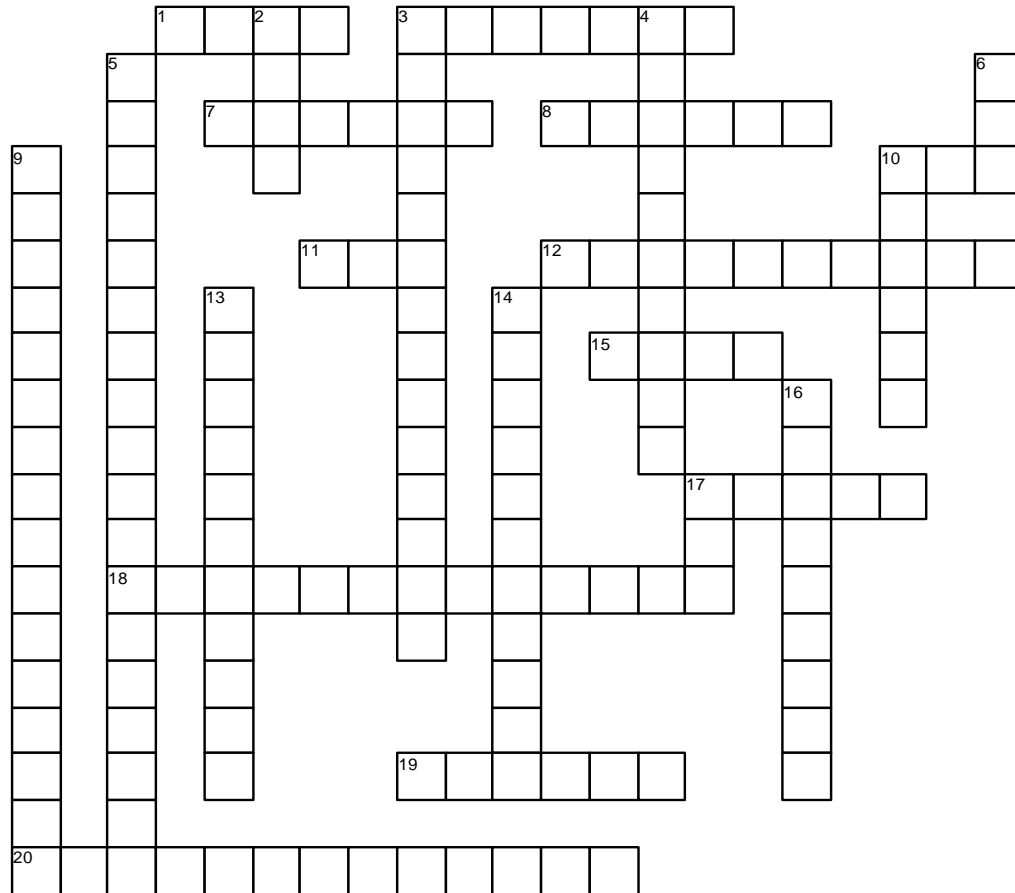


# Wheel Alignment Principles

## Chapter 19



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### ACROSS

- 1 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.
- 3 \_\_\_\_\_ is the angle formed by a line drawn perpendicular to the front axles.
- 7 A \_\_\_\_ is a condition where constant steering wheel corrections are necessary to maintain a straight-ahead direction on a straight, level road.
- 8 \_\_\_\_\_ is the inward or outward tilt of the wheels from true vertical as viewed from the front or rear of the vehicle.
- 10 \_\_\_\_ is the inward tilt of the steering axis.
- 11 \_\_\_\_ is the imaginary line drawn through the kingpin as viewed from the front.
- 12 The direction the rear wheels are pointed is called the \_\_\_\_\_.
- 15 \_\_\_\_ is determined by the angle of

the steering knuckle arms.

- 17 \_\_\_\_\_ is a vertical-type vibration usually caused by out-of-balance or defective tires or wheels.
- 18 The \_\_\_\_\_ is the SAI added to the camber reading of the front wheels only.
- 19 \_\_\_\_\_ is the forward or rearward tilt of the steering axis in reference to a vertical line as viewed from the side of the vehicle.
- 20 Positive caster will help with steering wheel \_\_\_\_\_ after a turn.

### DOWN

- 2 A \_\_\_\_ or drift is a mild pull that does not cause a force on the steering wheel that the driver must counteract
- 3 Some manufacturers refer to scrub radius as \_\_\_\_\_.
- 4 Positive caster causes changes in camber during a turn, this condition is called \_\_\_\_\_.
- 5 \_\_\_\_\_ refers to the checking and/or adjustment of all four

wheels.

- 6 \_\_\_\_ is another name for SAI if SLA-type suspension is used.
- 9 A \_\_\_\_\_ is used on many pickup trucks, SUVs, and many luxury vehicles designed with a high-positive-caster setting.
- 10 \_\_\_\_\_ is a back-and-forth vibration that can be caused by an out-of-balance tire or defective wheel or by an alignment problem.
- 13 If the vehicle has been involved in an accident, it is possible that the frame or rear axle mounting could cause \_\_\_\_\_.
- 14 \_\_\_\_\_ 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.
- 16 On a two-lane road, the center of the road is often higher than the berms, resulting in a \_\_\_\_\_.
- 17 \_\_\_\_ is the difference in distance between the front and rear of the tires.