

- 8) Technician A says that tie rod ends are used to connect the steering linkage to the steering knuckles. Technician B says that some ball and socket joints are filled with rubber and do not require lubrication. Which technician is correct? 8) _____
 A) Technician A only B) Technician B only
 C) Both technicians D) Neither technician
- 9) Which of the following terms is used to describe the center link? 9) _____
 A) Drag link B) Relay rod
 C) Connecting link D) All of these are correct
- 10) Technician A says that steering linkages with zerk fittings should be greased at least every six months. Technician B says that some steering linkage joints are sealed and do not require regular service. Which technician is correct? 10) _____
 A) Technician A only B) Technician B only
 C) Both technicians D) Neither technician
- 11) What steering component dampens and absorbs sudden motions in the steering linkage? 11) _____
 A) Shock absorber B) Steering dampener
 C) Drag link D) None of these
- 12) Technician A says that RBS type tie rod ends do not require periodic lubrication. Technician B says that the steering gear must be removed to replace outer tie rod ends. Which technician is correct? 12) _____
 A) Technician A only B) Technician B only
 C) Both technicians D) Neither technician
- 13) With four wheel steering systems, what term describes the front and rear wheels turning the same direction? 13) _____
 A) Negative phase mode B) Same phase steering
 C) Opposite phase steering D) None of these
- 14) Technician A says that the pitman arm is connected to the steering gear output shaft. Technician B says that an idler arm is used with all rack and pinion steering linkages. Which technician is correct? 14) _____
 A) Technician A only B) Technician B only
 C) Both technicians D) Neither technician
- 15) Which of the following linkages is used with a rack and pinion design? 15) _____
 A) Haltenberger B) Parallelogram
 C) Cross steer D) None of these is correct
- 16) Cross steer linkage is found on _____. 16) _____
 A) Light trucks and vans B) Sports cars
 C) Mid-size sedans D) None of these
- 17) A vehicle has an excessive amount of freeplay in the steering wheel and it is difficult to keep it traveling straight on a level road. Which is the LEAST likely cause? 17) _____
 A) Loose pitman arm retaining nut
 B) Worn tie rod ends
 C) Worn idler arms
 D) Excessive play in the ball socket assemblies

- 18) Which four wheel steering system is best for highway lane changes? 18) _____
A) Negative phase mode B) Opposite phase steering
C) Same phase steering D) None of these
- 19) Technician A says that the inner tie rod end mounts to the end of the rack on all rack and pinion systems. Technician B says that some rack and pinion systems use inner tie rod ends mounted to the center of the rack. Which technician is correct? 19) _____
A) Technician A only B) Technician B only
C) Both technicians D) Neither technician
- 20) How much end play is generally acceptable in tie rod ends? 20) _____
A) 0.0010 to 0.030 in. B) 0.030 to 0.050 in.
C) 0.050 to 0.100 in. D) Zero