

Forklift Steer Axle

Forklift Steer Axle - Axles are defined by a central shaft that rotates a gear or a wheel. The axle on wheeled motor vehicles may be connected to the wheels and revolved together with them. In this situation, bearings or bushings are provided at the mounting points where the axle is supported. On the other hand, the axle may be attached to its surroundings and the wheels could in turn revolve around the axle. In this particular case, a bearing or bushing is positioned within the hole within the wheel to allow the gear or wheel to turn around the axle.

If referring to cars and trucks, several references to the word axle co-occur in casual usage. Normally, the term refers to the shaft itself, a transverse pair of wheels or its housing. The shaft itself rotates with the wheel. It is frequently 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 called a casting is likewise called an 'axle' or at times an 'axle housing.' An even broader definition of the term refers to every transverse pair of wheels, whether they are attached to one another or they are not. Hence, even transverse pairs of wheels within an independent suspension are frequently known as 'an axle.'

In a wheeled vehicle, axles are an integral 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 motor vehicle body. In this system the axles should also be able to support the weight of the motor vehicle together with whichever cargo. In a non-driving axle, like for example 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 component and as suspension. Several front wheel drive cars consist of a solid rear beam axle.

There are various kinds of suspension systems wherein the axles work 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 often seen in the independent suspension found in nearly all new sports utility vehicles, on the front of several light trucks and on nearly all new cars. These systems still have a differential but it does not have attached axle housing tubes. It could be connected to the motor vehicle frame or body or also 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 motor vehicle weight.

Last but not least, in reference to a motor vehicle, 'axle,' has a more ambiguous definition. It means parallel wheels on opposing sides of the vehicle, regardless of their mechanical connection kind to one another and the motor vehicle body or frame.