Chapter 38

Sound Systems and Power Accessories

Name: _____ Date: _____

Instructor: _____ Score: _____ Textbook pages 669–695

Objective: After studying this chapter, you will be able to summarize the operation and general service of optional devices.

Sound Systems

1. What components are included in a basic radio system? _____

2. The radio station sends out a(n) _____ from a large broadcasting tower. 2. _____

3. A radio speaker's diaphragm moves back and forth, producing _____. 3. _____

Radio

4. Name and explain the differences between the two types of radio signals. _____

5. If a radio fails to work, what should you do? _____

6. Often two power leads feed the radio, one for the circuitry and the other for the _____. 6. _____

7. A speaker's permanent magnet and coil of wire mounted on a flexible diaphragm converts electricity into what?

Items 8-10. Match each term to its correct definition.

8. Internal problems require a specialized electronic technician; incorporated into the radio. 8. _____

9. Increases volume without sound distortion. 9. _____

10. Stores and plays music digitally. 10. _____

(A) CD player
(B) Tape player
(C) Power booster

11. When a transistor is driven too hard, sometimes to failure, _____ occurs. 11. _____

12. Diagnose the following radio noise sounds:

    (A) *Low-pitched clicking that changes with engine speed:* _____

    _____

    _____

    (B) *High-pitched whirring sound that also changes with engine speed:* _____

    _____

    _____

Power Seats

13. What operates power seats? _____

    _____

14. Explain the use of a *memory seat.* _____

    _____

15. For a seat to return to a desired position for different drivers, it can be programmed with a(n) _____. 15. _____

16. When the power seat only fails in one mode (up and down, for example), what should you do first?

    _____

    _____

17. Identify the most common reasons for power seat problems. _____

    _____

Power Windows

18. Identify what a power window system uses to operate the door windows. _____

    _____

    _____

19. The up-down mechanism for the glass is known as the _____. 19. _____

20. Explain how a window motor is protected from overheating damage. _____

    _____

    _____

21. What might you suspect if you hear a humming sound when a window switch is pressed? _____

    _____

22. Why must a technician avoid wearing a wristwatch or rings when servicing inside a door? _____

    _____

    _____

Power Door Locks

23. What do power door locks usually use to operate the door lock mechanisms?

    _____

24. Explain the basic procedure for removing a door panel. _____

25. What is a leading reason why wiring going through the body and into the door can break internally?

Power Trunk Release

26. What happens when you close the trunk release switch? _____

27. What does a power steering wheel use to automatically tilt and telescope the steering wheel? _____

Rear Window Defogger

28. How does a rear window defogger function? _____

29. If a window has _____, one area is heated and cleared before another. 29. _____

30. What procedure should be followed when the grid-type rear window defogger does not work?

Heated Windshield

31. When _____ to _____ volts pass through the invisible film in a heated windshield system, the glass heats up and melts ice or snow. 31. _____

32. Why must caution be taken when working on heated windshield systems? _____

33. Under what conditions does a reminder system make an audible signal? _____

Cruise Control Systems

34. Briefly explain the major parts of a modern cruise control system.

Power switches: _____

_____

Neutral safety switch: _____

_____

Throttle actuator: _____

_____

Vehicle speed sensor: _____

_____

Cruise computer: _____

_____

Clutch switch: _____

_____

35. Cruise control senses engine speed and controls the _____ opening on the engine. 35. _____

Power Mirrors

36. Power mirrors usually use tiny reversible _____ to tilt the sideview mirror glass into different positions. 36. _____

37. What should be done to service power mirrors? _____

_____

_____

38. Rearview mirror glass is often removed with a(n) _____ if cracked. 38. _____

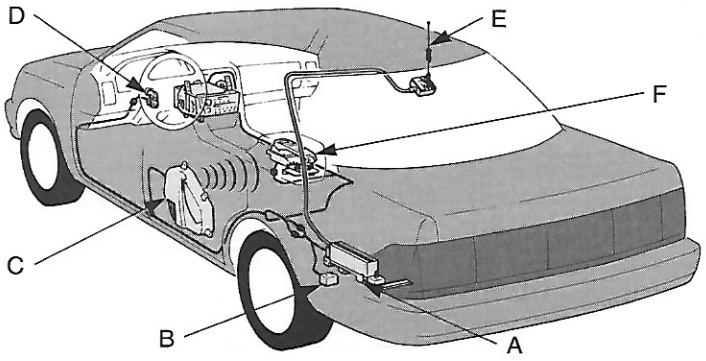
Cellular Mobile Telephone

39. Explain how a cellular mobile telephone uses a transceiver. _____

_____

_____

40. Identify the parts of the cellular phone system.



(A) _____

(B) _____

(C) _____

(D) _____

(E) _____

(F) _____