

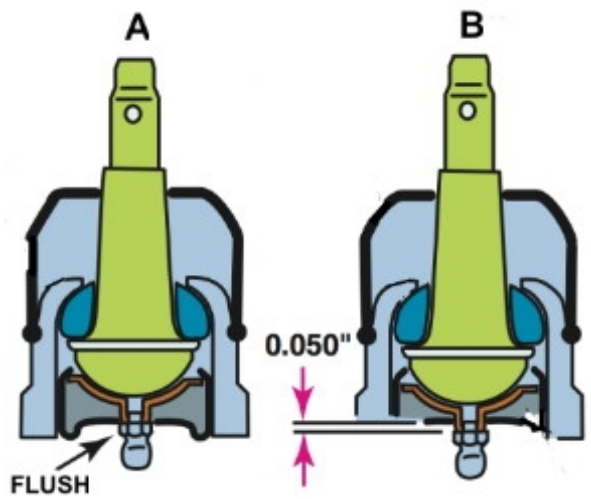
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Two technicians are discussing non-indicator type ball joint inspection. Technician A says that the vehicle should be on the ground with the ball joints *loaded*, then checked for free play. Technician B says the ball joints should be *unloaded* before checking for free play. Which technician is correct?
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician 1) _____
- 2) What should the technician do when replacing stabilizer bar links?
A) The stabilizer bar should be removed from the vehicle before replacing the links
B) The links can be replaced individually, yet the manufacturer often recommends that the links at both ends be replaced together
C) The stabilizer bar must be compressed using a special tool before removing or installing stabilizer bar links
D) Both B and C are correct 2) _____
- 3) Technician A says that many vehicles use lower control arms with non-removable ball joints. Technician B says that heat should be used to bend a deformed suspension component within specifications. Which technician is correct?
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician 3) _____
- 4) Where is the most common location for the coil spring on an SLA front suspension?
A) Upper control arm
B) Lower control arm
C) Stabilizer bar
D) Radius arm 4) _____
- 5) Technician A says that front shock replacement on most vehicles requires a special spring compressor. Technician B says that front shock absorbers can be replaced with the weight of the vehicle on the wheels. Which technician is correct?
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician 5) _____
- 6) Technician A says that the two main links in an SLA suspension are the upper control arm and the lower control arm. Technician B says that front suspensions with MacPherson struts usually have only one control arm. Which technician is correct?
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician 6) _____
- 7) Which of the following is NOT helpful information in diagnosing a suspension problem?
A) If the problem gets worse in warm or cold weather
B) If the problem gets worse while turning or going straight
C) If the problem gets worse with a warm or cold engine
D) All of these are helpful hints for diagnosis 7) _____

8) Technician A says that most loaded ball joints can have up to 0.050 inches of axial free play and still be within specifications. Technician B says that follower ball joints generally should have no more than 0.050 inches of play. Which technician is correct? 8) _____

A) Technician A only B) Technician B only
 C) Both technicians D) Neither technician

9) Which of the ball joints in this illustration is worn out and needs replacing? 9) _____



A) B B) Both are OK
 C) Both are worn out D) A

10) Technician A says that a road test should never be performed before service, for safety reasons. Technician B says that the purpose of any diagnosis is to eliminate known good components. Which technician is correct? 10) _____

A) Technician A only B) Technician B only
 C) Both technicians D) Neither technician

11) Technician A says that wear indicator ball joints should be unloaded to check properly. Technician B says that wear indicator ball joints should be checked with the weight of the vehicle on the ground. Which technician is correct? 11) _____

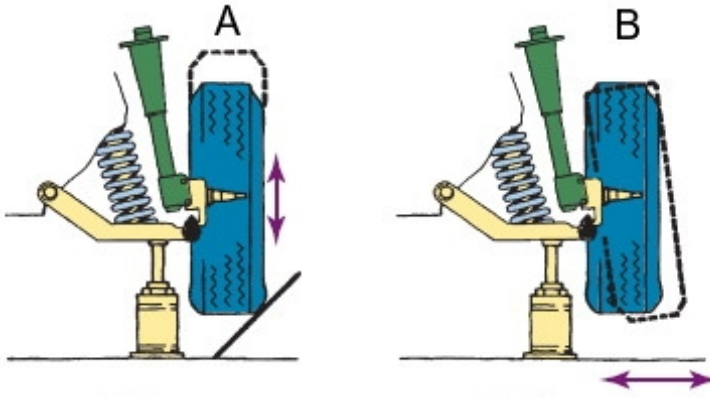
A) Technician A only B) Technician B only
 C) Both technicians D) Neither technician

12) Which tool is most often used to measure suspension component free play? 12) _____

A) Vernier caliper B) Micrometer
 C) Telescoping gauges D) Dial indicator

13) Which of these illustrates axial ball joint play?

13) _____



A) A

B) B

C) Both A and B

D) Neither A nor B

14) Before the strut insert can be removed from a typical MacPherson strut assembly, which operation is necessary to prevent possible personal injury?

14) _____

- A) The upper strut mounting bolts should be removed
- B) The brake caliper and/or brake hose should be removed from the housing
- C) The lower attaching bolts should be removed
- D) The coil spring should be compressed

15) The preferred method to separate tapered chassis parts is to use _____.

15) _____

- A) A torch to heat the joint until it separates
- B) A drill to drill out the tapered part
- C) A puller tool or two hammers to shock and deform the taper
- D) A pickle fork

16) Technician A says that when removing pinch bolt connections, turn the nut, not the bolt. Technician B says to tighten the pinch bolt until the steering knuckle is deformed by 0.050 inches. Which technician is correct?

16) _____

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician

17) Technician A says that a MacPherson strut typically does not include the spring as part of the strut assembly. Technician B says that a modified strut typically does not include the spring as part of the strut assembly. Which technician is correct?

17) _____

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician

18) Two technicians are discussing suspension bushings. Technician A says that replacing control arm bushings usually requires special tools. Technician B says using high-performance urethane bushings may cause excessive noise to be transferred to the passenger compartment. Which technician is correct?

18) _____

- A) Technician A only
- B) Technician B only
- C) Both technicians
- D) Neither technician

19) A vehicle is equipped with longitudinal torsion bars attached to the front lower control arms. Technician A says that this vehicle has loaded lower ball joints. Technician B says that the ball joints on this vehicle should be unloaded to test for radial and axial play. Which technician is correct? 19) _____

A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician

20) While servicing a vehicle with modified strut front suspension, technician A makes sure the lower control arm is supported. Technician B says that the coil spring must be removed from the strut assembly to service a modified strut vehicle. Which technician is correct? 20) _____

A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician