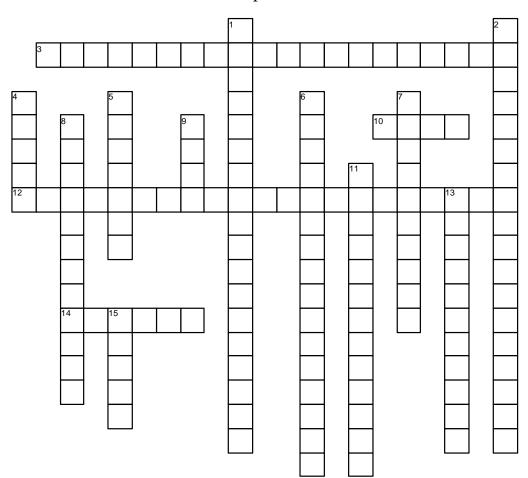
## **Regenerative Braking Systems**

Chapter 20



http://jameshalderman.com

## ACROSS

- **3** A \_\_\_\_\_\_ braking system is less complex because the base brakes are used along with energy recovery by the motors becoming generators.
- **10** \_\_\_\_\_ is the amount of matter in an object.
- 12 All series regenerative braking systems use an \_\_\_\_\_\_ system, which includes the hydraulic control unit that manages the brake cylinder pressures, as well as the front-rear axle brake balance.
- **14** All vehicles generate \_\_\_\_\_ to move the wheels to drive the vehicle down the road.

## DOWN

- 1 Some systems use a \_\_\_\_\_ sensor as an input signal to the brake ECU.
- 2 In \_\_\_\_\_ brake systems, the amount of regeneration is proportional to the brake pedal position.
- 4 A \_\_\_\_\_ applied to move an object results in the equation: F = ma.
- **5** \_\_\_\_\_ is the resistance of an object to change its state of motion.
- 6 Another name for regeneration is \_\_\_\_
- 7 Another name for friction brakes is \_\_\_\_\_.
- 8 \_\_\_\_\_\_ is the process where electricty becomes electrical energy, which is directed to and recharges the high-v oltage battery.
- **9** When connected to \_\_\_\_\_ batteries that can charge and discharge very quickly, the package is complete.
- 11 A hybrid electric vehicle relaims energy by converting the energy of a moving object, called \_\_\_\_\_\_, into electric energy.
- **13** The faster an object is \_\_\_\_\_, the more force that has to be applied.
- **15** A shortened name for regeneration is \_\_\_\_\_.

