

Wheels: “I need a concise definition that explains a full floating, semi floating, and open differential. Your help will be most appreciated.” Paula

Halderman: The term “full floating” refers to the method used to retain the axles. All heavy-duty trucks use full-floating axles. The load of the vehicle is carried by the axle tube and not by the axle. The axle can even be removed and the vehicle will still roll.

All rear-wheel-passenger vehicles today use a semi-floating axle shaft retaining method. The inner end of the axle floats because it is supported by a gear, not a bearing. The outer end of the axle shaft is supported by a bearing that transfers the load to the axle tube.

An “open” differential means that engine torque is separated evenly between the two drive axles and is not a “limited slip-type” design.

