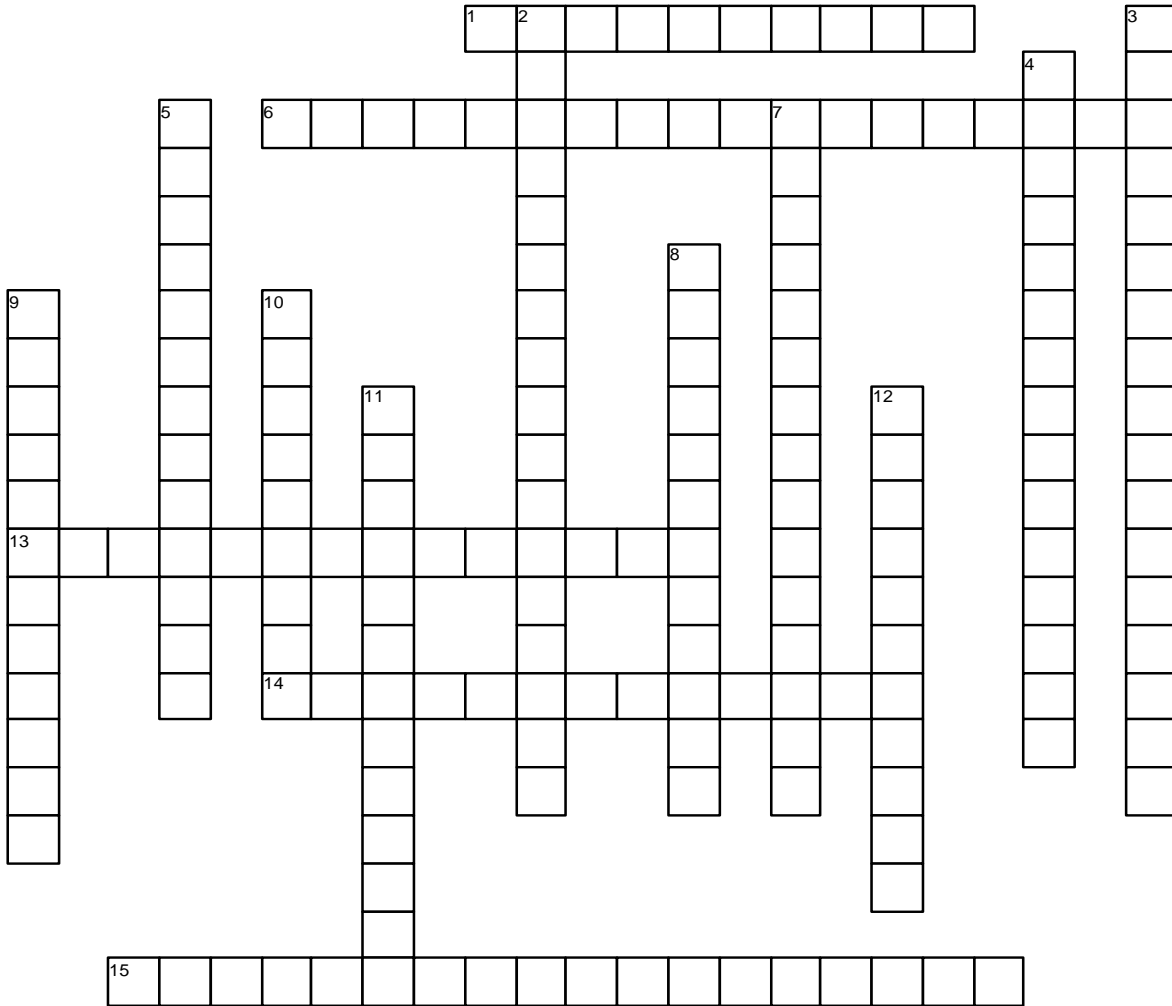


Four-Wheel and All-Wheel Drive

Chapter 15



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ACROSS

- 1 Most front drive axles use an _____ with ball joints for the steering pivots and a Cardan U-joint.
- 6 A _____ is used on AWD systems to prevent driveline harshness and vibration, commonly referred to as "driveline windup."
- 13 _____ for cars, pickups, and light trucks has steadily evolved from the somewhat crude but rugged Jeeps of World War II to sport cars and sport-utility vehicles.
- 14 A _____ device is used to control torque between two outputs and are connected in parallel.
- 15 An _____ disconnect system is used to connect or disconnect the outboard CV joint with the wheel hub.

DOWN

- 2 _____ drive has a positive, mechanical connection between the front and rear driveshafts when shifted into 4WD.
- 3 A _____ drive system uses a center

differential, which allows for both the front and rear axles to rotate at different speeds.

- 4 A _____ is a series of steel plates housed in a sealed steel drum.
- 5 _____ transfer cases that deliver power to both driveshafts all of the time are called mechanically active.
- 7 In an _____ - on - the - fly transfer case the operation of the range clutch and mode synchronizer assembly is controlled by the motor/encoder assembly.
- 8 There is a need for a unit, usually a _____, where the engine torque can be split to either one drive axle or both to provide four-wheel drive.
- 9 The _____ control module uses the data from the input and output speed sensors to determine when to shift the transfer case to four-wheel drive.
- 10 The _____ is achieved by the use of a floor-mounted lever to engage and disengage a clutch inside the transfer case.
- 11 4WD/AWD vehicles that are based on FWD vehicles integrate a _____ unit into the transaxle.
- 12 Power is applied to the front wheels through the drive axles to the _____.