Ergonomics of Driving

Most of us don’t think about it, but if we are driving vehicle on a regular basis, we need to watch how we drive to prevent aches and pains, as well as crashes.

Preliminary

Before you get in the vehicle, remove items from your pants pockets or shirt pockets so you aren’t sitting or leaning on anything.

Although getting into a vehicle may seem pretty straightforward, it is best to initially sit so that you are facing out the driver door and then rotate your legs and body into position.

Seat Position

To initially determine the proper seat position:

- push your seat all the way back
- place the seat in the lowest position
- raise the steering wheel to the highest position
- move the front edge of the seat to its lowest position.

If there is an adjustable lumbar support, back off on the support. The seat back should be tilted ~30 degrees from vertical. Don’t worry – this is just the starting position. Not all vehicles have all of these adjustments.

Now let’s find a good seat position.

First, raise the seat cushion to improve your visibility of the road. Be sure you have adequate head clearance and maximum vision of the road.

Move the seat forward until you can easily depress the accelerator and the brake without having to stretch.

Raise the front tilt of the seat cushion to support your upper thighs. If you feel pressure on your knees, you have raised it too high.

Raise the seat back until it supports your back and is in contact with your back and shoulders. If it is reclined too far, you will end up having to support your head and neck with your muscles to be able to see the road.

If your seat has adjustable lumbar support, inflate it so that it is in contact with the curves of your back (if you do not have a built in lumbar support, you may want to consider purchasing a support that fits over your car seat).

Adjust the steering wheel downward and toward you for easy reach. Check for visibility for your displays.

Adjust the head restraint so that the top of the restraint is at the top of your head. It is a restraint, not a head rest, so don’t expect to be able to lean against it while you are driving.

Adjust the rearview mirror and side mirrors to minimize blind spots.
You may need to make minor adjustments from here.

**Arm Position**

With the advent of airbags, the “10 o’clock” and the “2 o’clock” positions are no longer the preferred hand positions. “9” and “3” allow control of the steering wheel and keep your arms out of the way of the air bag.

Watch your wrist posture – your forearm and back of your hand should form a relatively flat surface. And although you may feel the need to firmly grip the steering wheel, gripping it too tightly does not allow you to steer properly and puts additional pressure on your muscles.

**In General**

Have whatever items you are going to need secured and within arm’s reach.

Now that you know what the ideal car position is, every 30 minutes adjust your position – move the seat back a little, adjust the tilt of the seat - so that you are not in a static posture (if you do not have automatic controls, do not do this while the car is moving).

Every two hours, get out of the vehicle (in a safe area), walk around and gently stretch.

If you must work on something while in your car, after you are safely parked, either move your seat all the way back and bring the item in front of you, or get into the passenger seat, move the seat back, and work on items directly in front of you.

Driving is a part of life, and for many, a part of their job. Take a few steps to make it less stressful on your body.

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¹ Seat Positioning information taken from Driving Ergonomics

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