Automotive Technology 6th Edition Chapter 99 - Hydraulic Valves and Switches Chapter 99
Name
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.
1) What reasons could cause the red brake warning lamp to come on during driving?
2) How can dynamic rear proportioning (DRP) take the place of the proportioning valve?
3) What are the split point and the slope of a proportioning valve?
4) Why are metering valves not used on all vehicles?
5) What is the difference between a brake pedal switch and a brake pedal sensor?

Answer Key

Testname: SHORT 99

- 1) Parking brake on. Low brake fluid. Unequal brake pressure. Worn brake pads. Page Ref: 1133
- 2) Most new vehicles with antilock brake systems have eliminated the need for a conventional brake proportioning valve. Instead, this becomes a function of the antilock brake system controller. Often referred to as dynamic rear proportioning (DRP), this system removes the need for a mechanical proportioning valve.

 Page Ref: 1138
- 3) The proportioning valve limits the pressure to the rear brakes after a certain pressure is achieved. This pressure is called the split point. A portion of the front brake pressure that is sent to the rear brakes is called the slope. Page Ref: 1134; 1136
- 4) Metering valves are not needed on front-wheel-drive vehicles because of the forward weight bias and they use a diagonal-split hydraulic system instead of a front/rear split system used on rear-wheel-drive vehicles.

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- 5) On older vehicles, the brake switch was used to turn on the brake lights. Most new vehicles use the brake pedal position (BPP) sensor or switch as an input to the body computer for many functions. This sensor is a three-wire potentiometer that returns a variable voltage signal to the ABS controller to indicate the position of the brake pedal. Page Ref: 1142-1143