

PRACTICE EXAM 23

1. During an initial ADAS inspection, a technician should look for which condition that could affect system performance?

- A. A factory-original windshield with no chips in the camera's view
- B. Tire pressures set correctly to the door-placard specification
- C. Add-on, modified, or previously repaired components near a sensor
- D. A clean, undamaged emblem mounted in front of the radar sensor

2. Before servicing an ADAS concern, researching service campaigns and recalls matters because:

- A. Recalls physically aim the radar sensor to the vehicle thrust line
- B. A related recall or bulletin may already address the customer concern
- C. Campaign data sets the steering angle sensor's stored zero-point
- D. Recall research lowers the system voltage required for calibration

3. A technician finds an aftermarket bull bar mounted in front of a forward radar. The FIRST action should be to:

- A. Increase the radar's gain setting to see through the bull bar
- B. Calibrate the radar with the bull bar left in its installed position
- C. Disable the forward collision system to clear the customer concern
- D. Evaluate and address the obstruction before any calibration

4. When verifying a customer concern, conducting a vehicle pre-scan helps the technician primarily by:

- A. Physically aiming each sensor to the vehicle's centerline reference
- B. Revealing stored DTCs and the equipment/options actually present

- C. Replacing the need for any functional road test after the repair
- D. Calibrating all ADAS sensors automatically before work begins

5. A technician must determine whether a vehicle has a particular ADAS feature before quoting service. The BEST way to confirm equipped options is to:

- A. Assume the feature is present because the trim level usually includes it
- B. Verify build data, RPO/option codes, or scan-tool reported configuration
- C. Ask the customer whether they believe the feature is installed
- D. Look only at the dashboard for an illuminated feature indicator lamp

6. Which finding during inspection would MOST likely affect ADAS performance and require attention before calibration?

- A. A correctly torqued radar bracket with no visible damage present
- B. A windshield with the camera area clean and free of any stickers
- C. Tire sizes that all match the original OEM specification exactly
- D. A bumper cover repainted with thick non-OEM paint over the radar

7. A technician researching an ADAS intersystem concern must consider that the ADAS may interact with which other vehicle systems?

- A. Only the audio and infotainment systems on the vehicle network
- B. Only the HVAC and interior lighting circuits within the cabin
- C. Braking, steering, powertrain, restraints, and TPMS systems
- D. Only the windshield washer and wiper control circuits up front

8. A pre-scan reveals a stored DTC in the restraints (SRS) module on a vehicle with a forward-collision concern. The technician should:

- A. Ignore the SRS code because it is unrelated to any ADAS function
- B. Clear the SRS code and proceed directly to the radar calibration
- C. Replace the airbag control module before scanning any other system
- D. Investigate it, since ADAS and restraints can interact on the network

9. When inspecting for components that could affect ADAS, a technician should specifically check for:

- A. A correctly mounted, factory-position sensor with no modifications
- B. Customized, inoperative, or previously repaired components near sensors
- C. An undamaged bumper cover with the original factory paint finish
- D. A properly inflated set of tires matching the placard specification

10. A technician needs the exact pre-calibration conditions for a specific vehicle. The authoritative source is:

- A. A generic aftermarket quick-reference chart covering many vehicles
- B. The recollection of a colleague who serviced a similar vehicle once
- C. An online forum thread describing one owner's unrelated experience
- D. The OEM service information for that exact make, model, and year

11. A technician finds a technical service bulletin (TSB) addressing the exact ADAS symptom reported. The TSB is valuable because it:

- A. May provide a known diagnostic path or software fix for the concern
- B. Physically aims the radar sensor to the vehicle's thrust line
- C. Sets the steering angle sensor zero-point during the procedure
- D. Eliminates the need for any functional road test after repair

12. Before calibrating, a technician confirms the vehicle has not been involved in unrepaired collision damage near a sensor. This matters because:

- A. Collision history changes the radar sensor's operating frequency band
- B. Damage history determines the camera's white-balance reference value
- C. Hidden structural damage can shift sensor mounting and aim references
- D. Collision history sets the ultrasonic array's maximum detection range

13. A technician should use scan-tool freeze-frame data during ADAS diagnosis to:

- A. Physically reposition the radar sensor's mounting bracket angle
- B. Calibrate the forward camera to the windshield-bonded bracket
- C. Set the steering angle sensor's zero-point before an alignment
- D. Capture the conditions present when the DTC was originally set

14. A customer reports an ADAS warning that is not currently active. The technician's BEST approach is to:

- A. Release the vehicle since the warning is not currently displayed
- B. Retrieve stored and history DTCs and review freeze-frame data
- C. Replace the most expensive ADAS sensor as a precautionary measure
- D. Clear all codes and tell the customer the concern is fully resolved

15. A technician finds non-OEM tires of a different size than specification during inspection. Regarding ADAS, this matters because:

- A. Incorrect tire size can alter ride height and the speed signal
- B. Tire brand changes the radar sensor's internal operating frequency
- C. Tire size determines the camera's white-balance during capture

D. Non-OEM tires reset the steering angle sensor on each key cycle

16. When a vehicle has multiple ADAS DTCs across several modules, the technician should FIRST:

A. Replace each module that reported a code, one at a time, in order

B. Analyze the codes together to find a common cause or network fault

C. Clear all the codes and release the vehicle to monitor for return

D. Calibrate every sensor before retrieving or analyzing any codes

17. A technician must decide whether bi-directional scan-tool controls are appropriate during diagnosis. These controls are used to:

A. Permanently rewrite a sensor's internal hardware identification code

B. Replace the need for any physical inspection of the sensor mounting

C. Command a component or actuator to verify its operation and response

D. Increase the vehicle's battery voltage above the charging system limit

18. A technician inspects a vehicle and finds an add-on accessory drawing power from an ADAS-related circuit. The concern is that the accessory may:

A. Improve the ADAS circuit's voltage stability during calibration

B. Introduce electrical interference or voltage drop affecting the system

C. Permanently raise the radar sensor's rated maximum detection range

D. Reset the steering angle sensor's zero-point on every key cycle

19. Before beginning service, the technician verifies the customer concern can be reproduced. Verifying the concern first is important because it:

A. Physically aims the radar sensor to the vehicle's centerline first

- B. Calibrates the forward camera before any diagnostic work begins
- C. Sets the steering angle sensor zero-point before the road test
- D. Confirms the actual symptom and prevents misdirected repairs

20. A technician researching a concern should review the vehicle's service history primarily to:

- A. Determine the camera's white-balance reference for the calibration
- B. Set the radar sensor's operating frequency for the specific vehicle
- C. Establish the ultrasonic array's maximum detection range value
- D. Identify prior repairs or patterns relevant to the current concern

21. A technician finds that a previous repair relocated a radar sensor's bracket slightly. The MOST appropriate response is to:

- A. Leave the bracket as found since any position works for radar
- B. Increase the radar gain to compensate for the bracket position
- C. Restore the bracket to its specified position and recalibrate
- D. Disable the radar system to avoid dealing with the bracket issue

22. When ADAS interacts with the braking system (as in AEB), a fault in which system could affect ADAS operation?

- A. Only the infotainment system on the high-speed network bus
- B. Only the interior cabin lighting control circuit near the dash
- C. The braking system, since AEB commands brake application
- D. Only the windshield washer fluid level sensor in the reservoir

23. A technician notes that half of the L4 test questions reference the composite vehicle. The composite vehicle reference is used because it:

- A. Lists the certification's passing score for each tested content domain
- B. Provides a standardized, manufacturer-neutral design for the questions
- C. Serves as the printed answer key for all radar-related test items
- D. Details the exact part numbers for one specific production vehicle

24. A technician finds an ADAS DTC indicating a sensor is "not configured" after a module replacement. This typically means the module:

- A. Has an internal hardware failure and must be returned immediately
- B. Requires a complete 12-volt battery replacement before it will work
- C. Has an open circuit in the wiring harness feeding the sensor
- D. Needs configuration/programming or calibration for the vehicle

25. During inspection, a technician should verify the windshield is OEM-equivalent when it houses a camera because:

- A. Non-OEM glass always changes the radar sensor's beam spread pattern
- B. Aftermarket glass resets the steering angle sensor on each key cycle
- C. Non-OEM glass lowers the radar module's supply voltage below spec
- D. Glass optical quality and bracket position can affect camera function

26. A technician finds a recall open on a vehicle's ADAS module software. The appropriate action regarding the recall is to:

- A. Address the recall per the manufacturer's published recall procedure
- B. Ignore the recall because it is unrelated to the current concern
- C. Disable the ADAS system to avoid triggering the recalled software
- D. Charge the customer to overwrite the recalled software immediately

27. A technician should document the pre-scan results because the documentation:

- A. Physically aims the radar sensor to the vehicle thrust line reference
- B. Calibrates the forward camera to its windshield-bonded bracket
- C. Sets the steering angle sensor zero-point before the alignment
- D. Establishes a baseline so repair-caused faults can be identified

28. When an ADAS concern involves the steering system (as in lane centering), the technician should recognize that a fault in the steering angle sensor could:

- A. Raise the radar sensor's maximum rated detection range value
- B. Lower the camera module's rated maximum operating temperature
- C. Increase the ultrasonic array's detection range beyond its rating
- D. Affect lane-centering operation that depends on steering data

29. A technician finds conflicting information between an aftermarket database and the OEM service information. The technician should:

- A. Follow the OEM service information as the authoritative source
- B. Average the two sources to reach a reasonable middle approach
- C. Use whichever source is faster to access in the shop bay
- D. Choose the aftermarket database because it covers more vehicles

30. Before calibration, a technician confirms no active DTCs remain in related systems. Pre-existing faults matter because they can:

- A. Raise the radar sensor's maximum rated detection range value
- B. Lower the camera module's rated maximum operating temperature
- C. Prevent calibration or indicate a fault that must be fixed first

D. Reset the steering angle sensor zero-point on each key cycle

31. A technician inspecting a vehicle should check whether the forward camera's view is obstructed by which condition?

A. A correctly positioned, undamaged emblem ahead of the radar sensor

B. A properly inflated set of tires matching the placard specification

C. A correctly torqued radar mounting bracket with no visible damage

D. Aftermarket tint film, stickers, or debris in the camera's field

32. A technician must research whether a specific vehicle uses static, dynamic, or both calibration methods. The correct source is:

A. A generic scan-tool quick-help menu covering many vehicle makes

B. Another shop's repair order for a loosely similar vehicle model

C. The tire manufacturer's load and inflation specification chart

D. The OEM service information for that exact make, model, and year

33. A technician finds that a customer's add-on lift kit changed the vehicle's ride height. Regarding ADAS, the technician should:

A. Recognize that altered ride height affects sensor pitch and aim

B. Ignore the lift since ride height never affects any ADAS sensor

C. Increase the radar gain to compensate for the new ride height

D. Reset the steering angle sensor to correct for the lift kit height

34. A technician interprets a freeze-frame showing the vehicle speed and system state when a DTC set. This data helps the technician by:

A. Physically aiming the radar sensor to the thrust line reference

- B. Indicating the operating conditions present at the moment of the fault
- C. Calibrating the forward camera to the windshield-bonded bracket
- D. Setting the steering angle sensor zero-point before the alignment

35. A technician finds a previously installed non-OEM bumper cover on a vehicle with a radar concern. The inspection should focus on whether the cover:

- A. Improves the radar's range because non-OEM covers are thinner
- B. Resets the steering angle sensor zero-point on each key cycle
- C. Has material, thickness, or paint that attenuates the radar signal
- D. Lowers the camera module's rated maximum operating temperature

36. A technician should determine vehicle equipment and options early in the process because:

- A. Knowing the equipped systems guides which ADAS components to inspect
- B. Equipment data physically aims the radar to the vehicle centerline
- C. Option content sets the camera's white-balance reference for capture
- D. Equipment codes lower the system voltage required for calibration

37. A technician finds that an ADAS concern only occurs intermittently. The BEST diagnostic aid for an intermittent fault is to:

- A. Review history DTCs and freeze-frame data captured when it occurred
- B. Replace the suspected sensor immediately to eliminate the variable
- C. Clear all codes and release the vehicle without further diagnosis
- D. Calibrate the sensor repeatedly until the intermittent fault stops

38. A technician must decide whether a sensor that communicates but does not detect objects has a circuit or a function fault. Intact communication with no detection points to:

- A. A completely open power supply circuit at the sensor connector
- B. The sensor's detection function or aim rather than its communication
- C. The scan tool's inability to send any commands to the sensor at all
- D. The instrument cluster failing to illuminate any warning lamp at all

39. A technician researching an ADAS concern should check TPMS status because:

- A. TPMS data physically aims the radar sensor to the thrust line
- B. TPMS resets the camera's white-balance reference during capture
- C. Incorrect tire pressure can alter ride height and sensor aim
- D. TPMS sets the ultrasonic array's maximum detection distance

40. A technician finds that a vehicle's ADAS features disabled themselves after a recent low-voltage event. Before extensive diagnosis, the technician should:

- A. Verify the codes are voltage-related and address the battery first
- B. Replace every ADAS module that reported a low-voltage fault code
- C. Recalibrate all cameras and radar sensors from scratch immediately
- D. Disconnect the battery for thirty minutes to force a full relearn

41. A technician must verify a repair did not introduce new faults. The appropriate verification is to:

- A. Perform a post-scan and compare it against the documented pre-scan
- B. Physically aim the radar sensor to the vehicle's thrust line again
- C. Set the steering angle sensor zero-point after the repair is complete
- D. Increase the radar gain to confirm the sensor still detects targets

42. A technician inspecting a vehicle finds the forward radar emblem cracked and partially detached. The concern is that the damaged emblem could:

- A. Improve radar transmission because the crack creates an opening
- B. Distort or attenuate the radar signal passing through the emblem
- C. Reset the steering angle sensor zero-point on each key cycle
- D. Lower the camera module's rated maximum operating temperature

43. When researching service precautions before ADAS work, the technician is looking primarily for:

- A. The camera's white-balance reference for the calibration procedure
- B. The radar sensor's internal operating frequency band specification
- C. Safety steps and warnings the manufacturer requires for the work
- D. The ultrasonic array's maximum rated object detection distance

44. A technician notes that a vehicle's ADAS sensor was previously replaced but apparently never calibrated. The MOST appropriate action is to:

- A. Perform the required calibration for the previously replaced sensor
- B. Assume the prior shop calibrated it and skip the procedure entirely
- C. Increase the sensor's gain to compensate for the missing calibration
- D. Disable the affected system to avoid dealing with the calibration

45. A technician should confirm the correct scan-tool software version before a calibration because an outdated version may:

- A. Physically shift the radar sensor's mounting bracket during the procedure
- B. Load outdated parameters or omit steps for that specific calibration
- C. Raise the camera module's rated maximum operating temperature limit
- D. Reset the steering angle sensor's zero-point on the next key cycle

46. A technician finds that an ADAS concern correlates with a specific intersystem interaction noted in service information. Reviewing intersystem configuration helps the technician:

- A. Physically aim the radar sensor to the vehicle's centerline reference
- B. Understand how the ADAS depends on braking, steering, or other inputs
- C. Set the camera's white-balance reference during the target capture
- D. Establish the ultrasonic array's maximum object detection distance

47. Before returning a vehicle, a technician should perform a functional verification because:

- A. A post-scan and road test confirm the systems operate correctly
- B. The scan tool's complete status alone proves real-world performance
- C. The absence of a warning lamp guarantees the repair fully succeeded
- D. Clearing the DTC memory confirms the calibration was successful

48. A technician inspecting an ADAS-equipped vehicle should treat a previously repaired sensor mount with particular scrutiny because:

- A. A prior repair may have left the sensor aim outside specification
- B. Previously repaired mounts always improve the sensor's detection range
- C. Repaired mounts reset the steering angle sensor on each key cycle
- D. A prior repair raises the camera module's rated temperature limit

49. A technician must decide whether to trust a customer's description of an ADAS feature's behavior. The BEST practice is to:

- A. Accept the description fully and begin replacing parts immediately
- B. Disregard the customer entirely and assume no concern exists
- C. Use the description as a starting point, then verify with diagnostics

D. Calibrate every sensor before listening to the customer's description

50. A technician completes an ADAS inspection and finds several issues affecting calibration. The correct sequence is to:

A. Calibrate first, then address the issues found during the inspection

B. Ignore minor issues and calibrate around them to save shop time

C. Correct the affecting issues first, then perform the calibration

D. Disable the affected systems instead of correcting any of the issues

Answer Key & Full Answer Explanations

1. C — Add-on, modified, or previously repaired components near a sensor can alter aim, obstruct the field, or interfere with operation, so the inspection targets them. The other options describe normal, in-spec conditions that pose no concern. Identifying these affecting components is the purpose of the initial inspection.

2. B — Researching campaigns and recalls matters because a related recall or bulletin may already address the customer's exact concern, saving misdirected diagnosis. Recalls do not aim sensors, set the steering zero-point, or change calibration voltage. Existing manufacturer remedies can resolve the issue directly.

3. D — The first action is to evaluate and address the obstruction before any calibration, since a bull bar in the radar path corrupts performance. Raising gain, calibrating around it, or disabling the system all ignore the root cause. Clearing the obstruction is prerequisite to valid operation.

4. B — A pre-scan reveals stored DTCs and the equipment/options actually present, grounding the diagnosis in real data. It does not aim sensors, replace a road test, or auto-calibrate. The retrieved baseline guides the rest of the workflow.

5. B — Equipped options are best confirmed by verifying build data, RPO/option codes, or scan-tool configuration. Assuming by trim, asking the customer, or watching for a lamp are unreliable. Documented configuration data confirms what the vehicle actually has.

6. D — A bumper cover with thick non-OEM paint over the radar attenuates the signal and requires attention before calibration. The other findings describe in-spec, undamaged conditions. The paint obstruction is the performance-affecting issue.

7. C — ADAS commonly interacts with braking, steering, powertrain, restraints, and TPMS systems, which the technician must consider. It is not limited to audio, HVAC, or washer circuits. These safety-critical systems share data and configuration with ADAS.

8. D — An SRS code on a vehicle with an ADAS concern should be investigated because ADAS and restraints can interact on the network. Ignoring or clearing it, or replacing the module blindly, skips proper diagnosis. Intersystem interaction makes the code potentially relevant.

9. B — The inspection specifically checks for customized, inoperative, or previously repaired components near sensors. The other options describe normal factory-correct conditions, not the items being screened for. Affecting modifications are the inspection target.

10. D — The authoritative source for exact pre-calibration conditions is the OEM service information for that specific make, model, and year. Generic charts, colleague recollection, and forum threads are unreliable. OEM data defines the validated conditions.

11. A — A matching TSB is valuable because it may provide a known diagnostic path or software fix for the reported symptom. It does not aim radar, set the steering zero-point, or waive the road test. Manufacturer bulletins can shortcut the diagnosis.

12. C — Confirming no unrepaired collision damage matters because hidden structural damage can shift sensor mounting and aim references. Collision history does not change radar frequency, camera white-balance, or ultrasonic range. Undetected damage corrupts aim before calibration.

13. D — Freeze-frame data captures the conditions present when the DTC was originally set, aiding diagnosis. It does not reposition the radar, calibrate the camera, or set the steering zero-point. The captured conditions guide fault analysis.

14. B — For a non-active warning, the best approach is to retrieve stored and history DTCs and review freeze-frame data. Releasing the vehicle, replacing a sensor blindly, or clearing codes without diagnosis are improper. History data documents the intermittent concern.

15. A — Incorrect tire size matters because it can alter ride height and the speed signal ADAS relies on. Tire brand does not change radar frequency, tire size does not set white-balance, and tires do not reset the steering sensor. Ride height and speed signal are the real effects.

16. B — With multiple ADAS DTCs, the technician first analyzes the codes together to find a common cause or network fault. Replacing modules individually, clearing codes, or calibrating before analysis are premature. A shared root cause is best found by reviewing codes collectively.

17. C — Bi-directional controls command a component or actuator to verify its operation and response. They do not rewrite hardware IDs, replace physical inspection, or raise battery voltage. Functional actuation confirms component behavior.

18. B — An accessory drawing power from an ADAS circuit may introduce electrical interference or voltage drop affecting the system. It does not improve voltage stability, raise radar range, or reset the steering sensor. The parasitic load is the concern.

19. D — Verifying the concern first confirms the actual symptom and prevents misdirected repairs. It does not aim radar, calibrate the camera, or set the steering zero-point. Symptom confirmation anchors the diagnosis.

20. D — Reviewing service history identifies prior repairs or patterns relevant to the current concern. It does not set white-balance, radar frequency, or ultrasonic range. Past-repair context informs the present diagnosis.

21. C — A relocated radar bracket should be restored to its specified position and recalibrated. Leaving it, raising gain, or disabling the system do not correct the aim. Proper bracket position plus recalibration restores accuracy.

22. C — Because AEB commands brake application, a fault in the braking system could affect ADAS operation. Infotainment, cabin lighting, and washer-level sensors are not the ADAS-critical interaction here. The braking system is the relevant intersystem dependency.

23. B — The composite vehicle reference provides a standardized, manufacturer-neutral design for the test questions. It is not a passing-score list, an answer key, or one vehicle's part catalog. Neutral standardization lets ASE assess reasoning.

24. D — A "not configured" code after module replacement means the module needs configuration/programming or calibration for the vehicle. It does not by itself prove a hardware failure, a dead battery, or an open circuit. Completing configuration is the required step.

25. D — OEM-equivalent glass matters because glass optical quality and bracket position can affect camera function. Non-OEM glass does not change radar beam spread, reset the steering sensor, or lower radar voltage. Optical and mounting quality govern the camera.

26. A — An open ADAS software recall should be addressed per the manufacturer's published recall procedure. Ignoring it, disabling the system, or charging to overwrite are all improper. Following the official recall remedy is correct.

27. D — Documenting the pre-scan establishes a baseline so repair-caused faults can be identified afterward. It does not aim radar, calibrate the camera, or set the steering zero-point. The documented baseline enables before-and-after comparison.

28. D — A steering angle sensor fault could affect lane-centering operation that depends on steering data. It does not raise radar range, lower camera temperature, or increase ultrasonic range. Lane centering relies on accurate steering input.

29. A — With conflicting sources, the technician follows the OEM service information as authoritative. Averaging, choosing by speed, or preferring broader coverage all risk error. OEM data governs over aftermarket databases.

30. C — Pre-existing active DTCs matter because they can prevent calibration or indicate a fault that must be fixed first. They do not raise radar range, lower camera temperature, or reset the steering sensor. Clearing related faults is prerequisite to calibration.

31. D — The camera's view can be obstructed by aftermarket tint film, stickers, or debris in its field. The other options describe normal, unobstructed conditions. Optical-path obstructions are what the inspection screens for.

32. D — The correct source for a vehicle's calibration method is the OEM service information for that exact make, model, and year. Generic menus, other shops' orders, and tire charts are unreliable. OEM procedure specifies static, dynamic, or both.

33. A — A lift kit changes ride height, so the technician should recognize that altered ride height affects sensor pitch and aim. Ignoring it, raising gain, or resetting the steering sensor do not address the aim shift. Ride-height change drives the recalibration need.

34. B — Freeze-frame data helps by indicating the operating conditions present at the moment of the fault. It does not aim radar, calibrate the camera, or set the steering zero-point. The captured conditions support diagnosis.

35. C — The inspection focuses on whether a non-OEM bumper cover has material, thickness, or paint that attenuates the radar signal. Non-OEM covers do not reliably improve range, reset the steering sensor, or lower camera temperature. Radar transmission through the cover is the concern.

36. A — Determining equipment and options early matters because knowing the equipped systems guides which ADAS components to inspect. Equipment data does not aim radar, set white-balance, or lower calibration voltage. Configuration knowledge focuses the inspection.

37. A — For an intermittent fault, the best aid is reviewing history DTCs and freeze-frame data captured when it occurred. Replacing a sensor, clearing codes, or repeated calibration do not capture the elusive condition. Stored history documents the intermittent event.

38. B — A sensor that communicates but does not detect points to its detection function or aim rather than its communication. A fully open power circuit would prevent any response, and tool or cluster faults are not indicated. Intact communication with no detection isolates the function.

39. C — Checking TPMS matters because incorrect tire pressure can alter ride height and sensor aim. TPMS does not aim radar, reset white-balance, or set ultrasonic range. Pressure links to aim through ride height.

40. A — After a low-voltage event, the technician should verify the codes are voltage-related and address the battery first. Mass module replacement, blanket recalibration, or a forced relearn are premature. Confirming the voltage cause comes first.

41. A — To verify no new faults, the technician performs a post-scan and compares it against the documented pre-scan. Aiming radar, setting the steering zero-point, or raising gain do not verify the repair. The before-and-after scan comparison confirms results.

42. B — A cracked, partially detached radar emblem could distort or attenuate the radar signal passing through it. A crack does not improve transmission, reset the steering sensor, or lower camera temperature. Emblem integrity affects radar performance.

43. C — Researching service precautions means looking for the safety steps and warnings the manufacturer requires for the work. It is not about white-balance, radar frequency, or ultrasonic range. Manufacturer safety requirements guide the procedure.

44. A — A previously replaced but uncalibrated sensor requires performing the needed calibration. Assuming prior calibration, raising gain, or disabling the system are improper. Completing the missing calibration restores correct operation.

45. B — An outdated scan-tool version may load outdated parameters or omit steps for that specific calibration. It does not shift the bracket, raise camera temperature, or reset the steering sensor. Correct software ensures the right procedure runs.

46. B — Reviewing intersystem configuration helps the technician understand how the ADAS depends on braking, steering, or other inputs. It does not aim radar, set white-balance, or define ultrasonic range. Intersystem understanding informs the diagnosis.

47. A — Functional verification matters because a post-scan and road test confirm the systems operate correctly. A one-time complete status, a dark lamp, or cleared codes alone do not prove performance. Real-world confirmation validates the repair.

48. A — A previously repaired sensor mount warrants scrutiny because a prior repair may have left the sensor aim outside specification. Repairs do not improve range, reset the steering sensor, or raise camera temperature. Possible residual misaim is the concern.

49. C — The best practice is to use the customer's description as a starting point, then verify with diagnostics. Accepting it fully and replacing parts, disregarding it entirely, or calibrating first are all improper. Verification confirms the reported behavior.

50. C — When inspection reveals affecting issues, the correct sequence is to correct those issues first, then perform the calibration. Calibrating first, ignoring issues, or disabling systems all produce invalid or unsafe results. Fixing affecting faults precedes calibration.