

PRACTICE EXAM 10

1. A transit bus comes in with three complaints: slow air build, a dryer that never purges, and cold-morning freeze-ups. Technician A says replace the compressor. Technician B says inspect the air dryer including its purge and heater. Who is correct?

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

2. A bus loses pressure overnight with the brakes released and parking brakes applied. The most likely leak location is the:

- A. Supply side: reservoirs, supply lines, or valve inlet seals
- B. Brake chamber service diaphragms
- C. Relay valve delivery seals
- D. Foot valve application passages

3. A compressor over-pressurizes the system until the relief valve vents at 150 psi. Technician A says the relief valve is faulty. Technician B says replace the compressor. Who is correct?

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

4. A long articulated bus applies its rear brakes a beat late despite good air supply and foundation brakes. The component intended to prevent this is the:

- A. Safety relief valve
- B. Pressure protection valve
- C. Rear relay valve and its control signal line
- D. Wheel speed sensor

5. A bus's accessories cut out when pressure drops during heavy use while braking stays normal. Technician A says the spring brakes failed. Technician B says the air dryer is saturated. Who is correct?

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

6. A bus pulls hard right when braking. The right slack adjuster is longer than the left, and the right lining is dry and in spec. The cause is:

- A. A glazed right lining
- B. A saturated air dryer
- C. A failed right wheel speed sensor
- D. Mismatched slack adjusters producing unequal force

7. A drum brake measures within diameter limits, the linings have thickness, but braking is weak and the linings are shiny and hard. The cause is:

- A. New linings needing break-in
- B. Glazed linings with reduced friction
- C. An over-tight wheel bearing
- D. A saturated air dryer

8. A wheel equipped with an automatic slack adjuster shows excessive pushrod stroke. Technician A says manually back-adjust it. Technician B says replace the drum. Who is correct, given the correct action is to diagnose the cause?

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

9. A bus pulls left when braking. The left chamber is a Type 24 and the right is a Type 30. The cause of the pull is:

- A. A saturated air dryer
- B. Mismatched chamber types producing unequal force
- C. A glazed left lining
- D. An over-purging air dryer

10. Grease on the inboard face of a brake plus oil-soaked linings on that wheel, with the bus pulling away from that side, traces to a:

- A. Wrong brake chamber type
- B. Failed wheel seal leaking onto the brake
- C. Low governor cut-out
- D. Saturated air dryer purge valve

11. A combination chamber's parking brake won't release with the knob in and pressure at 38 psi. The correct first action is to:

- A. Restore adequate system pressure and recheck
- B. Replace the combination chamber

- C. Cage the spring brake
- D. Replace the parking control valve

12. A seized, corroded spring brake chamber must be:

- A. Heated to free the clamp band
- B. Replaced as a complete sealed unit
- C. Disassembled and rebuilt
- D. Pried open to inspect the spring

13. A parked bus has its spring brakes applied, and a technician presses the service pedal during a test. The feature preventing destructive force stacking is:

- A. The low-pressure warning device
- B. The air dryer purge cycle
- C. The wheel speed sensor
- D. Anti-compounding via a double check valve

14. A driver reports the yellow parking knob popped out by itself at a terminal. The technician should first suspect:

- A. A failed steering angle sensor
- B. A glazed front lining
- C. A cracked brake rotor
- D. A system air leak dropping pressure to the auto-apply point

15. A bus's parking brake holds at full pressure but drags during operation; pressure is adequate and the foundation brake is free. The cause is:

- A. A small leak or restriction in the spring-brake circuit
- B. An over-tight wheel bearing
- C. A saturated air dryer
- D. A failed ABS modulator

16. An intermittent ABS lamp appears only over rough pavement and clears on smooth roads. The cause is most likely:

- A. A saturated air dryer cartridge
- B. An over-tight wheel bearing
- C. A loose or corroded sensor connector or chafed wiring
- D. A glazed brake lining

17. A scan tool reports a wheel speed sensor circuit fault. Bench testing shows good sensor output but an excessive sensor air gap. The correct action is to:

- A. Replace the sensor anyway
- B. Set the sensor air gap to specification
- C. Clear the code and release the bus
- D. Increase the governor cut-out

18. On an icy morning a bus repeatedly loses grip on the drive wheels pulling away from stops. The intervening system, and method, is:

- A. ABS caging the drive-axle spring brakes
- B. ATC braking the spinning wheel and/or cutting engine torque
- C. The pressure protection valve closing accessories
- D. ESC raising the compressor cut-out

19. A bus skids and rotates off the driver's intended path during an evasive maneuver, and selective wheel braking corrects it. The system responsible is:

- A. The air dryer purge circuit
- B. Automatic Traction Control during acceleration
- C. The low-pressure warning device
- D. Electronic Stability Control using yaw and steering input

20. A hydraulically braked shuttle has a pedal that slowly sinks under steady pressure with no external leak and no air in the lines. The fix is to:

- A. Replace the master cylinder for internal bypass
- B. Bleed the system again
- C. Replace the wheel bearings
- D. Replace the air dryer cartridge

21. A shuttle's pedal is spongy and improves after several pumps. There are no external leaks. The correct action is to:

- A. Replace the master cylinder
- B. Adjust the wheel bearings
- C. Replace the brake rotors
- D. Bleed the hydraulic system to remove trapped air

22. A shuttle's brake fluid is dark and tests high for moisture, with a soft pedal on long downgrades that recovers when cool. This indicates:

- A. An over-tight wheel bearing
- B. A seized caliper guide pin
- C. A saturated air dryer

D. Fluid fade from moisture-contaminated fluid

23. Engine oil was accidentally added to a hydraulic brake reservoir. The correct repair is to:

- A. Bleed the system and top off with correct fluid
- B. Replace affected rubber components and flush the system
- C. Add a seal conditioner
- D. Drive the bus until the contamination clears

24. An air-over-hydraulic bus has weak braking. The air supply is good and the actuator receives full air, but hydraulic output is low. The fault is:

- A. On the air supply side
- B. In the governor
- C. In the air dryer
- D. On the hydraulic side or in the actuator's hydraulic section

25. A drive-axle wheel end runs very hot. The brake is not dragging and end play is minimal. The cause is most likely:

- A. An over-tight (preloaded) wheel bearing
- B. A contaminated lining
- C. A saturated air dryer
- D. An under-adjusted bearing with excess play

26. A technician adjusts a wheel bearing and measures end play far above spec with a dial indicator. This means the bearing is:

- A. Preloaded too tight

- B. Under-adjusted (too loose) and must be reset
- C. The wrong chamber type
- D. Correctly within spec

27. A wheel end makes a growling noise that rises with road speed and changes during cornering, with no change when braking. This points to:

- A. A glazed brake lining
- B. A worn wheel bearing
- C. A leaking foot valve exhaust
- D. A saturated air dryer

28. During the air-brake pre-trip, drawing down pressure should sound the warning near 60 psi and auto-apply the spring brakes lower. If the warning never sounds, the technician should suspect:

- A. A correctly purging air dryer
- B. An over-adjusted wheel bearing
- C. A glazed brake lining
- D. A failed low-pressure warning device

29. A technician suspects a leak but isn't sure which half of the system. The best procedure is to:

- A. Replace the foot valve
- B. Replace the air dryer cartridge
- C. Perform timed pressure-drop tests with brakes released and applied
- D. Adjust the wheel bearings

30. Governor cut-out must be verified accurately before delivery. The technician should use:

- A. The dashboard air gauge alone
- B. A feeler gauge at the chamber
- C. A known-accurate test gauge on the reservoir
- D. A dial indicator on the hub

31. A technician records each wheel's stroke, lining thickness, drum/rotor dimensions, leak rates, the limits compared against, and the actions taken. This documentation:

- A. Creates a maintenance history and proves compliance
- B. Replaces the need for measurement tools
- C. Allows skipping the next pre-trip
- D. Substitutes for the manufacturer's specifications

32. A bus has weak braking with full air pressure and no leaks. To find the fault, the technician walks the force-multiplication chain and checks:

- A. The brake fluid moisture content
- B. Chamber size, slack adjuster length/adjustment, and pushrod stroke
- C. The ABS modulator wiring
- D. The air dryer purge valve

33. A dragging brake has blued and heat-checked a drum and glazed the linings. The root issue is:

- A. A correctly functioning air dryer
- B. Continuous friction from the brake failing to fully release
- C. An over-accurate test gauge
- D. A properly adjusted slack adjuster

34. A bus loses the primary brake circuit due to a ruptured line. The driver reports it still slows with a longer stopping distance and a warning light. This confirms:

- A. Total loss of all service braking
- B. Only the parking brake remains
- C. The ABS modulator is stopping the bus
- D. The secondary circuit still provides braking

35. A constant air leak is heard at the dryer exhaust after the system is fully charged and holding pressure. The cause is most likely a:

- A. Purge valve stuck open
- B. Worn compressor ring
- C. Saturated supply reservoir
- D. Failed wheel speed sensor

36. A bus's brakes apply and release too slowly at the far axle to meet timing requirements. The component designed to fix this is the:

- A. Relay valve sourcing and venting air locally
- B. Safety relief valve
- C. Low-pressure warning device
- D. Wheel speed sensor

37. A bus on an air disc brake shows uneven inboard/outboard pad wear and slight pull, with no slack adjuster present. The cause is:

- A. A mismatched slack adjuster
- B. A caliper seized on its guide pins, not floating
- C. A saturated air dryer

D. An over-tight wheel bearing

38. A modern air-braked transit bus arrives with the ABS warning lamp on. The bus cannot be released with stability/antilock inoperative beyond allowed limits because:

- A. The compressor will not build pressure
- B. The spring brakes are disabled
- C. The wheel bearings will overheat
- D. These systems are safety-critical and must be repaired

39. A bus pulls toward the right on a hydraulic disc system; the right caliper piston is seized. The bus pulls right because:

- A. The right brake grips harder
- B. The seized piston increases right braking
- C. The pull is unrelated to which caliper is seized
- D. The working left brake applies force while the seized right does little

40. A driver complains of a rumble that worsens loaded and in turns but is silent when coasting straight and light. The source is most likely:

- A. A glazed lining
- B. A worn wheel bearing under load
- C. A leaking relay valve
- D. A saturated air dryer

41. A bus is found with one brake chamber a different type than its axle mate. The technician should:

- A. Adjust the governor to compensate

- B. Increase the larger chamber's pressure
- C. Replace it with the matching type to restore equal braking
- D. Replace the air dryer cartridge

42. A technician confirms a brake is held applied by trapped air that won't exhaust on release, not a mechanical bind. The first component to check is the:

- A. Relay or quick-release valve exhaust path
- B. Wheel bearing adjustment
- C. Brake drum diameter
- D. Lining coefficient of friction

43. A compressor never unloads and pressure climbs until the relief valve vents. The fault is in the:

- A. Relief valve, which should be replaced
- B. Brake chamber diaphragm
- C. Governor or compressor unloader
- D. Wheel speed sensor circuit

44. A technician explains why high-speed stops generate far more heat than low-speed stops. The correct principle is that kinetic energy rises with the:

- A. Cube of the vehicle's weight
- B. Square root of the speed
- C. Square of the speed
- D. Governor cut-out pressure

45. A bus equipped with ABS faults and reverts to normal braking. A driver asks if the bus is unsafe to stop. The accurate answer is:

- A. No, full normal braking remains; only antilock is lost
- B. Yes, the bus has lost all braking
- C. Yes, only the parking brake works
- D. No, because ABS doubled the application pressure

46. A wet-tank drain releases significant water daily despite a good compressor. The cause is most likely a:

- A. Glazed brake lining
- B. Saturated or failing air dryer
- C. Over-tight wheel bearing
- D. Failed wheel speed sensor

47. A combination chamber loses its spring-section air through a torn diaphragm. The expected symptom is:

- A. Faster air dryer purging
- B. Higher governor cut-out
- C. A parking brake that drags or applies as air bleeds off
- D. Reduced rotor runout

48. Brake pulsation felt rhythmically with wheel rotation on an air disc brake should first prompt measurement of:

- A. Pushrod stroke
- B. Governor cut-out pressure
- C. Rotor runout and thickness variation
- D. Brake fluid moisture content

49. After a brake job, clearing ABS codes and confirming the self-test passes with a normal lamp is important because it:

- A. Raises the governor cut-out
- B. Verifies the repair corrected the fault and the system is functional
- C. Repacks the wheel bearings
- D. Increases reservoir capacity

50. A technician is about to service a foundation brake with a spring chamber. The correct FIRST action is to:

- A. Secure the vehicle, chock the wheels, and prepare to cage the spring
- B. Retrieve the ABS trouble codes
- C. Measure the rotor runout
- D. Drain the brake fluid reservoir

51. A bus drags its brakes at all wheels and chambers exhaust slowly on release. The most likely shared cause is the:

- A. A single seized slack adjuster
- B. One contaminated lining
- C. Foot valve not exhausting properly
- D. A worn wheel bearing

52. Technician A says oil at the dryer exhaust is harmless. Technician B says recurring oil means only the cartridge needs replacing. Who is correct, given the oil source must be corrected first?

- A. Technician A only
- B. Technician B only
- C. Both technicians

D. Neither technician

53. A governor verified at 145 psi cut-out against a 125 psi spec should prompt the technician to:

- A. Replace the safety relief valve
- B. Replace the air dryer cartridge
- C. Adjust or replace the governor to correct cut-out
- D. Adjust the wheel bearings

54. A bus with adequate pressure has a parking brake that drags at all wheels; the knob is in and a shared spring-circuit valve is restricted. The cause is:

- A. A single wheel's seized foundation brake
- B. A glazed lining on one wheel
- C. A restriction in the shared spring-brake supply
- D. A worn wheel bearing

55. A technician measures a drum's inside diameter and finds it exceeds the stamped maximum. The correct action is to:

- A. Replace the drum
- B. Machine it oversize and reuse it
- C. Continue using it until linings wear
- D. Reverse it and reuse the other side

56. A bus builds air slowly with good compressor output, no leaks, and a dryer that never "pops." The cause is most likely a:

- A. Worn brake drum

- B. Glazed brake lining
- C. Restricted air dryer or failed purge
- D. Failed wheel speed sensor

57. A failed wheel seal is a two-fold failure because it:

- A. Raises cut-out and lowers cut-in
- B. Speeds purging and increases capacity
- C. Contaminates the brake and starves the bearing
- D. Cages the spring and applies the parking brake

58. A bus loses pressure rapidly only when the brakes are applied and held. Technician A says check chamber diaphragms and relay delivery seals. Technician B says check the supply reservoir. Who is correct?

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

59. A wheel bearing adjusted too loose will exhibit:

- A. Excessive end play and a wandering brake
- B. Rapid overheating from preload
- C. Constant air dryer purging
- D. A higher governor cut-out

60. A bus reaches cut-out, purges, holds pressure, brakes evenly, and passes both leak tests. The technician concludes the:

- A. Wheel bearings are over-tight
- B. Linings are glazed
- C. ABS modulator has failed
- D. Air supply, dryer, and service systems are functioning properly

Answer Key & Full Answer Explanations

1. A — Technician B is correct: slow build, no purge, and freeze-ups all point to the air dryer, including its purge valve and heater. Technician A is wrong because the compressor output is not implicated by these dryer-specific symptoms.
2. A — Losing pressure overnight with the brakes released is a static, supply-side leak in the reservoirs, supply lines, or valve inlet seals. Application-side components only leak when the brakes are applied.
3. D — Both are wrong: the relief valve venting at 150 psi is protecting against over-pressure caused by a governor or unloader fault, so neither replacing the relief valve nor the compressor addresses the cause. The governor and unloader must be diagnosed.
4. C — A "beat late" rear application on a long bus is what the rear relay valve and its control signal line exist to prevent by sourcing and venting air locally. The relief valve, protection valve, and sensor do not affect application timing.
5. D — Both are wrong: accessories cutting out as pressure drops while braking stays normal is the pressure protection valve working as designed, not a failed spring brake or saturated dryer. It is intended behavior.
6. D — A dry, in-spec right lining but a longer right slack adjuster means unequal leverage and braking force, causing the pull. A glazed lining, saturated dryer, or sensor fault is not indicated.
7. B — In-spec drum and lining thickness with weak braking and a shiny, hard surface indicates glazing, which lowers the friction coefficient. New linings, a bearing, or a dryer would not produce this.

8. C — Neither technician is correct: excessive stroke on an automatic slack adjuster is a symptom to diagnose, not a clearance to manually back-adjust (Technician A) and not a drum problem (Technician B). The cause must be diagnosed.
9. B — A Type 24 on one side and a Type 30 on the other produce unequal pushrod force at the same pressure, causing the pull. A dryer or glazed lining would not create this specific imbalance.
10. B — Grease on the inboard brake face, oil-soaked linings, and pull away from that side point to a failed wheel seal leaking onto the brake. A chamber type, cut-out, or dryer purge valve is unrelated.
11. A — At 38 psi the system pressure is too low to hold the springs released, so the parking brake correctly stays applied. Restoring pressure and rechecking is the first action; the chamber and valve are likely fine.
12. B — A seized, corroded spring chamber is replaced as a complete sealed unit because the power spring stores lethal energy. Heating, disassembling, or prying it open can release the spring fatally.
13. D — Anti-compounding via a double check valve prevents the spring and service forces from stacking on the same foundation brake during the test. The warning device, purge cycle, and sensor have no such role.
14. D — A parking knob popping out by itself indicates a system air leak dropping pressure to the auto-apply point. A sensor, lining, or rotor fault is unrelated.
15. A — A parking brake that drags with adequate pressure and a free foundation brake points to a small leak or restriction in the spring-brake circuit. A bearing, dryer, or modulator is unrelated.
16. C — An ABS fault appearing only over rough pavement and clearing on smooth roads points to a loose or corroded connector or chafed wiring disturbed by vibration. A dryer, bearing, or lining would not cause an intermittent electronic fault.
17. B — With a good sensor but an excessive air gap, the fix is to set the sensor air gap to specification. Replacing the good sensor or clearing the code without correction would not fix the gap.

18. B — Drive-wheel grip loss pulling away is addressed by ATC braking the spinning wheel and/or cutting engine torque. ABS, the protection valve, and cut-out changes do not address spin.

19. D — Skidding off the intended path corrected by selective wheel braking is Electronic Stability Control using yaw rate and steering input. ATC addresses acceleration, not directional stability.

20. A — A pedal that slowly sinks under steady pressure with no external leak and no air is internal master-cylinder bypass, requiring replacement. Bleeding removes air but cannot fix internal seal bypass.

21. D — A spongy pedal that improves after pumping indicates compressible air trapped in the lines, corrected by bleeding the system. A master cylinder, bearing, or rotor fault would not firm up with pumping.

22. D — Dark, high-moisture fluid with a soft pedal on downgrades that recovers when cool is fluid fade (vapor lock) from moisture-contaminated fluid. A bearing, guide pin, or dryer is unrelated.

23. B — Engine oil in a brake reservoir is petroleum contamination, which swells and destroys rubber seals, so affected components must be replaced and the system flushed. Bleeding, conditioner, or driving cannot reverse it.

24. D — Good air supply and full air to the actuator but low hydraulic output places the fault on the hydraulic side or in the actuator's hydraulic section. The air side, governor, and dryer are not implicated.

25. A — A hot wheel end with no dragging brake and minimal end play indicates an over-tight (preloaded) bearing with no lubrication clearance. A loose bearing would show excessive play, and a lining or dryer is unrelated.

26. B — End play far above spec means the bearing is under-adjusted (too loose) and must be reset to the specified small end play. Excessive play hammers the bearing and damages the seal.

27. B — A growl that rises with road speed and changes during cornering, unaffected by braking, is the signature of a worn wheel bearing. Brake noise changes with application; a foot valve leak or dryer would not produce this.

28. D — If the low-pressure warning never sounds during draw-down, the low-pressure warning device has failed and must be repaired. A purging dryer, bearing, or lining would not affect the warning.

29. C — To localize a leak, the technician performs timed pressure-drop tests with the brakes released and applied, since each isolates a different half of the system. Replacing components blindly is not diagnosis.

30. C — Governor cut-out must be verified with a known-accurate test gauge on the reservoir, because the dashboard gauge is not accurate enough for setting specifications. A feeler gauge or dial indicator measures other things.

31. A — Recording readings, the limits compared against, and actions taken creates a maintenance history and proves compliance. It does not replace tools, specifications, or the next pre-trip.

32. B — Weak braking with full air and no leaks means a break in the mechanical force-multiplication chain, so the technician checks chamber size, slack adjuster length/adjustment, and pushrod stroke. Fluid moisture, ABS wiring, and the dryer are unrelated.

33. B — A drum blued and heat-checked with glazed linings results from continuous friction because the brake is failing to fully release (dragging). A healthy dryer, accurate gauge, or correct slack adjuster would not cause this.

34. D — Reduced but present braking with a longer stopping distance and a warning light after losing the primary circuit confirms the secondary circuit still provides braking. It is not total loss or parking-brake-only.

35. A — A constant leak at the dryer exhaust after full charge and holding pressure indicates a purge valve stuck open, venting continuously. A worn ring, saturated tank, or failed sensor would not produce a steady exhaust leak.

36. A — The relay valve sources and vents air locally at the far axle so the brakes apply and release fast enough to meet timing requirements. The relief valve, warning device, and sensor do not affect application timing.

37. B — Uneven inboard/outboard pad wear and pull on a brake with no slack adjuster point to a caliper seized on its guide pins and not floating. There is no slack adjuster on an air disc brake to blame.

38. D — An air-braked bus cannot be released with stability/antilock inoperative beyond allowed limits because these systems are safety-critical and must be repaired. The fault does not affect compressor build, spring brakes, or bearings.

39. D — A seized right caliper piston means the right brake does little, so the working left brake's force pulls the bus toward the right. Pull always reflects unequal force, never increased braking on the seized side.

40. B — A rumble that worsens loaded and in turns but is silent coasting light is a worn wheel bearing under load. A lining, relay valve, or dryer would not behave this way.

41. C — A mismatched chamber must be replaced with the matching type to restore equal braking force and prevent pull. Adjusting the governor, raising pressure, or replacing the dryer does not fix the mismatch.

42. A — When a brake is held applied by trapped air rather than a mechanical bind, the first component to check is the relay or quick-release valve exhaust path. Bearing, drum, and lining are not air-release components.

43. C — A compressor that never unloads until the relief valve vents has a fault in the governor or compressor unloader, not the relief valve. The relief valve is protecting the system; replacing it ignores the cause.

44. C — High-speed stops generate far more heat because kinetic energy rises with the square of the speed, so doubling speed quadruples the energy. It is not tied to the cube of weight, the square root of speed, or cut-out.

45. A — When ABS faults it reverts to normal braking, so full normal braking remains and only the antilock function is lost. The bus is not unsafe to stop, and ABS does not double application pressure.

46. B — Recurring daily water in the wet tank despite a good compressor points to a saturated or failing air dryer no longer removing moisture. A lining, bearing, or sensor fault is unrelated to water accumulation.

47. C — A torn spring-section diaphragm cannot hold the air that keeps the spring released, so the parking brake drags or applies as air bleeds off. It does not affect purge timing, cut-out, or rotor runout.

48. C — Pulsation felt rhythmically with wheel rotation on an air disc brake should first prompt measurement of rotor runout and thickness variation. It is not a stroke, governor, or fluid issue.

49. B — Clearing codes and confirming the self-test passes with a normal lamp verifies the repair corrected the fault and the system is functional. It does not change cut-out, repack bearings, or add reservoir capacity.

50. A — Safety comes before service, so the first action is to secure the vehicle, chock the wheels, and prepare to cage the spring. Pulling codes, measuring runout, or draining fluid are unrelated to neutralizing the stored energy.

51. C — Dragging at all wheels with slow chamber exhaust on release points to a shared component, the foot valve not exhausting properly. A single seized slack adjuster, one contaminated lining, or one worn bearing would affect only one wheel.

52. D — Neither technician is correct: oil at the dryer exhaust is not harmless (Technician A), and replacing only the cartridge leaves the source uncorrected (Technician B). The compressor or oil-feed source must be corrected first.

53. C — A cut-out reading 145 psi against a 125 psi spec means the governor is out of adjustment and must be adjusted or replaced. Replacing the relief valve, dryer cartridge, or adjusting bearings does not fix the governor.

54. C — Dragging at all wheels with the knob in and a restricted shared spring-circuit valve points to a restriction in the shared spring-brake supply preventing full release. A single wheel's bind, one glazed lining, or a bearing would not affect all wheels.

55. A — A drum exceeding its stamped maximum diameter must be replaced because it is too thin to handle braking heat. Machining oversize, continuing use, or reversing it are unsafe.

56. C — Slow build with good compressor output, no leaks, and a dryer that never "pops" points to a restricted air dryer or failed purge. A worn drum, glazed lining, or failed sensor would not affect build.

57. C — A failed wheel seal is two-fold because it contaminates the brake friction surface and starves the bearing of lubricant. It does not change cut-out/cut-in, speed purging, or cage the spring.

58. A — Technician A is correct: rapid loss only when applied and held is an application-side leak, so the chamber diaphragms and relay delivery seals are the suspects. Technician B is wrong because the supply reservoir leaks with the brakes released.

59. A — A bearing adjusted too loose exhibits excessive end play and a wandering brake, hammering the bearing and seal. Rapid overheating comes from preload, not looseness, and the dryer/cut-out are unrelated.

60. D — Reaching cut-out, purging, holding pressure, braking evenly, and passing both leak tests indicates the air supply, dryer, and service systems are functioning properly. It does not indicate over-tight bearings, glazed linings, or a failed modulator.