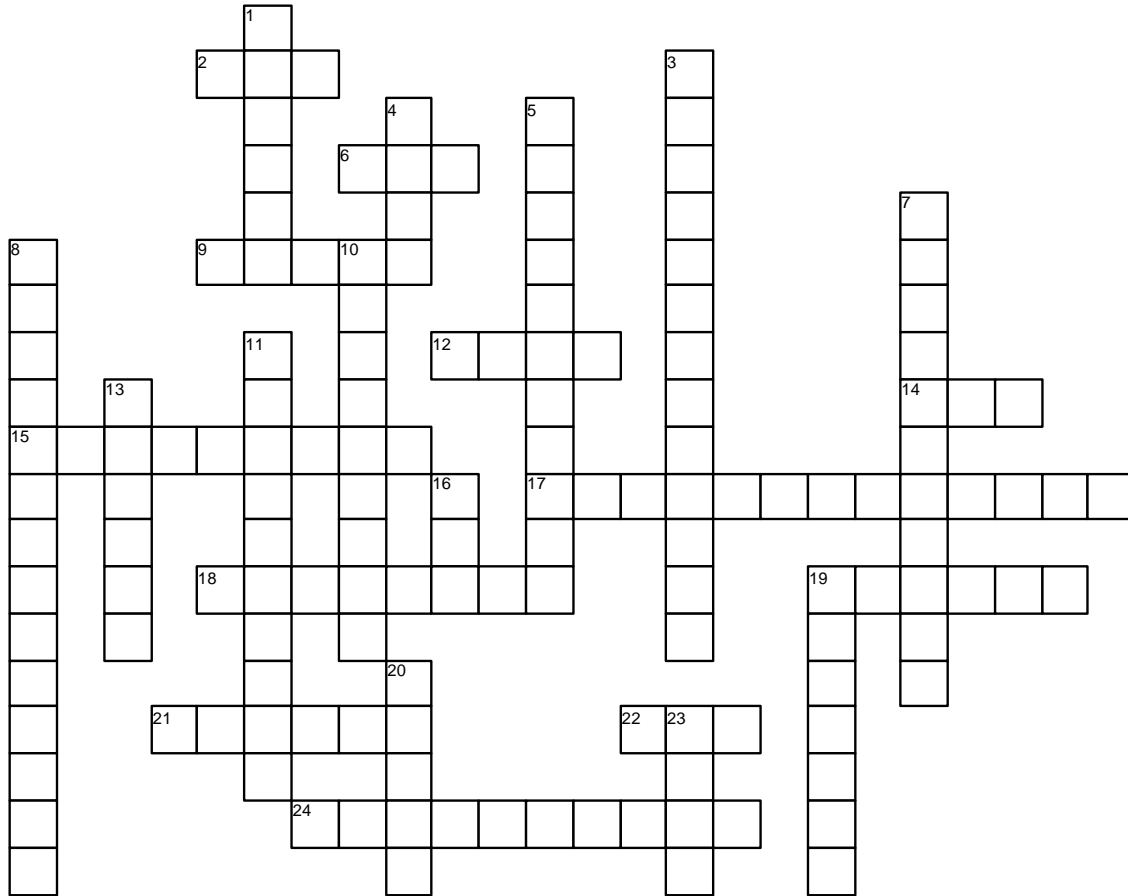


# Wheel Alignment Principles

## Chapter 124



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### ACROSS

- 2 \_\_\_ is the inward tilt of the steering axis.
- 6 \_\_\_ is the difference in distance between the front and rear of the tires.
- 9 Lead is also called \_\_\_.
- 12 A \_\_\_ is a minor pull that does not cause a force on the steering wheel that the driver must counteract
- 14 \_\_\_ is another name for SAI if SLA-type suspension is used.
- 15 On a two-lane road, the center of the road is often higher than the berms, resulting in a \_\_\_.
- 17 The \_\_\_ is the SAI added to the camber reading of the front wheels only.
- 18 A \_\_\_ dampener is used on many pickup trucks, SUVs, and many luxury vehicles designed with a high-positive-caster setting.
- 19 \_\_\_ is a back-and-forth vibration that can be caused by an out-of-balance tire or defective wheel or by an alignment problem.

- 21 A \_\_\_ is a condition where constant steering wheel corrections are necessary to maintain a straight-ahead direction on a straight, level road.
- 22 \_\_\_ is the imaginary line drawn through the kingpin as viewed from the front.
- 24 Positive caster causes changes in camber during a turn, this condition is called \_\_\_.

### DOWN

- 1 \_\_\_ is the forward or rearward tilt of the steering axis in reference to a vertical line as viewed from the side of the vehicle.
- 3 Positive caster will help with steering wheel \_\_\_ after a turn.
- 4 \_\_\_ is determined by the angle of the steering knuckle arms.
- 5 If the vehicle has been involved in an accident, it is possible that the frame or rear axle mounting could cause \_\_\_.

- 7 \_\_\_ refers to the distance between the line through the steering axis and the centerline of the wheel at the contact point with the road surface.
- 8 Some manufacturers refer to scrub radius as \_\_\_.
- 10 \_\_\_-\_\_\_ alignment refers to the checking and/or adjustment of all four wheels.
- 11 The direction the rear wheels are pointed is called the \_\_\_.
- 13 \_\_\_ is the inward or outward tilt of the wheels from true vertical as viewed from the front or rear of the vehicle.
- 16 SAI is also called ball joint inclination (BJI), if SLA-type suspension is used, or \_\_\_.
- 19 \_\_\_ is the angle formed by a line drawn perpendicular to the front axes.
- 20 \_\_\_ is a vertical-type vibration usually caused by out-of-balance or defective tires or wheels.
- 23 A \_\_\_ is generally defined as a definite tug on the steering wheel toward the left or the right while driving straight on a level road.