

Forklift Steer Axle

Forklift Steer Axle - Axles are defined by a central shaft which rotates a wheel or a gear. The axle on wheeled vehicles can be fixed to the wheels and revolved along with them. In this particular case, bushings or bearings are provided at the mounting points where the axle is supported. Conversely, the axle could be connected to its surroundings and the wheels could in turn revolve all-around the axle. In this situation, a bushing or bearing is located within the hole in the wheel to allow the gear or wheel to rotate around the axle.

With cars and trucks, the term axle in some references is used casually. The term generally refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself turns together with the wheel. It is usually bolted in fixed relation to it and called an 'axle shaft' or an 'axle.' It is equally true that the housing surrounding it which is normally known as a casting is also referred to as an 'axle' or at times an 'axle housing.' An even broader definition of the term means every transverse pair of wheels, whether they are attached to one another or they are not. Hence, even transverse pairs of wheels in an independent suspension are generally called 'an axle.'

In a wheeled motor vehicle, axles are an important component. With a live-axle suspension system, the axles work to be able to transmit driving torque to the wheel. The axles even maintain the position of the wheels relative to one another and to the vehicle body. In this system the axles must also be able to support the weight of the vehicle along with whatever cargo. In a non-driving axle, like the front beam axle in various two-wheel drive light trucks and vans and in heavy-duty trucks, there will be no shaft. The axle in this particular condition serves only as a steering part and as suspension. Many front wheel drive cars consist of a solid rear beam axle.

There are various kinds of suspension systems where the axles function just to transmit driving torque to the wheels. The angle and position of the wheel hubs is a function of the suspension system. This is usually found in the independent suspension found in most new SUV's, on the front of numerous light trucks and on the majority of new cars. These systems still consist of a differential but it does not have fixed axle housing tubes. It can be attached to the motor vehicle frame or body or likewise can be integral in a transaxle. The axle shafts then transmit driving torque to the wheels. The shafts in an independent suspension system are like a full floating axle system as in they do not support the motor vehicle weight.

The vehicle axle has a more vague definition, meaning that the parallel wheels on opposing sides of the vehicle, regardless of their type of mechanical connection to one another.