Protect your back using proper lifting techniques. So, what is it that causes back problems?

1. The Weight of the Object - The weight of objects is a hazard to your back because some loads place great stress on muscles, discs and vertebrae. To help with this issue:
   • Place the load in the “power zone,” which is between mid-thigh and mid-chest.
   • Maintain a neutral and straight sine alignment whenever possible.
   • Usually bending at the knees, instead of the waist, helps with back safety.
   • Limit the weight you lift to no more than 50 lbs. When lifting loads heavier than 50 lbs, use 2 or more people to lift the load.

2. Awkward Postures - Bending in an awkward posture forces the back to support the weight of the upper body in addition to the weight you are lifting. Bending awkwardly moves the load away from the body and allows leverage to significantly increase the load on the back. Reaching moves the load away from the back and puts extra strain on the shoulders.
   • Carrying loads on one should, under an arm, or in one hand creates uneven pressure on the spine.
   • Carry using 2 hands.
   • Minimize bending and reaching by placing heavy objects on shelves, tables, or racks so that you really don’t have to lift it.
   • Avoid twisting, especially when bending forward while lifting.
   • Turn by moving the feet rather than twisting the torso.
   • Keep your elbows close to your body and keep the load as close to your body as possible.

3. High-Frequency and Long-Duration - Holding items for a long period of time (even loads that are light) increases the risk of back and shoulder injury. Repeatedly exerting can fatigue muscles by limiting recuperation times. Inadequate rest periods do not allow the body to rest.
   • Rotate tasks so you are not exposed to the same activity for too long.

4. Inadequate Handholds - If there are inadequate handholds, lifting is more difficult due to the lift height being lower and higher risk of contact stress. Inadequate handholds also increase the risk of dropping the load.
   • Utilize proper handholds. Move materials from containers without handholds into containers with good handholds.
   • Wear proper Personal Protective Equipment to avoid finger injuries and contact stress.

5. Environmental Factors - Always make sure your surrounding area is clear from hazards.
   • Both hot and cold temperatures create lifting hazards.
   • Poor lighting is an environmental factor when lifting a load.

• Work in teams. One person lifts, while another person assembles.
• Take regular breaks and break tasks into short segments.
• Pre-assemble items to minimize the time you spend handling them.