# ASE T5 Truck Suspension Prep

Free Practice Test — 30 Real Exam-Style Questions

with full answer key & explanations

# Practice Questions

Try all 30 first, then check the answer key at the back.



**1. What is the most likely cause of noise when turning the steering wheel of a medium-duty truck?**

A. Low power steering fluid level
B. Loose steering wheel
C. Damaged power steering pump belt
D. Worn steering column U-joints

**2. Technician A says that collapsed steering column damage should be evaluated after any front-end collision. Technician B says a collapsible steering column should be replaced if it shows any signs of deformation. Who is right?**

A. Technician B
B. Neither Technician A nor B
C. Both Technician A and B
D. Technician A

**3. A power steering system has restricted flow. What is the proper test to accurately diagnose the issue?**

A. Testing the power steering pump belt tension
B. Power steering pressure test
C. Visual inspection of the fluid level
D. Measuring steering wheel free play



**4. After replacing a hydraulic power steering pump on a heavy-duty truck, the steering is still difficult to turn. What is the most likely cause?**

A. Relief/poppet valve requires adjustment
B. Air in the hydraulic system
C. Incorrect fluid type
D. Damaged steering column

**5. When diagnosing a truck with binding during steering, Technician A says that a damaged flexible coupling could be the cause. Technician B says that misadjusted poppet valves could be the cause. Who is right?**

A. Technician A
B. Technician B
C. Neither Technician A nor B
D. Both Technician A and B

**6. During inspection of a power steering system, milky fluid is observed in the reservoir. What is the most likely cause?**

A. Overheated fluid
B. Normal fluid condition
C. Water contamination
D. Air in the system



**7. What tool is required to properly calibrate the steering angle sensor after replacing the electronic power steering control module?**

A. Alignment equipment
B. Scan tool with OEM software
C. Torque wrench
D. Pressure gauge

**8. When checking a power steering gear box on a Class 8 truck, what is the proper procedure to check for internal leakage?**

A. Perform a pressure test with the steering wheel at full lock
B. Visually inspect the outside of the box for fluid
C. Remove the gear box and check for metal particles
D. Measure steering wheel free play

**9. A truck exhibits a grinding noise from the power steering pump. Technician A says this could be caused by a worn pump shaft bearing. Technician B says this could be caused by low fluid level. Who is right?**

A. Technician A
B. Technician B
C. Neither Technician A nor B
D. Both Technician A and B

**10. Which of these is the most common cause of power steering fluid contamination?**

A. External dirt entry
B. Steering gear wear
C. Deteriorated internal hoses
D. Incorrect fluid type

**11. When replacing a pitman arm on a heavy truck, what is the most important consideration?**

A. Lubricating the pitman arm ball joint
B. Proper alignment with sector shaft splines
C. Using thread locking compound on all fasteners
D. Replacing all related steering components

**12. A truck requires excessive steering effort at low speeds but operates normally at highway speeds. What is the most likely cause?**

A. Low power steering pump flow
B. Excessive toe-in setting
C. Improper tire pressure
D. Worn king pins



**13. When inspecting a steering column, looseness is detected. Technician A says this could be caused by worn support bearings. Technician B says this could be caused by loose mounting bolts. Who is right?**

A. Technician A
B. Technician B
C. Neither Technician A nor B
D. Both Technician A and B

**14. After replacing the steering gear on a medium-duty truck, which of the following should be performed to ensure proper operation?**

A. Adjust the drag link length
B. Replace the power steering fluid filter
C. Check and adjust poppet valve settings
D. Replace the power steering pump

**15. The power steering system on a heavy truck is noisy during operation. After checking and confirming proper fluid level, what should be checked next?**

A. Tie rod condition
B. Belt condition and tension
C. Steering column U-joints
D. Wheel alignment settings



**16. What is the proper procedure for removing air from a hydraulic power steering system?**

A. Run the engine at idle with steering wheel turned from lock to lock several times
B. Raise the front wheels off the ground while turning the steering wheel
C. Use a vacuum pump on the reservoir
D. Add an anti-foam additive to the system

**17. When performing a calibration of a column-mounted electronically controlled steering system, what must be done first?**

A. Disconnect the battery
B. Remove the steering wheel
C. Lock the front wheels in position
D. Center the steering wheel precisely

**18. A hydraulically assisted steering system exhibits intermittent power assist. Technician A says a worn pump drive belt could cause this issue. Technician B says a faulty pressure relief valve could cause this issue. Who is right?**

A. Technician B
B. Neither Technician A nor B
C. Both Technician A and B
D. Technician A

**19. What is the most likely cause of a steering system that chatters when turning in both directions?**

A. Worn pitman arm
B. Low fluid level in the power steering system
C. Excessive caster angle
D. Loose frame mounts

**20. When checking the mounting of a rack-and-pinion steering gear, what is most important to inspect?**

A. Condition of bushings and bracket integrity
B. Rack seal condition
C. Steering wheel alignment
D. Power steering pump pressure

**21. A truck with air suspension is sitting noticeably lower on the right side. Technician A says to check the air bags for leaks. Technician B says to check the height control valve for proper operation. Who is right?**

A. Technician A
B. Technician B
C. Neither Technician A nor B
D. Both Technician A and B



**22. When inspecting a fifth wheel, a technician finds excessive movement in the pivot pins. What is the most likely cause?**

A. Cracked fifth wheel plate
B. Damaged locking mechanism
C. Worn bushings
D. Loose mounting bolts

**23. A driver reports that the truck bounces excessively over bumps. Technician A says to check the shock absorbers for leaks. Technician B says to check for broken leaf springs. Who is right?**

A. Neither Technician A nor B
B. Both Technician A and B
C. Technician A
D. Technician B

**24. During inspection of a truck's frame, what does elongated mounting holes typically indicate?**

A. Excessive component movement
B. Normal wear pattern
C. Manufacturing defect
D. Improper drilling technique



**25. When replacing kingpins on a front axle, which of these procedures is most important?**

A. Painting the kingpin for corrosion protection
B. Installing the kingpin dry without lubrication
C. Replacing only the upper kingpin bushing
D. Reaming the bushings after installation

**26. A driver complains of poor ride quality with a truck that has leaf springs. Technician A says that misaligned spring center bolts could cause this condition. Technician B says that worn spring hanger bushings could cause this condition. Who is right?**

A. Technician B
B. Neither Technician A nor B
C. Both Technician A and B
D. Technician A

**27. A technician notices hairline cracks in a truck frame near the spring hangers. What is the most appropriate repair action?**

A. Weld the cracks without additional reinforcement
B. Stop-drill the ends of the cracks and install reinforcement plates
C. Apply frame paint to seal the cracks
D. Replace the entire frame rail section

**28. What component is responsible for maintaining proper axle spacing and alignment in a walking beam suspension system?**

A. Torque rods
B. Shock absorbers
C. Air bags
D. Stabilizer bars

**29. A sliding fifth wheel is difficult to adjust. Technician A says to check for bent slide rails. Technician B says to check for debris in the slide path. Who is right?**

A. Technician A
B. Technician B
C. Neither Technician A nor B
D. Both Technician A and B

**30. When inspecting a truck's stabilizer bar, what condition would indicate that replacement is necessary?**

A. Slight discoloration from heat
B. Normal grease seepage at bushings
C. Cracked or broken mounting brackets
D. Surface rust on the bar

# Answer Key & Explanations



**1. D — Worn steering column U-joints**
Worn U-joints in the steering column often cause noise specifically when the steering wheel is being turned as they create binding or clicking sounds during rotation.

**2. C — Both Technician A and B**
Both technicians are correct. Collapsible steering columns should be inspected after any front-end collision, and if they show any signs of deformation (which means they've been compressed in a collision), they should be replaced as they will not function properly in a future collision.

**3. B — Power steering pressure test**
A power steering pressure test using a flow meter and pressure gauge is the proper diagnostic procedure to accurately determine if there is restricted flow in the system and identify the cause of the restriction.

**4. A — Relief/poppet valve requires adjustment**
If the relief/poppet valve is not adjusted correctly after pump replacement, it may limit maximum system pressure, resulting in difficult steering despite the new pump installation.

**5. D — Both Technician A and B**
Both technicians are correct. A damaged flexible coupling in the steering column can cause binding during rotation, and misadjusted poppet valves can create binding in the hydraulic system particularly at the extremes of steering travel.

**6. C — Water contamination**
Milky power steering fluid typically indicates water contamination, which can occur due to condensation or a defective reservoir cap allowing water entry into the system.

**7. B — Scan tool with OEM software**
A scan tool with the appropriate software is required to calibrate the steering angle sensor after control module replacement to ensure proper functionality of the electronic power steering system.

**8. A — Perform a pressure test with the steering wheel at full lock**
To check for internal leakage in a power steering gear box, a pressure test should be performed while observing if pressure drops when the steering wheel is held at full lock, which would indicate internal leakage past seals or valves.

**9. D — Both Technician A and B**
Both technicians are correct. A worn pump shaft bearing can cause grinding noise, and low fluid level can also cause grinding noise as the pump cavitates due to insufficient fluid intake.

**10. C — Deteriorated internal hoses**
Deteriorated internal hoses are the most common cause of power steering fluid contamination as they break down over time and release particles into the fluid.

**11. B — Proper alignment with sector shaft splines**
When replacing a pitman arm, ensuring proper alignment with sector shaft splines is crucial as improper installation can lead to steering misalignment and potential failure.

**12. A — Low power steering pump flow**
Low power steering pump flow is most likely to cause excessive steering effort specifically at low speeds because more hydraulic assistance is needed during slow-speed maneuvering when the steering wheel is turned more quickly.

**13. D — Both Technician A and B**
Both technicians are correct. Steering column looseness can be caused by worn support bearings in the column assembly or by loose mounting bolts that secure the column to the vehicle structure.

**14. C — Check and adjust poppet valve settings**
After steering gear replacement, checking and adjusting poppet valve settings is essential to ensure proper pressure relief at full steering wheel rotation and prevent damage to the steering system.

**15. B — Belt condition and tension**
After confirming the fluid level is correct, the belt condition and tension should be checked next as a loose or worn belt can cause power steering pump noise during operation.

**16. A — Run the engine at idle with steering wheel turned from lock to lock several times**
The proper procedure for removing air from a hydraulic power steering system is to run the engine at idle with the steering wheel turned from lock to lock several times, which purges air from the system.

**17. D — Center the steering wheel precisely**
Before calibrating a column-mounted electronically controlled steering system, the steering wheel must be centered precisely to establish the correct neutral position for the electronic control module.

**18. C — Both Technician A and B**
Both technicians are correct. A worn pump drive belt can slip intermittently, causing fluctuating hydraulic pressure, and a faulty pressure relief valve can open inconsistently, both resulting in intermittent power assist.

**19. B — Low fluid level in the power steering system**
Low fluid level in the power steering system is the most likely cause of chattering when turning in both directions, as it leads to air being drawn into the pump and hydraulic system.

**20. A — Condition of bushings and bracket integrity**
When inspecting rack-and-pinion mounting, checking bushings and bracket integrity is most important because deteriorated bushings or damaged brackets allow excessive movement of the steering gear, affecting steering precision and feel.

**21. D — Both Technician A and B**
Both technicians are correct. Air bags can develop leaks that prevent proper inflation, and height control valves regulate air flow to maintain proper ride height. Both components should be inspected when diagnosing uneven air suspension height.

**22. C — Worn bushings**
Worn bushings are the most likely cause of excessive movement in the fifth wheel pivot pins. The bushings provide the bearing surface for the pins, and when they wear, the pins develop excessive play.

**23. B — Both Technician A and B**
Both technicians are correct. Leaking shock absorbers cannot properly dampen suspension movement, causing excessive bouncing. Similarly, broken leaf springs can compromise the suspension's ability to properly support the vehicle, resulting in bouncing over bumps.

**24. A — Excessive component movement**
Elongated mounting holes in a truck frame typically indicate that there has been excessive movement of components, causing the holes to wear and stretch over time. This is often due to loose fasteners that allowed components to shift during operation.

**25. D — Reaming the bushings after installation**
Properly reaming the bushings after installation is critical to ensure the correct fit of the kingpin. If the bushings are not properly reamed, the kingpin may bind or have excessive play, affecting steering performance and component life.

**26. C — Both Technician A and B**
Both technicians are correct. Misaligned spring center bolts can affect how the leaf spring flexes and functions, while worn spring hanger bushings allow excess movement in the suspension system. Both conditions can contribute to poor ride quality.

**27. B — Stop-drill the ends of the cracks and install reinforcement plates**
Hairline cracks in a truck frame require stop-drilling the ends of the cracks to prevent further propagation, followed by proper reinforcement plates and welding according to manufacturer specifications to restore frame integrity.

**28. A — Torque rods**
Torque rods (also called radius rods) maintain proper axle spacing and alignment in walking beam suspensions by controlling the fore and aft movement of the axles while allowing the walking beam to pivot properly.

**29. D — Both Technician A and B**
Both technicians are correct. Bent slide rails can impede the movement of a sliding fifth wheel, and debris accumulated in the slide path can also cause binding or difficulty in adjustment. Both issues should be inspected when a fifth wheel is difficult to slide.

**30. C — Cracked or broken mounting brackets**
Cracked or broken mounting brackets on a stabilizer bar indicate that replacement is necessary. The mounting brackets secure the stabilizer bar to the vehicle frame, and if cracked or broken, the stabilizer bar cannot function properly to control body roll.

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