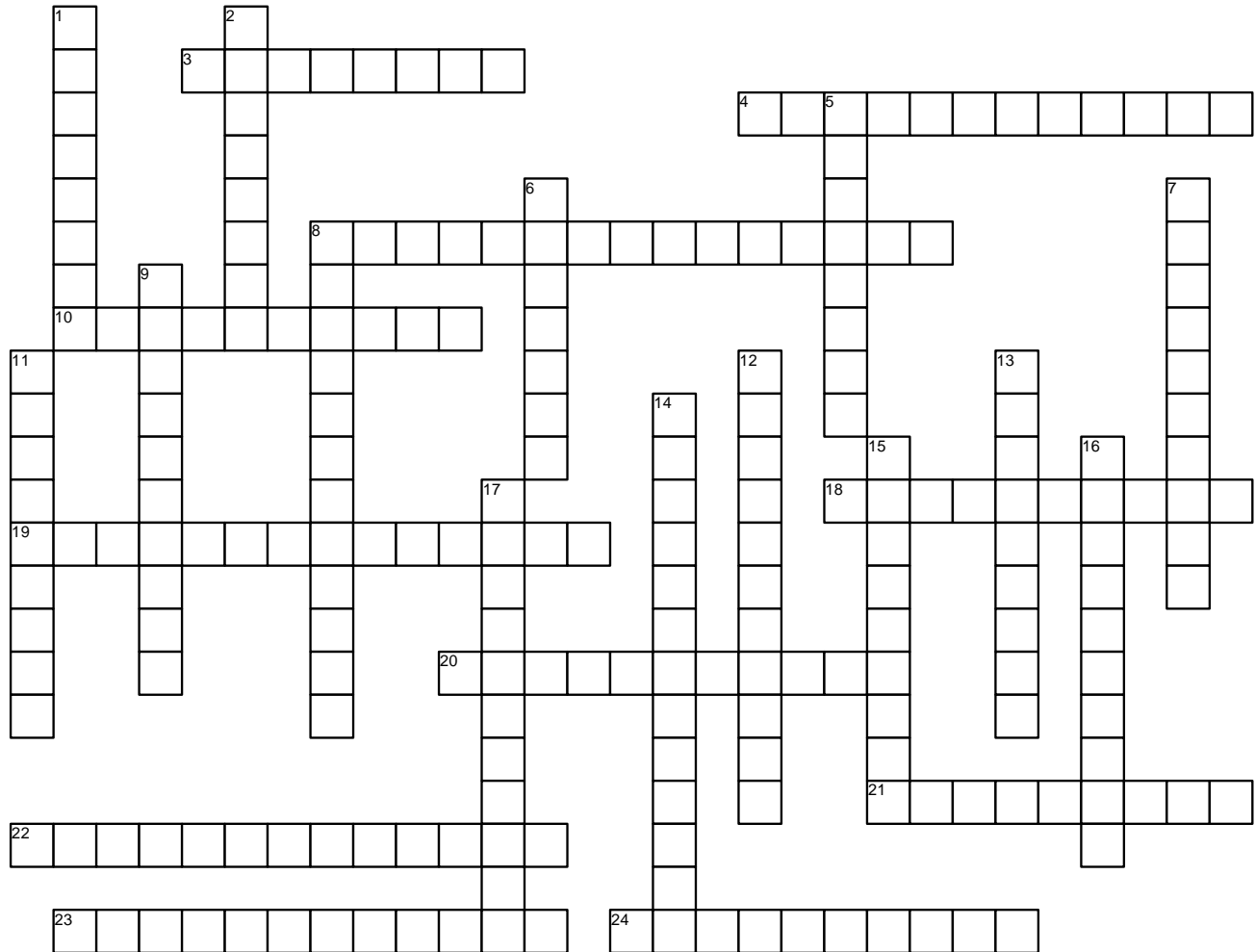


# Suspension System Components And Operation

## Chapter 25



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### ACROSS

- 3 \_\_\_\_\_ construction is a design that combines the body with the structure of the frame.
- 4 \_\_\_\_\_ help prevent the leaves from separating whenever the leaf spring is rebounding from hitting a bump or rise in the roadway.
- 8 A \_\_\_\_\_ is hard to classify either as part of the suspension or as part of the wheel.
- 10 \_\_\_\_\_ construction consists of formed sheet steel used to construct a framework for the entire vehicle.
- 18 A \_\_\_\_\_ is a spring that is a long, round, hardened steel bar similar to a coil spring except that it is a straight bar.
- 19 A \_\_\_\_\_ consists of welded or riveted frame members around the entire perimeter of the body.

- 20 \_\_\_\_\_ are constructed of one or more strips of long, narrow spring steel.
- 21 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 \_\_\_\_\_.
- 22 Since the early 1980s, fiberglass-reinforced epoxy plastic \_\_\_\_\_ spring have been used on production vehicles.
- 23 Coil springs are usually installed in a \_\_\_\_\_.
- 24 The leaves are held together by a \_\_\_\_\_.

### DOWN

- 1 The leaf spring is attached to the frame with movable mounting hangers called \_\_\_\_\_.
- 2 \_\_\_\_\_ refers to the force

that causes the front of the vehicle to drop down while braking.

- 5 The area separating the engine compartment from the passenger compartment is called the \_\_\_\_\_.
- 6 The only knuckle that uses a \_\_\_\_\_ is a steering knuckle on an I-beam or twin I-beam front suspension.
- 7 A \_\_\_\_\_ is a suspension link that connects a knuckle or wheel flange to the frame.
- 8 \_\_\_\_\_ 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.
- 9 \_\_\_\_\_ are actually ball-and-socket joints, similar to the joints in a person's shoulder.
- 11 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.
- 12 \_\_\_\_\_ are made of special round spring steel wrapped in a helix shape.
- 13 \_\_\_\_\_ refers to the reaction of the body of a vehicle during acceleration.
- 14 A \_\_\_\_\_ is a partial frame often used on unit-body vehicles to support the power train and suspension components.
- 15 All suspensions use springs that share a common characteristic described by \_\_\_\_\_.
- 16 Hard rubber or plastic cushions or \_\_\_\_\_ are usually mounted between the coil spring and the spring seat.
- 17 A \_\_\_\_\_ is a common name for a type of perimeter frame where the transverse connecting members are straight across.