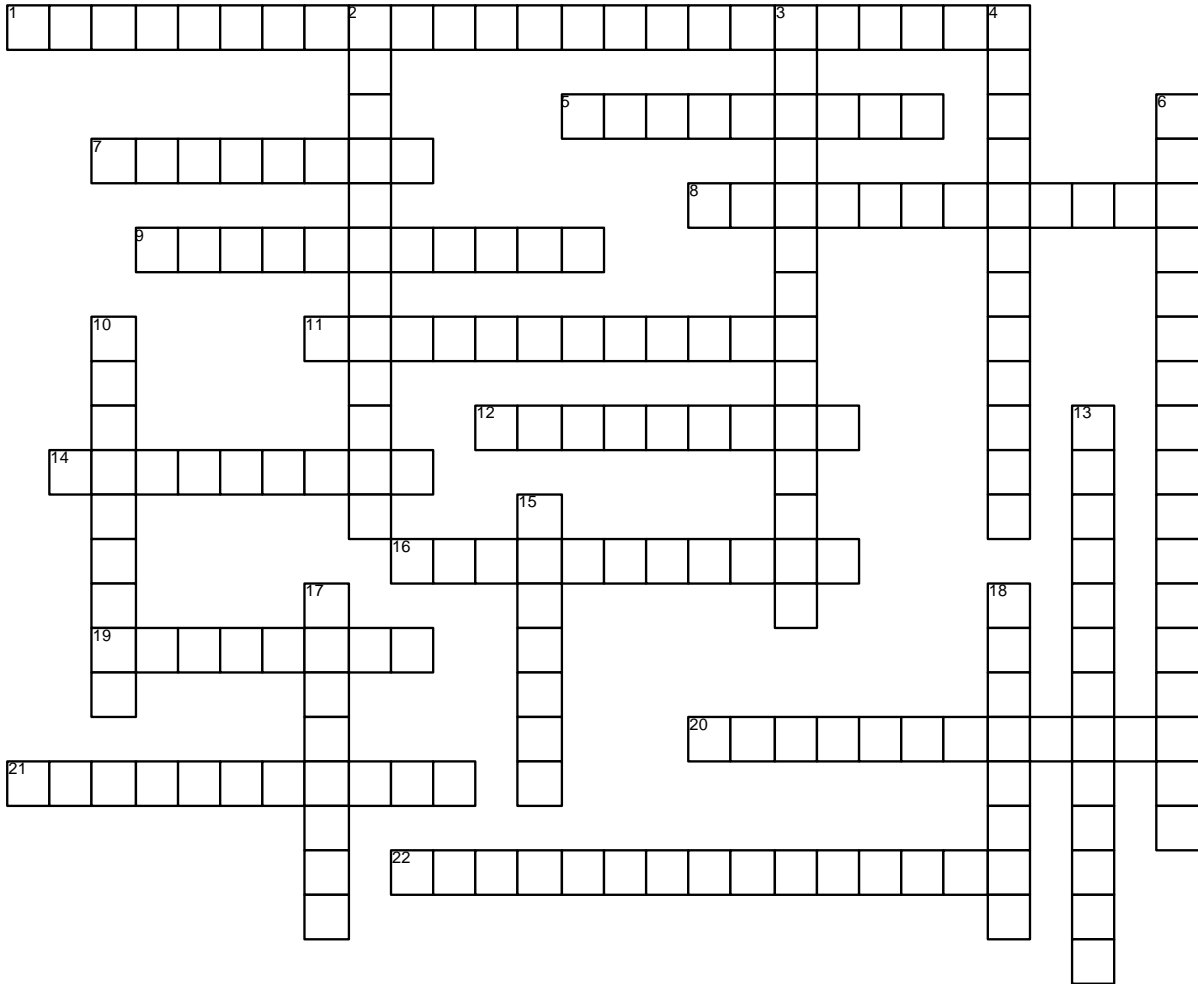


Four-Wheel Drive And All-Wheel Drive

Chapter 131



<http://jameshalderman.com>

ACROSS

- 1 An _____ clutch assembly is actuated by the vehicle's computer based on inputs from the ABS wheel speed sensors.
- 5 All-wheel-drive systems use an _____ differential to prevent driveline harshness and vibration.
- 7 When the transfer case controls are in _____ drive, the front differential assembly is disconnected from the transfer case.
- 8 The driven member of a planetary gear set is called the _____.
- 9 Power is applied to the front wheels through the drive axles to the _____.
- 11 The _____ gears rotate around the sun gear.
- 12 In most _____-drive vehicles, the overall gear ratio of the front differential is slightly higher than the overall ratio of the rear differential.
- 14 The _____ differential uses two bevel gears or spider gears attached to the output shaft of the transmission.
- 16 The drive member of a planetary gear set is called the _____.
- 19 _____ four-wheel drives use a center differential to allow the front and rear wheels to travel at different speeds under all operating conditions.
- 20 The purpose and function of the _____ is to direct engine torque to the front and rear axle assemblies.
- 21 Another name for the ring gear is the _____.
- 22 A _____ is commonly used on many four-wheel-drive vehicles to provide an "automatic" lockup of the center differential.
- 6 _____ drive can only be driven in four-wheel drive on slippery surfaces.
- 10 The _____ is achieved by the use of a floor-mounted lever to engage and disengage a clutch inside the transfer case.
- 13 The _____ attaches the sun gear to the planet pinion gears.
- 15 The _____ is in the center like the position of the sun in our solar system.
- 17 The outer _____ has teeth on the inside that mesh with the teeth of the planet pinion gears.
- 18 A _____ may be selected to deliver high torque at low speeds to the drive wheels.

DOWN

- 2 Another name for the ring gear is the _____.
- 3 The held member of a planetary gear set is called the _____.
- 4 A _____ is required to allow the drive wheels to travel different distances and speeds while cornering or driving over bumps or dips.