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

Suspension System Diagnosis

1. List and explain common suspension system problems.

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

   (A) 
   (B) 
   (C) 
   (D) 
   (E) 
   (F) 
   (G) 
   (H) 
   (I) 
   (J) 
   (K) 
   (L)
3. What are the symptoms of bad shock absorbers?

4. Describe how to perform a shock bounce test.

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**Suspension Spring Service**

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

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

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

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**Ball Joint Service**

8. What are some symptoms of worn ball joints?

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

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

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

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

   (A) 
   (B) 
   (C)
Suspension Bushing Service

13. How do you check for control arm bushing wear? ____________________________

14. What is sticktion? When can it be heard? ________________________________

MacPherson Strut Service

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

16. Label the parts of the strut assembly.

(A) __________________________
(B) __________________________
(C) __________________________
(D) __________________________
(E) __________________________
(F) __________________________
(G) __________________________
(H) __________________________
(I) __________________________
(J) __________________________
(K) __________________________
(L) __________________________
(M) __________________________
(N) __________________________
(O) __________________________
17. In your own words, explain how to replace a strut shock absorber.

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

19. Always _____ all suspension systems bolts and nuts to factory specs.

**Computerized Suspension Diagnosis**

20. How would you start troubleshooting an electronically controlled suspension system?

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

22. What can go wrong with a height sensor?

23. *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.