When minor repairs are being performed, such as changing a tire, it is permissible to raise just one corner of the vehicle, or the front or the rear. The vehicle is first raised with a jack and then placed on jack stands. (Do not go under the vehicle while it is elevated by a jack). The vehicle should be equally balanced on the jack stands.

A mechanic's shop may have industry jacks or hydraulic lifts. These can be used to raise the vehicle and keep it elevated. These lifts can raise the entire vehicle at the same time. When lifting the entire vehicle the center of gravity should be positioned evenly with the lifting hoist arms. This is evident when the vehicle is raised and all tires lift off the ground at the same time. Most vehicles are front-heavy due to the engine block. However, many work trucks are balanced to have the center of gravity in the middle.





Hydraulic lift with hoist arms that raise the vehicle on its lifting points. The lift consists of two vertical blue beams and four white hoist arms. Two white hoist arms on the other side of the vehicle are not seen in the pictures.

Image credit: CC-BY-ANT Berezhnyi on Wikipedia



Another hydraulic lift that raises the car on its tires

More instructions will be given for lifting a corner of the vehicle to replace a spare tire in Chapter 4. The owner's manual should be consulted any time when lifting the vehicle.