

PRACTICE EXAM 2: A5 SIMULATION

— BRAKES

1. A vehicle's brake fluid in the reservoir appears dark brown. The MOST likely cause is:
 - A. A worn power steering pulley
 - B. Moisture absorption and rubber seal degradation contaminating the fluid
 - C. A worn ball joint
 - D. Air in the clutch hydraulic system

2. Technician A says brake fluid contamination causes seal damage and reduced boiling point. Technician B says fluid color is irrelevant as long as the system functions. Who is correct?
 - A. Technician B only
 - B. Both Technician A and Technician B
 - C. Neither Technician A nor Technician B
 - D. Technician A only

3. The proper procedure for testing brake fluid for moisture content is to:
 - A. Use a brake fluid moisture tester or test strip per the manufacturer's specification
 - B. Apply compressed air to the fluid
 - C. Replace the fluid as a precaution
 - D. Visually inspect for visible contamination only

4. A vehicle's brake fluid has been tested and shows visible copper contamination. The MOST likely cause is:

- A. A worn power steering pulley
- B. A worn ball joint
- C. Corrosion of brake line components, indicating fluid degradation and the need for system flush
- D. Air in the clutch hydraulic system

5. The proper purpose of bench-bleeding a master cylinder before installation is to:

- A. Generate hydraulic pressure for the system
- B. Drive the brake pump during operation
- C. Filter contaminants from the brake fluid
- D. Remove air from the master cylinder before installation, ensuring proper hydraulic operation

6. The proper procedure for bench-bleeding a master cylinder is to:

- A. Apply compressed air to the master cylinder
- B. Mount in a vise, install bleeder tubes, fill with fluid, stroke piston until clear fluid emerges
- C. Replace the master cylinder as a precaution
- D. Visually inspect for visible damage only

7. A vehicle equipped with a quick-take-up master cylinder has been brought in for service. The proper purpose of the quick-take-up valve is to:

- A. Generate hydraulic pressure for the system
- B. Drive the brake pump during operation
- C. Allow rapid initial fluid movement to position the pads, then closing for normal pressure operation

D. Filter contaminants from the brake fluid

8. A vehicle has been brought in with a complaint of brake hose visible damage (cracking, swelling, or surface deterioration). The MOST appropriate action is:

A. Replace the damaged hose with a new component meeting specification

B. Apply additional sealer to the damaged area

C. Reuse the hose after cleaning

D. Apply hard-facing material to the damage

9. The proper purpose of a brake hose is to:

A. Generate hydraulic pressure for the brake system

B. Drive the brake pump during operation

C. Filter contaminants from the brake fluid

D. Allow flexible hydraulic connection between the chassis and the moving suspension/brake assembly

10. A vehicle has been brought in with a complaint that one wheel locks during braking even with light pedal pressure. The MOST likely cause is:

A. A worn power steering pulley

B. A collapsed or restricted brake hose acting as a one-way check valve

C. A worn ball joint

D. Air in the clutch hydraulic system

11. The proper procedure for inspecting a brake hose is to:

A. Apply compressed air to the hose

- B. Replace the hose as a precaution
- C. Inspect for visible damage, swelling, cracking, and verify free flow under pressure
- D. Visually inspect for visible damage only

12. A vehicle's brake line has been damaged. The proper material for replacement is:

- A. Steel brake line meeting the manufacturer's specification, properly flared per the manufacturer's procedure
- B. Copper tubing as a substitute
- C. Plastic tubing as a substitute
- D. Aluminum tubing as a substitute

13. The proper procedure for flaring a brake line is to:

- A. Apply compressed air to the line
- B. Replace the line as a precaution
- C. Visually inspect for visible damage only
- D. Cut the line square, deburr, install fitting, and use a flaring tool to form the manufacturer-specified flare type

14. A vehicle equipped with a metering valve in the front brake circuit has been brought in for service. The proper purpose of the metering valve is to:

- A. Generate hydraulic pressure for the brake system
- B. Hold off front disc brake application until rear drum brake pressure builds, providing balanced braking
- C. Drive the brake pump during operation
- D. Filter contaminants from the brake fluid

15. A vehicle equipped with a combination valve has been brought in for diagnosis. The combination valve typically combines which functions?

- A. Metering valve, proportioning valve, and pressure differential warning switch
- B. Master cylinder and brake booster
- C. Wheel cylinder and proportioning valve
- D. Brake pedal and parking brake

16. The proper procedure for diagnosing a brake warning light related to pressure differential is to:

- A. Apply compressed air to the system
- B. Replace the master cylinder as a precaution
- C. Inspect for hydraulic imbalance between the front and rear circuits, identify the cause, and verify proper operation after repair
- D. Visually inspect for visible damage only

17. A vehicle has been brought in with a complaint of brake fluid leak at a brake line connection. Brake fluid is visible at the fitting. The MOST likely cause is:

- A. A worn power steering pulley
- B. A worn ball joint
- C. Air in the clutch hydraulic system
- D. Damaged flare, improper torque, or damaged flare seat at the connection

18. The proper procedure for repairing a brake line connection leak is to:

- A. Apply additional sealer to the connection

B. Inspect the flare and seat, replace damaged components, install with proper torque, and verify no leak under pressure

C. Apply compressed air to the connection

D. Replace the entire brake system as a precaution

19. A vehicle equipped with disc brakes has been brought in with a complaint of caliper piston seizure. The MOST likely cause is:

A. Corrosion in the caliper bore, contamination of the piston, or hydraulic seal failure causing the piston to bind

B. A worn power steering pulley

C. A worn ball joint

D. Air in the clutch hydraulic system

20. The proper procedure for rebuilding a disc brake caliper is to:

A. Apply compressed air to the caliper

B. Replace the caliper as a precaution

C. Disassemble, inspect bore for damage, install new seals and dust boot, lubricate, and verify operation

D. Visually inspect for visible damage only

21. A vehicle equipped with disc brakes has been brought in for caliper replacement. After installation, the customer reports the brake pedal is low and requires multiple pumps. The MOST likely cause is:

A. A worn power steering pulley

B. A worn ball joint

C. Air in the clutch hydraulic system

D. Air trapped in the new caliper that requires bleeding before normal operation

22. The proper procedure for bleeding the brake system after caliper replacement is to:

- A. Apply compressed air to the caliper
- B. Use the manufacturer-specified bleeding sequence, expel air with fresh fluid, and verify firm pedal
- C. Replace the master cylinder as a precaution
- D. Visually inspect for visible damage only

23. A vehicle has been brought in with a complaint of brake pedal that pulses during braking. Rotor runout is verified within specification. The MOST likely cause is:

- A. Rotor thickness variation (parallelism error) between the two friction surfaces, creating cyclical pressure variation
- B. A worn power steering pulley
- C. A worn ball joint
- D. Air in the clutch hydraulic system

24. The proper procedure for measuring rotor thickness variation is to:

- A. Apply compressed air to the rotor
- B. Replace the rotor as a precaution
- C. Use a brake rotor micrometer to measure thickness at multiple points around the rotor face, comparing maximum and minimum readings
- D. Visually inspect for visible damage only

25. A vehicle has been brought in for brake service. The technician finds the brake rotor has visible heat checks (small surface cracks). The MOST appropriate action is:

- A. Apply hard-facing material to the heat checks

- B. Reuse the rotor with new pads
- C. Apply additional sealer to the cracks
- D. Resurface within specification or replace if material removal would exceed limits

26. The proper procedure for resurfacing a brake rotor is to:

- A. Apply compressed air to the rotor
- B. Mount on a brake lathe, machine to remove minimal material, verify post-machining thickness, and verify within specification
- C. Replace the rotor as a precaution
- D. Visually inspect for visible damage only

27. A vehicle equipped with drum brakes has been brought in with a complaint of grabbing during light brake application. The MOST likely cause is:

- A. Contaminated brake shoes (oil, grease, or brake fluid contamination), out-of-round drum, or hardware misalignment
- B. A worn power steering pulley
- C. A worn ball joint
- D. Air in the clutch hydraulic system

28. The proper procedure for inspecting drum brake hardware is to:

- A. Apply compressed air to the hardware
- B. Replace the hardware as a precaution
- C. Inspect springs for stretch, verify return spring tension, inspect adjuster operation, and verify proper hardware condition
- D. Visually inspect for visible damage only

29. A vehicle's drum brake return springs have been measured and found to be stretched beyond specification. The MOST appropriate action is:

- A. Apply additional tension to the springs
- B. Reuse the springs with assembly lubricant
- C. Apply hard-facing material to the springs
- D. Replace the return springs with new components meeting specification

30. The proper procedure for resurfacing a brake drum is to:

- A. Apply compressed air to the drum
- B. Mount on a brake lathe, machine to remove minimal material, verify post-machining diameter, and verify within specification
- C. Replace the drum as a precaution
- D. Visually inspect for visible damage only

31. A vehicle equipped with a non-serviceable hub-bearing assembly has been brought in for wheel bearing replacement. The proper procedure is to:

- A. Apply compressed air to the bearing
- B. Replace the bearing seals only
- C. Apply hard-facing material to the worn bearing
- D. Replace the entire hub-bearing assembly using the manufacturer-specified procedure

32. The proper procedure for diagnosing wheel bearing noise is to:

- A. Road test under varied conditions, identify the noise characteristics, perform manual inspection for play, and identify the affected bearing

- B. Apply compressed air to the bearings
- C. Replace the bearings as a precaution
- D. Visually inspect for visible damage only

33. A vehicle equipped with ABS has been brought in with a complaint that the ABS system pulses during normal braking. Scan tool data is normal. The MOST likely cause is:

- A. A worn power steering pulley
- B. A worn ball joint
- C. The ABS hydraulic control unit cycling because a sensor reports false wheel lockup, possibly from a damaged tone ring or sensor air gap issue
- D. Air in the clutch hydraulic system

34. The proper procedure for inspecting an ABS tone ring is to:

- A. Apply compressed air to the tone ring
- B. Visually inspect for damage, missing teeth, or contamination, and verify proper sensor air gap if specified
- C. Replace the tone ring as a precaution
- D. Visually inspect for visible damage only

35. A vehicle equipped with ABS has been brought in for brake service. After service, the ABS warning light illuminates. The MOST likely cause is:

- A. A worn power steering pulley
- B. A worn ball joint
- C. Air in the clutch hydraulic system
- D. A wheel speed sensor disconnected during service or air trapped in the ABS hydraulic control unit

36. The proper procedure for completing ABS service after hydraulic work is to:

- A. Verify all sensor connections, perform the manufacturer-specified bleeding procedure (which may include scan tool activation), clear DTCs, and verify operation
- B. Apply compressed air to the ABS unit
- C. Replace the ABS module as a precaution
- D. Replace the brake fluid as the only step

37. A vehicle equipped with an automatic emergency braking (AEB) system has been brought in with a complaint that the system is providing erratic operation. The MOST likely cause is:

- A. A worn power steering pulley
- B. A worn ball joint
- C. A failed forward-facing camera or radar sensor, miscalibrated sensor, or fault in the AEB module
- D. Air in the clutch hydraulic system

38. The proper procedure for verifying AEB sensor calibration is to:

- A. Apply compressed air to the sensor
- B. Park on a level surface, perform the manufacturer-specified calibration with proper targets, and verify operation
- C. Replace the sensor as a precaution
- D. Visually inspect for visible damage only

39. A vehicle equipped with an electronic parking brake has been brought in for rear brake pad replacement. The proper procedure includes:

- A. Apply compressed air to the parking brake

- B. Replace the parking brake as a precaution
- C. Pull the cable manually to release the brake
- D. Use the scan tool service mode to retract the parking brake actuator before pad replacement

40. The proper procedure for adjusting a parking brake on a rear disc brake system equipped with cable-operated parking brake is to:

- A. Apply the parking brake to the specified position, adjust cable tension to specification, verify proper holding
- B. Apply compressed air to the cable
- C. Replace the cable as a precaution
- D. Replace the brake fluid as the only step

41. A vehicle equipped with a parking brake operating through the rear disc brake caliper has been brought in for parking brake adjustment. The MOST likely adjustment point is:

- A. Apply compressed air to the caliper
- B. The cable tension at the cable equalizer or the parking brake lever assembly, per the manufacturer's specification
- C. The rear caliper itself
- D. The master cylinder

42. The proper procedure for verifying parking brake operation is to:

- A. Replace the parking brake as a precaution
- B. Apply compressed air to the parking brake
- C. Apply the brake on a graded surface, verify the vehicle holds, release and verify proper release, and verify the parking brake warning operation
- D. Visually inspect for visible damage only

43. A vehicle has been brought in with a complaint that the brake warning light is illuminated. The MOST likely cause is:

- A. A worn power steering pulley
- B. A worn ball joint
- C. Low brake fluid level, parking brake engaged, hydraulic pressure differential, or brake system fault
- D. Air in the clutch hydraulic system

44. The proper procedure for diagnosing a brake warning light is to:

- A. Verify fluid level, verify parking brake position, retrieve any stored DTCs, and identify the specific cause
- B. Apply compressed air to the warning light circuit
- C. Replace the warning light bulb as a precaution
- D. Replace the brake fluid as the only step

45. A vehicle's brake pedal travel has been measured and found to be excessive (low pedal). The proper diagnostic sequence is to:

- A. Apply compressed air to the master cylinder
- B. Verify fluid level, inspect for hydraulic leaks, check rear drum adjustment if equipped, and bleed the system
- C. Replace the master cylinder as a precaution
- D. Replace the brake fluid as the only step

PRACTICE EXAM 2: A5 SIMULATION

— ANSWER KEY, EXPLANATIONS, AND TASK REMEDIATION

1. B — Moisture absorption and rubber seal degradation contaminating the fluid. Brake fluid darkens over time as it absorbs moisture and rubber seal compounds. The dark color is the diagnostic signature of contamination that lowers the boiling point and damages components. *ASE Task Reference: A5 Domain F — Brake Tools, Fluids, and Service Specifications. Review subsection 5.6.*
2. D — Technician A only. Brake fluid contamination causes seal damage and reduced boiling point, both of which compromise braking safety. Fluid color is a meaningful diagnostic indicator that should not be ignored. *ASE Task Reference: A5 Domain F — Brake Tools, Fluids, and Service Specifications. Review subsection 5.6.*
3. A — Use a brake fluid moisture tester or test strip per the manufacturer's specification. Brake fluid moisture testing requires a specific tester or test strip designed for that purpose. Visual inspection cannot reliably determine moisture content; the tool provides accurate measurement. *ASE Task Reference: A5 Domain F — Brake Tools, Fluids, and Service Specifications. Review subsection 5.6.*
4. C — Corrosion of brake line components, indicating fluid degradation and the need for system flush. Copper contamination indicates the fluid has degraded enough to corrode internal components. The copper level indicates fluid replacement is overdue and a complete flush is required. *ASE Task Reference: A5 Domain F — Brake Tools, Fluids, and Service Specifications. Review subsection 5.6.*
5. D — Remove air from the master cylinder before installation, ensuring proper hydraulic operation. Bench bleeding fills the master cylinder with fluid and removes trapped air before installation. Without bench bleeding, air remains trapped in the master cylinder and is difficult to remove during system bleeding. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
6. B — Mount in a vise, install bleeder tubes, fill with fluid, stroke piston until clear fluid emerges. Bench bleeding requires proper mounting, bleeder tube installation, fluid filling, and piston stroking until air-free fluid emerges. Each step is required for complete air removal. *ASE Task*

Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.

7. C — Allow rapid initial fluid movement to position the pads, then closing for normal pressure operation. The quick-take-up valve allows rapid fluid movement during initial pedal application to quickly position the pads against the rotor. Once the pads contact, the valve closes and normal hydraulic pressure operation begins. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
8. A — Replace the damaged hose with a new component meeting specification. Damaged brake hoses cannot be repaired safely; the high pressures and safety implications require new replacement. Sealants and surface treatments cannot restore damaged hoses. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
9. D — Allow flexible hydraulic connection between the chassis and the moving suspension/brake assembly. Brake hoses provide flexible hydraulic connection between the rigid brake lines on the chassis and the brake calipers on the moving suspension. The flexibility accommodates suspension and steering motion. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
10. B — A collapsed or restricted brake hose acting as a one-way check valve. A collapsed hose can pass fluid in one direction (apply) but restrict flow in the opposite direction (release). The result is one wheel that locks during application and stays applied because pressure cannot release. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
11. C — Inspect for visible damage, swelling, cracking, and verify free flow under pressure. Brake hose inspection requires visual inspection plus flow verification. Visible damage may not indicate internal restriction; flow testing under pressure reveals internal blockage. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
12. A — Steel brake line meeting the manufacturer's specification, properly flared per the manufacturer's procedure. Brake lines must be steel of proper specification and flared correctly. Copper, plastic, and aluminum cannot withstand brake hydraulic pressures and cannot be used as brake line replacements. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
13. D — Cut the line square, deburr, install fitting, and use a flaring tool to form the manufacturer-specified flare type. Brake line flaring requires square cut, deburring, fitting installation in proper order, and flare formation with the correct flare type tool. Each step is critical for proper sealing. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*

14. B — Hold off front disc brake application until rear drum brake pressure builds, providing balanced braking. The metering valve delays front disc brake application until rear drum pressure builds. This balances braking timing between disc and drum brakes during light pedal application. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
15. A — Metering valve, proportioning valve, and pressure differential warning switch. The combination valve typically combines three functions in one unit: metering, proportioning, and pressure differential warning. This consolidates multiple components for efficient packaging. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
16. C — Inspect for hydraulic imbalance between the front and rear circuits, identify the cause, and verify proper operation after repair. Pressure differential warning indicates a hydraulic imbalance between front and rear circuits. The cause must be identified and corrected; the warning resets after the imbalance is resolved. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
17. D — Damaged flare, improper torque, or damaged flare seat at the connection. Brake line connection leaks indicate a sealing problem at the flare interface. Damaged flare, incorrect torque, or damaged seat each prevent proper sealing. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
18. B — Inspect the flare and seat, replace damaged components, install with proper torque, and verify no leak under pressure. Brake line connection repair requires inspection, replacement of damaged parts, proper torque, and pressure verification. Each step is required for permanent repair. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
19. A — Corrosion in the caliper bore, contamination of the piston, or hydraulic seal failure causing the piston to bind. Caliper piston seizure is the diagnostic signature of corrosion or contamination. The piston cannot move freely in the bore, causing the piston to bind and produce uneven braking. *ASE Task Reference: A5 Domain C — Disc Brake Diagnosis and Repair. Review subsection 5.3.*
20. C — Disassemble, inspect bore for damage, install new seals and dust boot, lubricate, and verify operation. Caliper rebuilding requires disassembly, bore inspection, new sealing components, proper lubrication, and operational verification. Each step ensures proper post-rebuild operation. *ASE Task Reference: A5 Domain C — Disc Brake Diagnosis and Repair. Review subsection 5.3.*
21. D — Air trapped in the new caliper that requires bleeding before normal operation. New calipers require bleeding to remove the air present from manufacturing. Without bleeding, the air remains trapped and produces the low pedal symptom. *ASE Task Reference: A5 Domain C — Disc Brake Diagnosis and Repair. Review subsection 5.3.*

22. B — Use the manufacturer-specified bleeding sequence, expel air with fresh fluid, and verify firm pedal. Post-caliper bleeding requires the manufacturer's sequence, fresh fluid, and pedal verification. The sequence ensures complete air removal from the caliper and connecting lines. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
23. A — Rotor thickness variation (parallelism error) between the two friction surfaces, creating cyclical pressure variation. Brake pedal pulse with proper runout indicates parallelism error in the rotor. The thickness variation creates cyclical hydraulic pressure changes that pulse the pedal during braking. *ASE Task Reference: A5 Domain C — Disc Brake Diagnosis and Repair. Review subsection 5.3.*
24. C — Use a brake rotor micrometer to measure thickness at multiple points around the rotor face, comparing maximum and minimum readings. Thickness variation measurement requires multi-point measurement at the same circumference. The difference between maximum and minimum reveals parallelism error. *ASE Task Reference: A5 Domain C — Disc Brake Diagnosis and Repair. Review subsection 5.3.*
25. D — Resurface within specification or replace if material removal would exceed limits. Heat checks indicate thermal damage that has compromised the surface. Resurfacing within specification removes the damaged surface; if material removal would exceed limits, replacement is required. *ASE Task Reference: A5 Domain C — Disc Brake Diagnosis and Repair. Review subsection 5.3.*
26. B — Mount on a brake lathe, machine to remove minimal material, verify post-machining thickness, and verify within specification. Rotor resurfacing requires brake lathe mounting, minimal material removal, post-machining verification, and specification confirmation. Each step ensures proper post-service operation. *ASE Task Reference: A5 Domain C — Disc Brake Diagnosis and Repair. Review subsection 5.3.*
27. A — Contaminated brake shoes (oil, grease, or brake fluid contamination), out-of-round drum, or hardware misalignment. Drum brake grabbing during light application is the diagnostic signature of friction surface or geometry issues. Each cause produces uneven friction development that manifests as grabbing. *ASE Task Reference: A5 Domain B — Drum Brake Diagnosis and Repair. Review subsection 5.2.*
28. C — Inspect springs for stretch, verify return spring tension, inspect adjuster operation, and verify proper hardware condition. Drum brake hardware inspection requires multiple checks since each component contributes to proper operation. Stretched springs, weak return tension, or damaged adjusters each affect performance. *ASE Task Reference: A5 Domain B — Drum Brake Diagnosis and Repair. Review subsection 5.2.*
29. D — Replace the return springs with new components meeting specification. Stretched return springs cannot provide proper shoe return after release. Replacement is required; weakened springs

cause incomplete release and accelerated wear. *ASE Task Reference: A5 Domain B — Drum Brake Diagnosis and Repair. Review subsection 5.2.*

30. B — Mount on a brake lathe, machine to remove minimal material, verify post-machining diameter, and verify within specification. Drum resurfacing requires lathe mounting, minimal material removal, and specification verification. The procedure parallels rotor resurfacing for the same diagnostic and service reasons. *ASE Task Reference: A5 Domain B — Drum Brake Diagnosis and Repair. Review subsection 5.2.*
31. D — Replace the entire hub-bearing assembly using the manufacturer-specified procedure. Non-serviceable hub-bearing assemblies cannot be rebuilt; the bearing is integral to the hub assembly. Replacement of the entire unit per the manufacturer's procedure is the only proper service. *ASE Task Reference: A5 Domain D — Wheel Bearing Diagnosis and Repair. Review subsection 5.4.*
32. A — Road test under varied conditions, identify the noise characteristics, perform manual inspection for play, and identify the affected bearing. Wheel bearing diagnosis requires multiple methods: road test verification, characteristic identification, and manual inspection. Each method reveals different aspects of bearing condition. *ASE Task Reference: A5 Domain D — Wheel Bearing Diagnosis and Repair. Review subsection 5.4.*
33. C — The ABS hydraulic control unit cycling because a sensor reports false wheel lockup, possibly from a damaged tone ring or sensor air gap issue. ABS pulsing during normal braking indicates the system is detecting false wheel lockup. Tone ring damage or sensor air gap issues produce false signals that trigger unnecessary ABS activation. *ASE Task Reference: A5 Domain E — Electronic Brake, Traction, and Stability Control Systems. Review subsection 5.5.*
34. B — Visually inspect for damage, missing teeth, or contamination, and verify proper sensor air gap if specified. ABS tone ring inspection requires visual inspection for physical damage and verification of proper sensor positioning. Both contribute to proper signal generation. *ASE Task Reference: A5 Domain E — Electronic Brake, Traction, and Stability Control Systems. Review subsection 5.5.*
35. D — A wheel speed sensor disconnected during service or air trapped in the ABS hydraulic control unit. Post-service ABS warning typically indicates either sensor disconnection or trapped air in the HCU. Both are common service-related causes that the system detects. *ASE Task Reference: A5 Domain E — Electronic Brake, Traction, and Stability Control Systems. Review subsection 5.5.*
36. A — Verify all sensor connections, perform the manufacturer-specified bleeding procedure (which may include scan tool activation), clear DTCs, and verify operation. ABS service completion requires connection verification, proper bleeding (often requiring scan tool HCU activation), DTC clearing, and operational verification. *ASE Task Reference: A5 Domain E — Electronic Brake, Traction, and Stability Control Systems. Review subsection 5.5.*

37. C — A failed forward-facing camera or radar sensor, miscalibrated sensor, or fault in the AEB module. Erratic AEB operation indicates the system cannot reliably detect forward objects. Camera, radar, calibration, or module faults each produce erratic detection and intervention. *ASE Task Reference: A5 Domain E — Electronic Brake, Traction, and Stability Control Systems. Review subsection 5.5.*
38. B — Park on a level surface, perform the manufacturer-specified calibration with proper targets, and verify operation. AEB sensor calibration requires precise vehicle positioning, proper calibration procedure, and verification. Without proper calibration, the system produces erratic operation. *ASE Task Reference: A5 Domain E — Electronic Brake, Traction, and Stability Control Systems. Review subsection 5.5.*
39. D — Use the scan tool service mode to retract the parking brake actuator before pad replacement. Electronic parking brakes typically engage on rear calipers. Service mode retraction is required to allow piston compression for new pad installation; mechanical retraction can damage the actuator. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
40. A — Apply the parking brake to the specified position, adjust cable tension to specification, verify proper holding. Cable-operated rear disc parking brake adjustment requires the manufacturer's specified position, proper cable tension, and holding verification. Each step ensures proper parking brake function. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
41. B — The cable tension at the cable equalizer or the parking brake lever assembly, per the manufacturer's specification. Cable-operated parking brake adjustment is at the equalizer or lever assembly, depending on system design. The caliper itself is not adjusted; cable tension determines apply force. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
42. C — Apply the brake on a graded surface, verify the vehicle holds, release and verify proper release, and verify the parking brake warning operation. Parking brake operational verification requires graded surface testing, holding verification, release verification, and warning operation verification. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
43. C — Low brake fluid level, parking brake engaged, hydraulic pressure differential, or brake system fault. The brake warning light has multiple potential triggers. Each cause must be checked systematically; the light may indicate any of these conditions or others depending on the system. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*
44. A — Verify fluid level, verify parking brake position, retrieve any stored DTCs, and identify the specific cause. Brake warning light diagnosis requires systematic verification of common causes.

Fluid level, parking brake position, and DTCs together identify the specific issue. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*

45. B — Verify fluid level, inspect for hydraulic leaks, check rear drum adjustment if equipped, and bleed the system. Excessive brake pedal travel diagnosis requires systematic investigation of all causes. Fluid level, hydraulic leaks, rear adjustment, and air all contribute to potential causes. *ASE Task Reference: A5 Domain A — Hydraulic, Power Assist, and Parking Brake Systems. Review subsection 5.1.*