

Forklift Steer Axles

The definition of an axle is a central shaft used for turning a wheel or a gear. Where wheeled vehicles are concerned, the axle itself could be connected to the wheels and revolve together with them. In this particular case, bearings or bushings are provided at the mounting points where the axle is supported. Conversely, the axle can be connected to its surroundings and the wheels can in turn turn all-around the axle. In this instance, a bushing or bearing is placed inside the hole inside the wheel to enable the gear or wheel to rotate all-around the axle.

When referring to cars and trucks, several references to the word axle co-occur in casual usage. Generally, the word refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates with the wheel. It is normally bolted in fixed relation to it and called an 'axle' or an 'axle shaft'. It is equally true that the housing surrounding it that is usually referred to as a casting is also referred to as an 'axle' or occasionally an 'axle housing.' An even broader sense of the word refers to every transverse pair of wheels, whether they are connected to one another or they are not. Hence, even transverse pairs of wheels inside an independent suspension are often referred to as 'an axle.'

In a wheeled motor vehicle, axles are an important part. With a live-axle suspension system, the axles serve in order 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 particular system the axles must likewise be able to support the weight of the vehicle along with any cargo. In a non-driving axle, as in the front beam axle in several two-wheel drive light vans and trucks and in heavy-duty trucks, there would be no shaft. The axle in this condition serves only as a steering part and as suspension. Numerous front wheel drive cars consist of a solid rear beam axle.

There are different types of suspension systems wherein the axles serve only to transmit driving torque to the wheels. The position and angle of the wheel hubs is a function of the suspension system. This is usually seen in the independent suspension seen in the majority of brand new sports utility vehicles, on the front of various light trucks and on most new cars. These systems still have a differential but it does not have attached axle housing tubes. It could be connected to the vehicle frame or body or also 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 motor vehicle axle has a more vague description, meaning that the parallel wheels on opposing sides of the vehicle, regardless of their kind of mechanical connection to one another.