

## Forklift Steer Axles

The description of an axle is a central shaft intended for rotating a gear or a wheel. Where wheeled motor vehicles are concerned, the axle itself may be fixed to the wheels and revolve with them. In this particular situation, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle can be connected to its surroundings and the wheels can in turn revolve all-around the axle. In this case, a bearing or bushing is situated in the hole within the wheel to be able to enable the gear or wheel to rotate around the axle.

Whenever referring to cars and trucks, some references to the word axle co-occur in casual usage. Usually, the word refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself turns with the wheel. It is normally bolted in fixed relation to it and called an 'axle shaft' or an 'axle.' It is equally true that the housing around it which is generally referred to as a casting is otherwise called an 'axle' or at times an 'axle housing.' An even broader sense of the word means every transverse pair of wheels, whether they are connected to one another or they are not. Thus, even transverse pairs of wheels in an independent suspension are often referred to as 'an axle.'

The axles are an integral part in a wheeled vehicle. The axle works so as to transmit driving torque to the wheel in a live-axle suspension system. The position of the wheels is maintained by the axles relative to one another and to the vehicle body. In this particular system the axles must also be able to support the weight of the motor vehicle together with whatever load. In a non-driving axle, like the front beam axle in several two-wheel drive light trucks and vans and in heavy-duty trucks, there would be no shaft. The axle in this situation serves only as a steering component and as suspension. Several front wheel drive cars consist of a solid rear beam axle.

The axle serves just to transmit driving torque to the wheels in various types of suspension systems. The position and angle of the wheel hubs is part of the functioning of the suspension system seen in the independent suspensions of new sports utility vehicles and on the front of several brand new light trucks and cars. These systems still consist of a differential but it does not have connected axle housing tubes. It can be attached to the vehicle frame or body or even could be integral in a transaxle. The axle shafts then transmit driving torque to the wheels. The shafts in an independent suspension system are similar to a full floating axle system as in they do not support the vehicle weight.

To finish, in reference to a vehicle, 'axle,' has a more vague definition. It means parallel wheels on opposing sides of the vehicle, regardless of their mechanical connection type to one another and the motor vehicle body or frame.