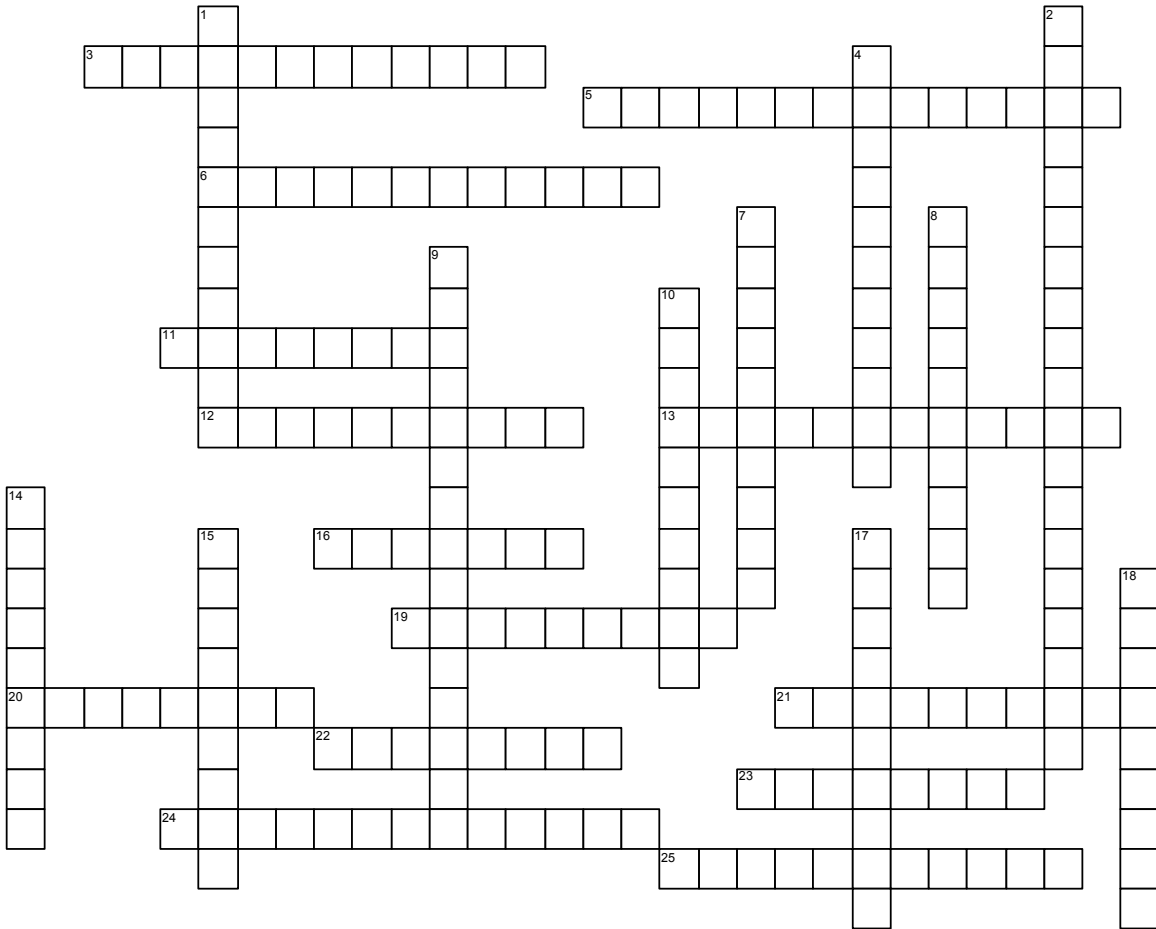


Suspension System Principles And Components

Chapter 112



<http://jameshaldeman.com>

ACROSS

- 3 _____ help prevent the leaves from separating whenever the leaf spring is rebounding from hitting a bump or rise in the roadway.
- 5 A _____ consists of welded or riveted frame members around the entire perimeter of the body.
- 6 _____ 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.
- 11 _____ refers to the force that causes the front of the vehicle to drop down while braking.
- 12 _____ construction consists of formed sheet steel used to construct a framework for the entire vehicle.
- 13 Coil springs are usually installed in a _____.
- 16 The only knuckle that uses a _____ is a steering knuckle on an I-beam or twin I-beam front suspension.

- 19 _____ refers to the reaction of the body of a vehicle during acceleration.
- 20 The leaf spring is attached to the frame with movable mounting hangers called _____.
- 21 _____ are actually ball-and-socket joints, similar to the joints in a person's shoulder.
- 22 The area separating the engine compartment from the passenger compartment is called the _____.
- 23 _____ construction is a design that combines the body with the structure of the frame.
- 24 A _____ is a partial frame often used on unit-body vehicles to support the power train and suspension components.
- 25 A _____ is a common name for a type of perimeter frame where the transverse connecting members are straight across.

DOWN

- 1 _____ are made of special

- round spring steel wrapped in a helix shape.
- 2 Since the early 1980s, fiberglass-reinforced epoxy plastic _____ have been used on production vehicles.
- 4 _____ are constructed of one or more strips of long, narrow spring steel.
- 7 The leaves are held together by a _____.
- 8 A _____ is a suspension link that connects a knuckle or wheel flange to the frame.
- 9 A _____ is hard to classify either as part of the suspension or as part of the wheel.
- 10 A _____ is a spring that is a long, round, hardened steel bar similar to a coil spring except that it is a straight bar.
- 14 All suspensions use springs that share a common characteristic described by _____.
- 15 Depending on the suspension design, springs are installed a certain distance from the wheel, which

- determines the ratio of wheel travel to spring travel, or _____.
- 17 Hard rubber or plastic cushions or _____ are usually mounted between the coil spring and the spring seat.
- 18 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.