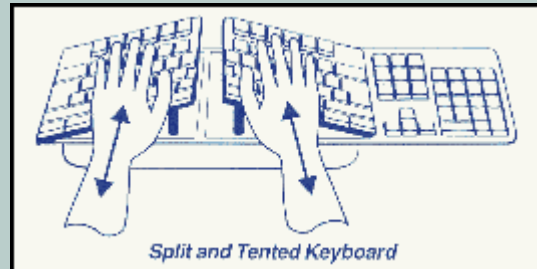


Fig. 4 Trackball.



Split and Rotated Keyboard with Wrist Rest

Fig. 5



Split and Tented Keyboard

Fig. 6