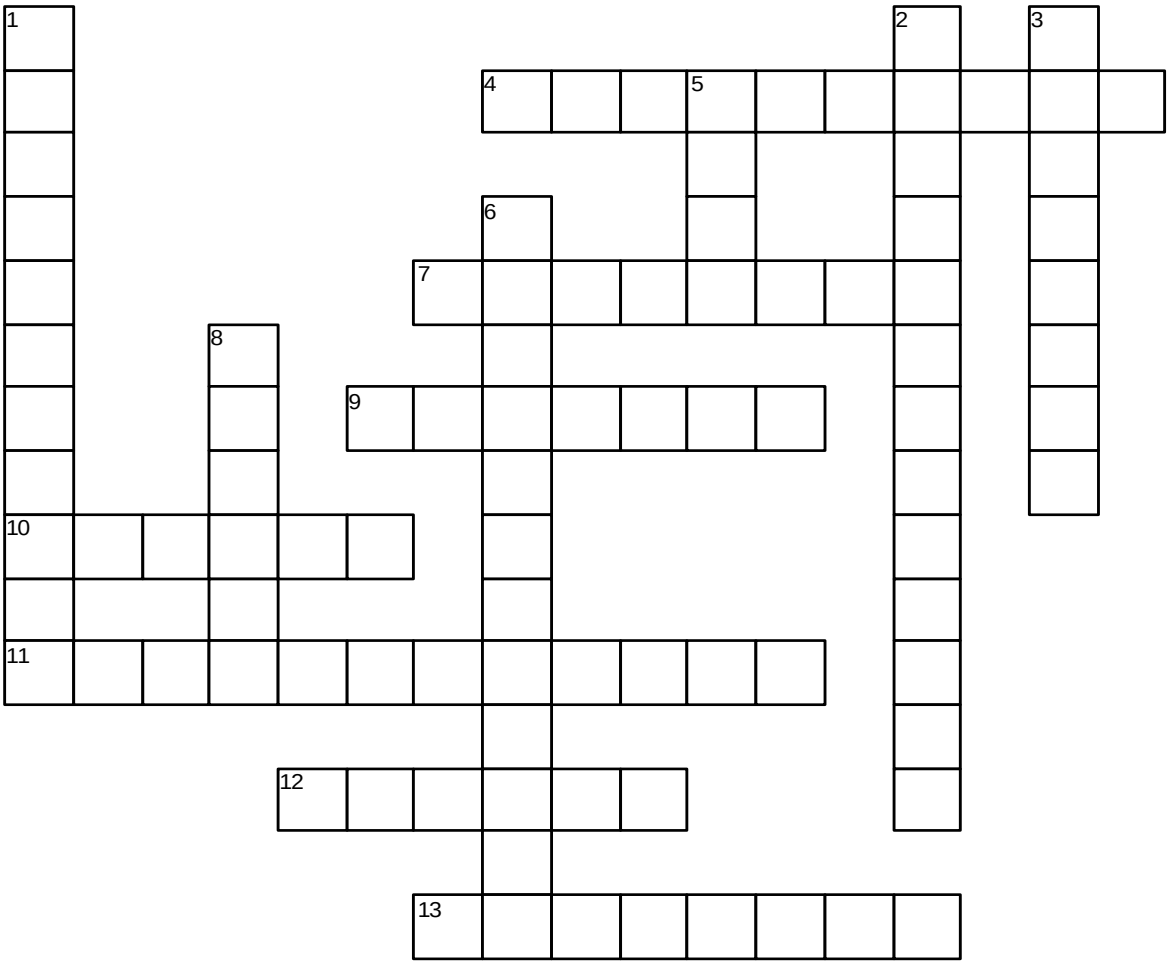
Regenerative Brakes and One- Pedal Driving

Chapter 91



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ACROSS

4 One of the unique things about most electric motors is that electrical energy can be converted into _____ energy, and mechanical energy can be converted back into electrical energy.

7 On the Ford Escape hybrid system, the regenerative braking system checks the integrity of the brake system as a _____-_____.

9 a is the resistance of an object to change its state of motion.

10 All vehicles generate _____ to move the wheels to drive the vehicle down the road.

11 _____ rates are measured in units of "feet per second, per second."

12 In _____ regenerative braking systems, the amount of regeneration is proportional to the brake pedal position.

13 ___-_____ driving means that for normal driving, the driver only needs to use the accelerator pedal to accelerate and decelerate.

DOWN

1 The faster an object is _____, the more force that has to be applied.

2 An electric vehicle (EV) or hybrid electric vehicle (HEV) can reclaim energy by converting the energy of a moving object, called _____ _____, into electric energy.

3 A _____ regenerative braking system is less complex because the base (friction) brakes are used along with energy recovery by the motors, becoming generators.

5 the energy absorbed by the braking system is lost in the form of ____ and cannot be recovered or stored for use later to help propel the vehicle.

6 This electricity is electrical energy, which is directed to and recharges the high-voltage battery. This process is called _____, regen, or simply "reclaiming energy."

8 Most hybrid electric vehicles use _____ master cylinders that do not look like conventional master cylinders.