

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) What is the difference between checking for venting (compensation) and bypassing?

2) Discuss the difference between a dual split and a diagonal split master cylinder.

3) What are some master cylinder fault symptoms?

4) Explain Pascal's Law.

5) Describe how a master cylinder works.

Answer Key

Testname: CHASSIS8_SHORT6

1) Venting occurs every time the brake pedal is depressed, which forces a small amount of brake fluid up into the master cylinder reservoir as the primary piston is moving forward. Bypassing is a fault where brake fluid from the rear circuit is forced into the front brake circuit.

Page Ref: 82

2) A dual split hydraulic system separates the two front wheel brakes into one circuit and the two rear wheel brakes into another circuit whereas, a diagonally split system separates the brakes into right front and left rear on one circuit and left front and right rear on the other circuit.

Page Ref: 81-83

3) • Spongy brake pedal. A spongy pedal with a larger-than-normal travel indicates air in the lines.

- Lower-than-normal brake pedal. A brake pedal that travels downward more than normal and then gets firm is an indication that one circuit of the dual-circuit hydraulic system is probably not working.

- Sinking brake pedal. If the brake pedal sinks all the way to the floor especially when the vehicle is not moving, suspect a defective master cylinder that is leaking internally. This internal leakage is often called bypassing because the brake fluid is leaking past the sealing cups, allowing pressure from one chamber to leak into the other chamber.

Page Ref: 86

4) Pascal's Law states that when force is applied to a confined liquid, the pressure is equally transmitted undiminished and in every direction.

Page Ref: 73

5) The force of the driver's foot on the brake pedal compresses brake fluid in the master cylinder using two pistons, one for each circuit.

Page Ref: 76-80