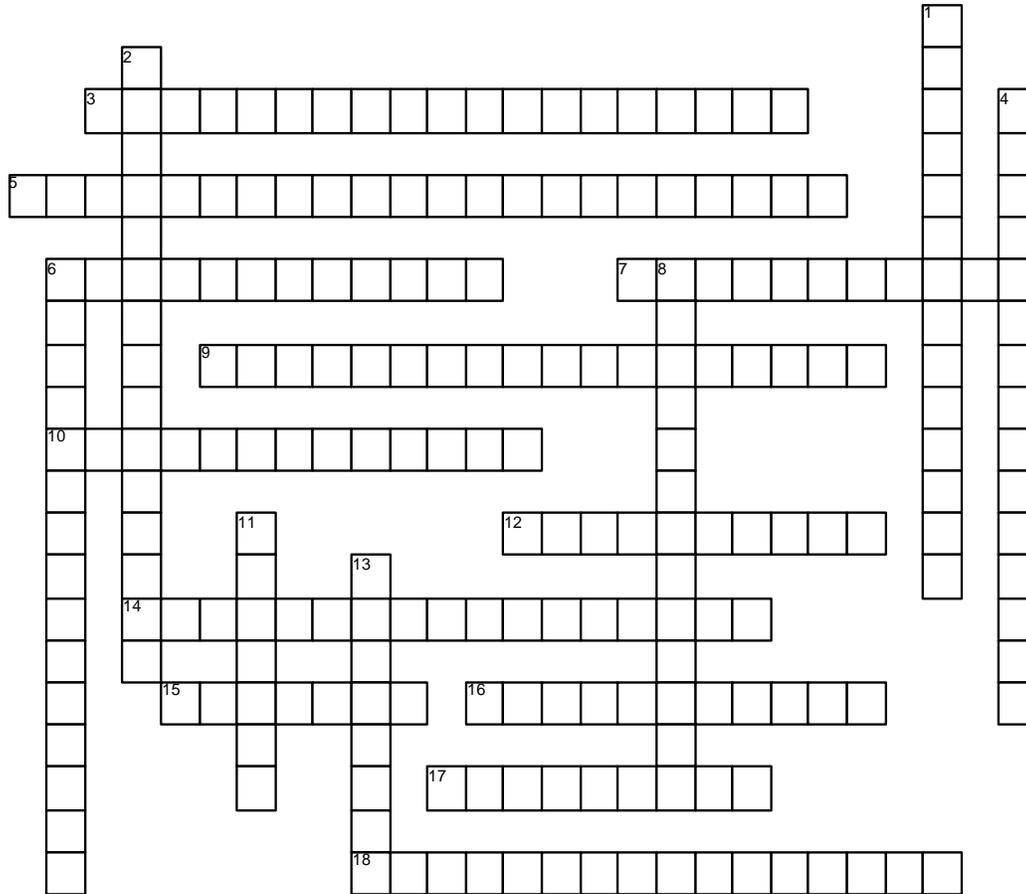


# ABS Components And Operation

## Chapter 110



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### ACROSS

- 3 Ford's version of a single-channel rear-wheel-only ABS system is called \_\_\_\_\_ System.
- 5 \_\_\_\_\_ systems are required on all new vehicles.
- 6 A \_\_\_\_\_ speed sensor generates its own output signal and can operate without an outside voltage being applied.
- 7 \_\_\_\_\_ speed sensors are called active because they require outside electrical power to operate.
- 9 The \_\_\_\_\_ saves the cost for an additional sensor and reduces the complexity of the system by allowing both rear wheels to be controlled simultaneously.
- 10 Electronically operated \_\_\_\_\_ are used to hold, release, and reapply hydraulic pressure to the brakes.
- 12 Most \_\_\_\_\_ sensors consist of a magnetic pickup and a toothed sensor ring.
- 14 The first step in the standard ABS control strategy is to hold or isolate the pressure

in a given brake circuit by closing an \_\_\_\_\_.

- 15 The term \_\_\_\_\_ always refers to the number of separate or individually controlled ABS hydraulic circuits in an ABS system, not the number of wheel speed sensor electrical circuits.
- 16 The \_\_\_\_\_ is a pressurized storage reservoir.
- 17 GM and Chrysler call their version of a single-channel rear-wheel-only ABS system \_\_\_\_\_ Antilock.
- 18 During the \_\_\_\_\_ stage, the release and/or isolation solenoids are closed and/or the additional solenoid energized so pressure can be reapplied to the brake from the master cylinder or accumulator to reapply the brake.

### DOWN

- 1 \_\_\_\_\_ systems, which are sometimes referred to as "add-on" systems, have become the most common type of ABS system because of their lower cost and simplicity.
- 2 If the wheel speed sensor continues to

indicate the wheel is slowing too quickly and is starting to lock, the same solenoid or a second \_\_\_\_\_ is energized to open a vent port that releases pressure from the brake circuit.

- 4 \_\_\_\_\_ systems help prevent the wheels from locking during sudden braking, especially on slippery surfaces.
- 6 The \_\_\_\_\_ stage is when the solenoid is electrically closed, it becomes hydraulically closed, which blocks off the line and prevents any further pressure from the master cylinder reaching the brake.
- 8 If one wheel starts to slow at a faster rate than the others, or at a faster rate than that which is programmed in the antilock \_\_\_\_\_, it indicates a wheel is starting to slip and is in danger of losing traction and locking.
- 11 Another name for pressure reduction stage is \_\_\_\_\_ stage.
- 13 Traction is defined in terms of \_\_\_\_\_, which is the difference between the actual speed and the rate at which the tire tread moves across the road.