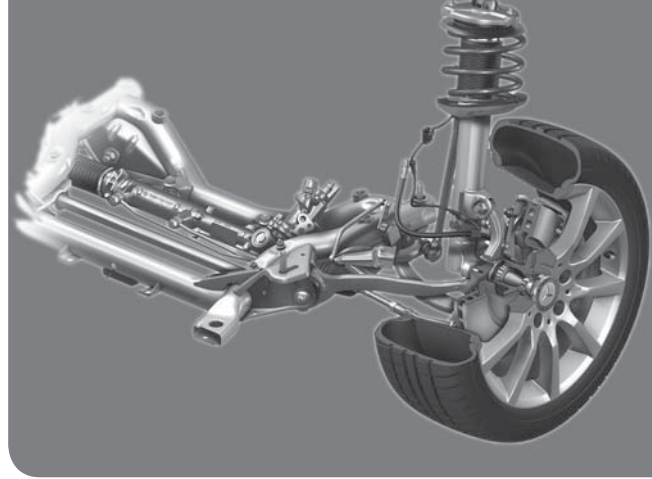


Chapter 76

Suspension System Diagnosis and Repair



Name _____

Date _____

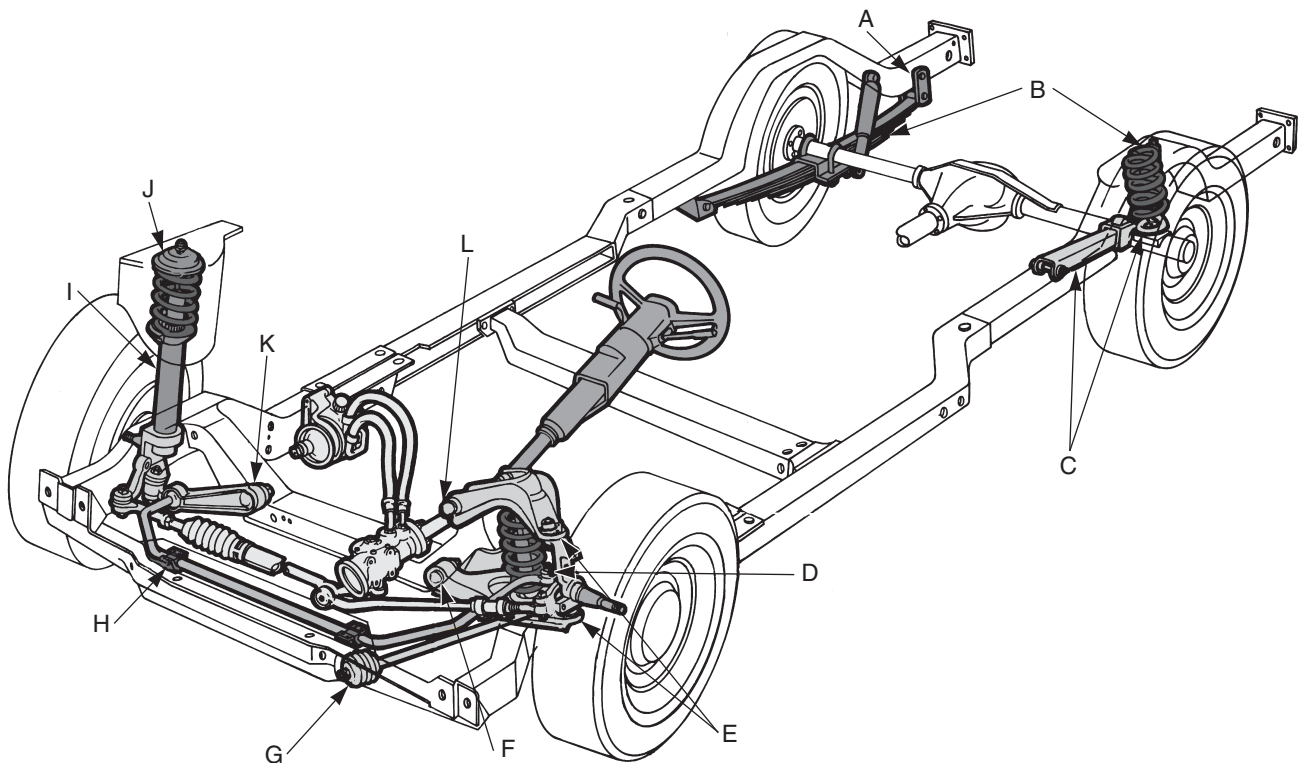
Instructor _____

Score _____

Objective: After studying this chapter, you will be able to diagnose and troubleshoot common suspension system problems.

Suspension System Diagnosis

1. Label the types of problems that can develop in a suspension system.



- | | |
|-----------|-----------|
| (A) _____ | (G) _____ |
| (B) _____ | (H) _____ |
| (C) _____ | (I) _____ |
| (D) _____ | (J) _____ |
| (E) _____ | (K) _____ |
| (F) _____ | (L) _____ |

2. List and explain common suspension system problems.

Shock Absorber Service

3. What are the symptoms of bad shock absorbers?

4. Describe how to perform a shock absorber bounce test.

5. Explain the procedure for replacing shock absorbers.

6. *True or False?* Air shocks must be replaced when faulty. _____
Gas-filled shocks may be repairable.

Name _____

7. What is the most common problem with air shocks?

8. *True or False?* Never exceed the recommended maximum air pressure given for air shocks.

Suspension Spring Service

9. What is the result of spring fatigue?

10. What two things must be measured when checking spring condition or torsion bar adjustment?

11. Describe the special tool sometimes used to service coil springs.

12. A(n) _____ tool, or _____, is commonly used to force the ball joint away from the steering knuckle.

13. *True or False?* Never unbolt the ball joint without first compressing the coil spring.

14. *True or False?* When replacing a rear coil spring, a spring compressor may not be needed.

15. Leaf spring service usually involves spring or _____ replacement.

16. Torsion bar replacement is (frequently/not frequently) _____ needed.

Ball Joint Service

17. What are some problems caused by worn ball joints?

18. How can you identify a dry ball joint?

19. Why must you be careful not to inject too much grease into a ball joint equipped with a balloon seal?

20. What are two ways of checking ball joint wear?

21. *True or False?* A ball joint can usually be replaced without removing the control arm from the vehicle.

22. List the three steps in replacing a riveted ball joint.

23. *True or False?* Always use a new cotter pin when servicing a component.

Suspension Bushing Service

24. How do you check for control arm bushing wear?

25. What is sticktion? When can it be heard?

MacPherson Strut Service

26. *True or False?* The most common trouble with a MacPherson strut suspension is spring fatigue.

31. How do you safely dispose of gas-filled shocks?

32. Always _____ all suspension system bolts and nuts to _____ factory specifications.

Computerized Suspension Diagnosis

33. How would you start troubleshooting a computer-controlled suspension system?

34. What faulty parts might a scan tool locate on a suspension system?

35. What can go wrong with a height sensor?

36. *True or False?* When replacing the shocks on _____ electronic suspension systems, you may be able to transfer some of the electronic parts from the old units onto the new ones.