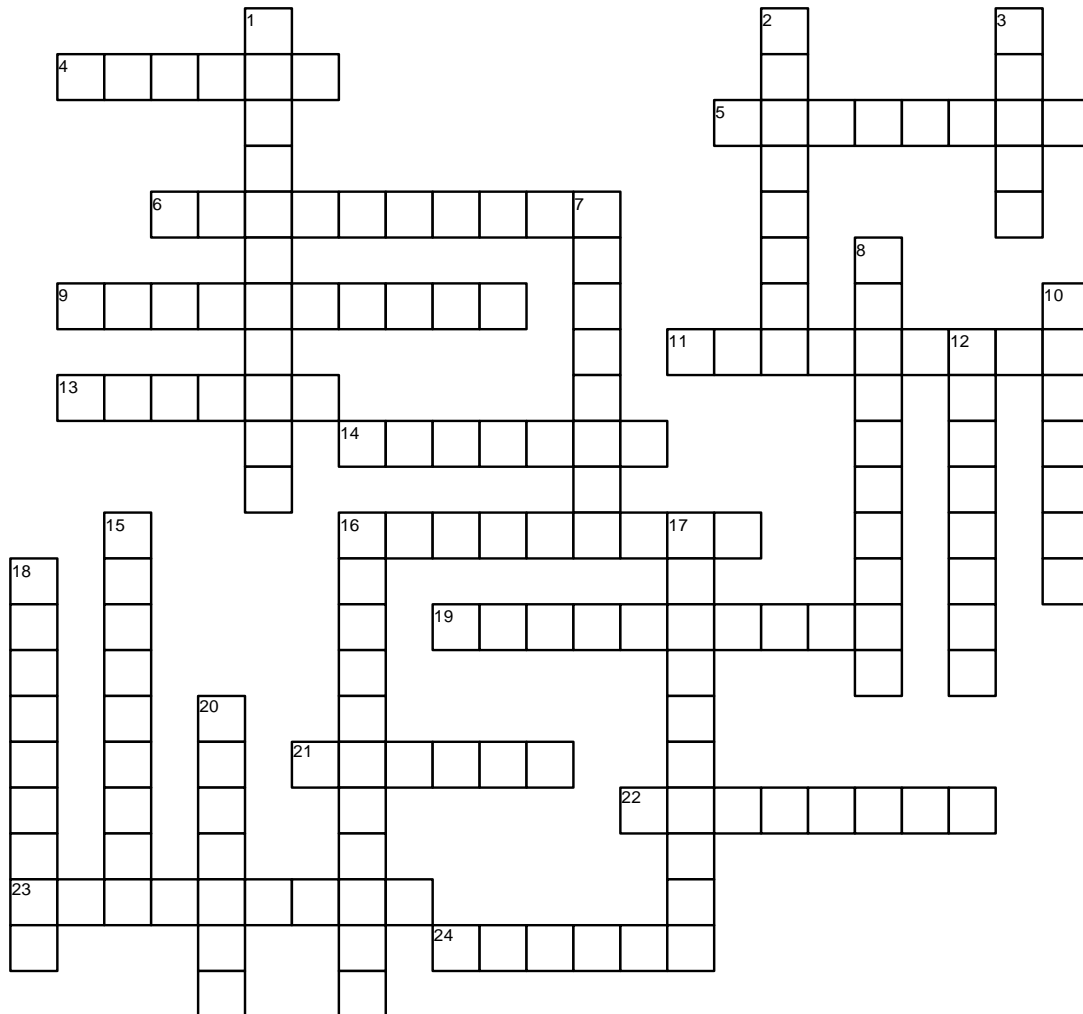


Suspension System Principles and Components

Chapter 111



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ACROSS

- 4 All suspensions use springs that share a common characteristic described by _____ Law.
- 5 The area separating the engine compartment from the passenger compartment is called the _____.
- 6 Hard rubber or plastic cushions or _____ are usually mounted between the coil spring and the spring seat.
- 9 A _____ is a suspension link that connects a knuckle or wheel flange to the frame.
- 11 Depending on the suspension design, springs are installed a certain distance between the wheel, which determines the ratio of wheel travel to spring travel, or _____.
- 13 Coil springs are usually installed in a _____ pocket.
- 14 A steering _____ is hard to

classify either as part of the suspension or as part of the wheel.

- 16 Since the early 1980s, fiberglass-reinforced epoxy plastic _____ leaf spring have been used on production vehicles.
- 19 The leaves are held together by a _____.
- 21 _____ weight is the term used to identify the weight of the car or truck that does not move up and down and is supported or sprung by the suspension.
- 22 _____ construction is a design that combines the body with the structure of the frame.
- 23 A basic _____ consists of a rubber air chamber, generally closed at the bottom by a piston fitted into a control arm, or by a strut shock absorber.
- 24 A _____ frame is a common name for a type of perimeter frame where the transverse

connecting members are straight across.

DOWN

- 1 _____ are constructed of one or more strips of long, narrow spring steel.
- 2 A _____ frame is a partial frame often used on unit-body vehicles to support the power train and suspension components.
- 3 _____ frame construction consists of formed sheet steel used to construct a framework for the entire vehicle.
- 7 The leaf spring is attached to the frame with movable mounting hangers called _____.
- 8 _____ are actually ball-and-socket joints, similar to the joints in a person's shoulder.
- 10 _____ clips help prevent the leaves from separating

whenever the leaf spring is rebounding from hitting a bump or rise in the roadway.

- 12 _____ refers to the force that causes the front of the vehicle to drop down while braking.
- 15 A _____ frame consists of welded or riveted frame members around the entire perimeter of the body.
- 16 _____ are made of special round spring steel wrapped in a helix shape.
- 17 A _____ is a spring that is a long, round, hardened steel bar similar to a coil spring except that it is a straight bar.
- 18 _____ refers to the reaction of the body of a vehicle during acceleration.
- 20 The only knuckle that uses a _____ is a steering knuckle on an I-beam or twin I-beam front suspension.