# ERGONOMIC GUIDE TO DRIVER SEAT FITTING

(How to Adjust Your Truck Seat)



University of Washington **Ergonomics Laboratory** 



State of Washington **Safety Health Investment Project** 



## Why is Seat Fit Important?

Truck drivers are exposed to risk factors that can lead to musculoskeletal disorders, such as neck, shoulder, and back pain. Back pain is the most common ailment, on a yearly basis 1 out of 5 people will experience back pain.

Below are known causes of back pain:

- Poor sitting posture
- Long periods of the same posture
- Whole body vibration
- Repeated lifting of heavy loads (> 50 lbs) or lifting objects to or from the floor

The physical effort needed to sustain a posture over a work day can lead to muscle fatigue as well as contribute to neck and back pain.



Fitting your seat to your body will improve your posture and will help reduce:

- Pain
- Discomfort
- Fatigue

## **Seat Fitting Instructions**

#### **Seat Height:**

Place your feet flat on the floor and adjust the seat height until your knees are bent at a 90 degree angle (a single red or gray switch on the side of your seat). **Your knees should not be higher than your hips.** 



### **Lumbar Support:**

Fill the lumbar support to meet your back it should provide you a firm yet comfortable level of support (one to three switches in a group on the side of your seat).

- 1) Begin with the mid lumbar bladder (the middle switch)
- 2) Fill the lower lumbar bladder (if present)
- 3) Fill the upper lumbar bladder (if present)

## Caution: Overfilling lumbar bladders can cause rounding of the spine

#### **Health Benefit:**

Good lumbar support will minimize slouching (forward head positioning) and will dampen the exposure to vibration.

#### **Seat Back Angle:**

A slight recline in the back is recommended. Position the seat back so the angle between the back and thighs is 100-110 degrees (a knob or lever at the left corner of the seat back)

#### Fore and After Seat Slide:

Adjust seat distance to make sure you can depress each pedal without raising or rotating out of your seat.

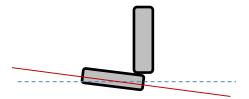
#### Seat Pad Depth:

Position so you can place at least two fingers between the back of your knees and the front of the seat pad by lifting it and moving it in or out.

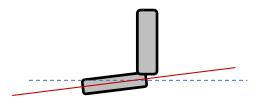
#### Seat Pan Tilt:

Keep the seat pan flat (a lever on the front of the seat pad).

• Tall drivers may want to elevate the front of the seat to meet your knees



• When driving conditions require high clutch use, drivers may consider lowering the front of the seat pan



### Fore-After Seat Lock (if present):

In city driving or if your trailer pushes and tugs your cab, you may want to release the fore-aft lock so the seat can float and absorb some of the cab movement (a lever on the side of the seat).

#### **Steering Wheel Tilt and Depth:**

- 1) Adjust the wheel to meet you
- 2) Place your hands at 9 and 3 o'clock
- 3) Your elbows should be close to your sides and you should avoid having to reach to meet the steering wheel

<u>Mirrors:</u> Adjust the mirrors so you can see the complete area of each mirror without slouching or twisting.

**Helpful Hint:** Use the mirrors as a cue to sit up when you slouch instead of readjusting them.

# **Injury Prevention Reminders**

#### Do not go directly from prolonged sitting to lifting and carrying tasks.

- Give your back a few minutes to adjust by completing other tasks such as paperwork or talking with the client.
- Alternatively walk around and do mild stretching

## Never twist your back when entering and exiting your truck.

- Turn your body before stepping up or down to prevent twisting the spine.
- When carrying objects turn with your feet instead of twisting the spine.



Always use three points of contact when entering and exiting the cab!

If you prefer to drive your tractor as a low rider you may not experience the benefits of your seat suspension system.

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