Chassis Systems 8th Edition Chapter 26	
Name	
SHORT A	NSWER. Write the word or phrase that best completes each statement or answers the question.
1)	What are four symptoms of worn or defective shock absorbers?
2)	What is the procedure for replacing front shock absorbers on an SLA-type suspension vehicle?
3)	What is the testing procedure for ball joints?
4)	How should a proper road test be performed to diagnosis of suspension-related problems?
5)	How should tapered suspension components be removed?

## Answer Key

Testname: CHASSIS8 SHORT26

1) The four symptoms of defective shock absorbers include: (a) Excessive harshness, (b) Frequent "bottoming out" on rough roads, (c) Extended vehicle vertical movement after driving on dips or a rise in the road, and (d) Cupped-type tire wear.

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2) Front shock absorber replacement on an SLA-type suspension simply requires that the fasteners be removed. No special methods or tools are required and the shocks can even be replaced without having to hoist the vehicle off the ground.

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- 3) Load-carrying ball joints must be unloaded before they can be accurately tested. If the coil spring or torsion bar is attached to the lower control arm, the ball joint can be unloaded by placing a jack under the lower control arm and raising the tire off the ground. A special block or tool is required to hold the control arm if the spring is attached to the upper control arm. A dial indicator and a pry bar are used to move and measure the amount of wear.

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- 4) A thorough road test should include driving the vehicle over bumpy sections of road, as well as beside parked vehicles. Drive into driveways with a curb to cause the suspension to compress while the wheels are turned. A complete test drive should also include driving in reverse while turning.

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- 5) Tapered suspension components, such as ball joints, can be safely separated from the attached component by using a puller-type tool. To reassemble, use a new nut and tighten to factory specifications. If the cotter key hole does not line up after the attaching nut is tightened to specifications, tighten the nut just enough to align the cotter key never loosen the nut to align the hole.

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