PRACTICE EXAM 7: L1 SIMULATION — ADVANCED ENGINE PERFORMANCE SPECIALIST

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1. A vehicle has been brought in with: complaint of multiple drivability symptoms, P0171 and P0300 set, vehicle data shows V6 with 110,000 miles, freeze frame at 1,800 RPM/45 kPa MAP, fuel trim +20%, vacuum leak at intake manifold gasket, worn spark plugs, and DTCs across multiple modules. The MOST appropriate action is:

A. Address all findings: repair vacuum leak, replace spark plugs, address fuel trim, clear DTCs, allow monitor completion

B. Replace only the spark plugs as the most direct repair

C. Apply compressed air to the system

D. Replace the brake fluid as the only step

2. Technician A says addressing only the spark plugs resolves multi-domain L1 issues. Technician B says all related findings must be addressed for complete repair. Who is correct?

A. Technician A only

B. Both Technician A and Technician B

C. Neither Technician A nor Technician B

D. Technician B only

3. The proper procedure for diagnosing a complex multi-symptom L1 case study is to:

A. Apply compressed air to the system

B. Verify each customer concern, identify findings systematically across all six L1 domains, address all causes

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

4. A vehicle has been brought in with: complaint of failed I/M test for high HC, vehicle data shows V8 with 130,000 miles, P0300 set, faulty spark plugs, weak coil, lean fuel trims, and faulty oxygen sensors. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace only the catalyst as the most direct repair

C. Replace the brake fluid as the only step

D. Address all findings: replace plugs, replace coil, address lean condition, replace O2 sensors, allow monitor completion

5. Technician A says I/M test failures can have multiple coexisting causes. Technician B says addressing all related findings is required for complete repair. Who is correct?

A. Technician A only

B. Technician B only

C. Both Technician A and Technician B

D. Neither Technician A nor Technician B

6. The proper procedure for verifying complete I/M test repair is to:

A. Verify all repairs, road test through proper drive cycle, allow all monitors to complete, perform I/M test

B. Apply compressed air to the system

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

7. A vehicle has been brought in with: complaint of multiple drivability symptoms, vehicle data shows 4-cylinder turbo with 70,000 miles, P0171 and P0299 set simultaneously, freeze frame at WOT, low fuel pressure under load, boost leak, and DTCs across multiple modules. The MOST appropriate action is:

A. Apply compressed air to the system

B. Address all findings: address fuel pressure, repair boost leak, clear DTCs, road test, verify operation

C. Replace only the fuel pump as the most direct repair

D. Replace the brake fluid as the only step

8. Technician A says drivability issues with multiple findings require comprehensive repair. Technician B says only the loudest symptom needs to be addressed. 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

9. The proper procedure for verifying turbo system service is to:

A. Apply compressed air to the system

B. Replace the turbo system as a precaution

C. Verify all repairs, monitor boost pressure, road test, verify proper operation

D. Replace the brake fluid as the only step

10. A vehicle has been brought in with: complaint of failed catalyst monitor, multiple drive cycles attempted, vehicle data shows V6 with 90,000 miles, P0420 set, recent service shows oxygen sensor replacement 2 weeks ago, monitor still not completing. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace the catalyst as a precaution

C. Replace the brake fluid as the only step

D. Verify enabling criteria, identify the blocking factor, address the cause, allow monitor completion

11. The proper procedure for diagnosing failed monitor completion after service is to:

A. Verify all repairs, identify enabling criteria, follow manufacturer drive cycle, verify completion

B. Apply compressed air to the system

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

12. A vehicle has been brought in with: complaint of multiple engine performance issues, vehicle data shows V6 with 95,000 miles, P0420, P0171, P0301 set, freeze frame at 1,500 RPM/35 kPa, multi-domain findings (catalyst, lean, misfire). The MOST likely cause is:

A. Apply compressed air to the system

B. A cascade failure where lean condition produces misfire that damages catalyst

C. Replace the catalyst as a precaution

D. Replace the brake fluid as the only step

13. The proper procedure for diagnosing cascading multi-domain issues is to:

A. Apply compressed air to the system

B. Replace the affected components as a precaution

C. Identify the root cause, address it first, then address downstream effects, verify operation

D. Replace the brake fluid as the only step

14. A vehicle has been brought in with: complaint of intermittent drivability issues, no current DTCs, customer reports symptoms only during specific conditions, scan data normal during current visit. The MOST appropriate action is:

A. Use scan tool data recorders, monitor for symptom recurrence, capture data when symptom occurs

B. Apply compressed air to the system

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

15. Technician A says intermittent symptoms can have multiple coexisting causes. Technician B says addressing intermittent issues requires capturing data during the symptom. Who is correct?

A. Technician A only

B. Technician B only

C. Neither Technician A nor Technician B

D. Both Technician A and Technician B

16. The proper procedure for diagnosing intermittent multi-domain issues is to:

A. Apply compressed air to the system

B. Verify the concern under matching conditions, capture data when symptom occurs, identify the cause

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

17. A vehicle has been brought in with: complaint of multiple engine performance issues, vehicle data shows V6 with 80,000 miles, recent service shows fuel injection cleaning 1 week ago, customer reports symptoms began after service. The MOST likely cause is:

A. Apply compressed air to the system

B. Replace the affected components as a precaution

C. Service-related issue (improper procedure, contamination, calibration loss)

D. Replace the brake fluid as the only step

18. The proper procedure for diagnosing post-service issues is to:

A. Verify the concern, identify potential service-related causes, address the cause, verify operation

B. Apply compressed air to the system

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

19. A vehicle equipped with hybrid technology has been brought in with: complaint of multiple drivability symptoms, vehicle data shows hybrid with 100,000 miles, multi-system DTCs, hybrid system warnings, reduced engine performance. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace the hybrid system as a precaution

C. Replace the brake fluid as the only step

D. Verify the concern, follow manufacturer-specified procedure with PPE, perform required service

20. Technician A says hybrid powertrain service requires high-voltage isolation procedures. Technician B says all related findings must be addressed. Who is correct?

A. Technician A only

B. Both Technician A and Technician B

C. Technician B only

D. Neither Technician A nor Technician B

21. The proper procedure for verifying hybrid powertrain service is to:

A. Apply compressed air to the system

B. Replace the hybrid system as a precaution

C. Verify all repairs, restore the high-voltage system properly, verify proper operation per manufacturer

D. Replace the brake fluid as the only step

22. A vehicle has been brought in with: complaint of poor performance only at extreme temperatures, vehicle data shows V6 with 80,000 miles, marginal sensor performance at temperature, multiple worn components, and DTCs at extreme conditions. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace the affected systems as a precaution

C. Replace the brake fluid as the only step

D. Address all findings: address marginal sensors, replace worn components, verify operation under conditions

23. The proper procedure for verifying extreme-temperature service is to:

A. Verify all repairs, verify proper operation under extreme conditions, road test, verify performance

B. Apply compressed air to the system

C. Replace the affected systems as a precaution

D. Replace the brake fluid as the only step

24. A vehicle has been brought in with: complaint of engine knock, vehicle data shows V8 with 105,000 miles, knock sensor DTCs, advanced timing condition, lean fuel mixture, worn spark plugs. The MOST appropriate action is:

A. Apply compressed air to the system

B. Address all findings: address timing issue, address fuel mixture, replace plugs, verify resolution

C. Replace only the knock sensor as the most direct repair

D. Replace the brake fluid as the only step

25. The proper procedure for verifying knock service is to:

A. Apply compressed air to the system

B. Replace the engine as a precaution

C. Verify all repairs, monitor knock sensor activity, road test, verify proper operation

D. Replace the brake fluid as the only step

26. A vehicle has been brought in with: complaint of poor fuel economy, vehicle data shows V6 with 85,000 miles, normal scan data, normal monitor readiness, no DTCs, customer reports gradual decline in economy over 6 months. The MOST likely cause is:

A. Apply compressed air to the system

B. Replace the affected components as a precaution

C. Replace the PCM as a precaution

D. Mechanical degradation, accumulated component wear, or factor outside OBD-II scope

27. The proper procedure for diagnosing gradual decline in fuel economy is to:

A. Verify the concern, perform mechanical testing, evaluate accumulated wear, identify the cause

B. Apply compressed air to the system

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

28. A vehicle has been brought in with: complaint of MIL on, multiple DTCs, vehicle data shows V6 with 110,000 miles, recent battery replacement, multi-module relearn required, and post-relearn DTCs. The MOST likely cause is:

A. Apply compressed air to the system

B. Replace the affected modules as a precaution

C. Calibration loss requiring complete multi-module relearn

D. Replace the brake fluid as the only step

29. The proper procedure for verifying complete post-battery-replacement service is to:

A. Apply compressed air to the system

B. Verify all relearns completed, verify all functions, clear DTCs, road test, verify operation

C. Replace the affected modules as a precaution

D. Replace the brake fluid as the only step

30. A vehicle has been brought in with: complaint of MIL on, multiple DTCs, vehicle data shows V8 with 90,000 miles, recent OTA software update, post-update fault behavior across multiple modules. The MOST likely cause is:

A. Apply compressed air to the system

B. Replace the affected modules as a precaution

C. Replace the brake fluid as the only step

D. Post-update issue requiring rollback, additional update, or manufacturer-specified procedure

31. The proper procedure for verifying post-update powertrain service is to:

A. Apply compressed air to the system

B. Verify all repairs, verify successful update or rollback, verify all functions, clear DTCs, road test

C. Replace the affected modules as a precaution

D. Replace the brake fluid as the only step

32. A vehicle has been brought in with: complaint of multiple drivability symptoms following a fuel fill-up, fuel quality issues identified, multiple worn components, and DTCs related to engine operation. The MOST appropriate action is:

A. Address all findings: address contaminated fuel, replace worn components, clear DTCs, verify operation

B. Apply compressed air to the system

C. Replace the fuel system as a precaution

D. Replace the brake fluid as the only step

33. The proper procedure for verifying fuel quality service is to:

A. Apply compressed air to the system

B. Replace the fuel system as a precaution

C. Verify all repairs, verify proper fuel quality, verify proper engine operation, clear DTCs

D. Replace the brake fluid as the only step

34. A vehicle has been brought in with: complaint of multiple powertrain issues that occur only at certain ambient temperatures, scan data showing temperature-related symptoms, multiple worn components, and DTCs across multiple modules. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace the affected systems as a precaution

C. Replace the brake fluid as the only step

D. Verify the symptom under matching temperature conditions, identify the cause, address all findings

35. The proper procedure for verifying temperature-related powertrain service is to:

A. Apply compressed air to the system

B. Verify all repairs, verify proper operation in matching conditions, clear DTCs, verify operation

C. Replace the affected systems as a precaution

D. Replace the brake fluid as the only step

36. A vehicle has been brought in with: complaint of multiple powertrain issues that occur only when the vehicle is in motion, scan data showing motion-related symptoms, marginal connections, and DTCs across multiple modules. The MOST appropriate action is:

A. Verify the symptom during motion, perform wiggle testing during operation, address marginal connections

B. Apply compressed air to the system

C. Replace the affected components as a precaution

D. Replace the brake fluid as the only step

37. The proper procedure for verifying motion-related powertrain service is to:

A. Apply compressed air to the system

B. Replace the affected components as a precaution

C. Verify all repairs, verify proper operation during motion, road test, verify resolution

D. Replace the brake fluid as the only step

38. A vehicle has been brought in with: complaint of multiple engine performance issues, multiple worn components across the engine system, multiple service items required across all six L1 domains, and the symptom complex spanning the entire powertrain. The MOST appropriate action is:

A. Apply compressed air to the system

B. Address all findings comprehensively: repair each component requiring service, perform proper service

C. Replace the engine system as a precaution

D. Replace the brake fluid as the only step

39. The proper procedure for verifying complete L1-domain powertrain service is to:

A. Verify all repairs, perform proper service procedures, clear DTCs, road test under varied conditions, verify all symptoms resolved

B. Apply compressed air to the system

C. Replace the engine system as a precaution

D. Replace the brake fluid as the only step

40. A vehicle has been brought in with: complaint of multiple powertrain issues that occur only after extended driving, scan data showing heat-related symptoms, multiple worn components, and DTCs across multiple modules. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace the affected systems as a precaution

C. Replace the brake fluid as the only step

D. Verify the symptom under matching heat conditions, identify the cause, address all findings, perform service

41. The proper procedure for verifying heat-related powertrain service is to:

A. Apply compressed air to the system

B. Verify all repairs, verify proper operation under matching heat conditions, road test, verify performance

C. Replace the affected systems as a precaution

D. Replace the brake fluid as the only step

42. A vehicle has been brought in with: complaint of powertrain issues that affect both engine and transmission operation, multiple DTCs in both modules, common cause findings, and reduced overall performance. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace the engine and transmission as a precaution

C. Identify the common cause, address findings systematically, perform required service, verify operation

D. Replace the brake fluid as the only step

43. The proper procedure for verifying engine and transmission integration service is to:

A. Apply compressed air to the system

B. Replace the engine and transmission as a precaution

C. Verify all repairs, verify both systems operate properly, clear DTCs, road test, verify resolution

D. Replace the brake fluid as the only step

44. A vehicle has been brought in with: complaint of powertrain issues that affect emissions test results, multiple emission DTCs, faulty emission components, and reduced emission control efficiency. The MOST appropriate action is:

A. Address all findings: replace emission components, address engine performance, perform required service

B. Apply compressed air to the system

C. Replace the emission system as a precaution

D. Replace the brake fluid as the only step

45. The proper procedure for verifying emissions test service is to:

A. Apply compressed air to the system

B. Verify all repairs, road test through proper drive cycle, allow all monitors to complete, verify operation

C. Replace the emission system as a precaution

D. Replace the brake fluid as the only step

46. A vehicle has been brought in with: complaint of multiple powertrain issues with multiple DTCs, multiple coexisting findings, the symptom complex spanning all six L1 domains, and complex case study presentation. The MOST appropriate action is:

A. Apply compressed air to the system

B. Replace components individually as each symptom is identified

C. Replace the engine as a precaution

D. Address all findings comprehensively across all domains: perform proper service, clear DTCs, road test, verify

47. The proper procedure for verifying complete L1 powertrain service is to:

A. Apply compressed air to the system

B. Replace the engine system as a precaution

C. Verify all repairs, perform proper service procedures, clear DTCs, road test under varied conditions, verify all symptoms resolved

D. Replace the brake fluid as the only step

48. A vehicle has been brought in for routine L1 advanced engine performance inspection. The technician finds multiple components past the manufacturer's typical service interval and showing signs of wear. The MOST appropriate action is:

A. Apply compressed air to the components

B. Replace all worn components as a precaution

C. Replace the brake fluid as the only step

D. Inform the customer of all findings, document the wear pattern, provide recommendations based on interval and use

49. The proper procedure for documenting L1 powertrain inspection findings is to:

A. Inspect all relevant components, measure relevant specifications, record findings, identify required service, document service performed, provide recommendations

B. Apply compressed air to the components

C. Replace the components as a precaution

D. Replace the brake fluid as the only step

50. The proper procedure for recommending L1 powertrain service is to:

A. Apply compressed air to the system

B. Test relevant components, verify performance and condition, evaluate against the manufacturer's interval, provide recommendations

C. Replace the engine system as a precaution

D. Replace the brake fluid as the only step

PRACTICE EXAM 7: L1 SIMULATION — ANSWER KEY, EXPLANATIONS, AND TASK REMEDIATION

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1. A — Address all findings: repair vacuum leak, replace spark plugs, address fuel trim, clear DTCs, allow monitor completion. Multiple multi-domain findings each contribute to symptoms. Comprehensive repair addresses each cause. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

2. D — Technician B only. Multi-domain L1 issues with multiple findings require comprehensive repair. Component wear progresses together; addressing only one leaves issues unresolved. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

3. B — Verify each customer concern, identify findings systematically across all six L1 domains, address all causes. Complex multi-symptom L1 diagnosis requires systematic approach across all domains. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

4. D — Address all findings: replace plugs, replace coil, address lean condition, replace O2 sensors, allow monitor completion. I/M failure with multiple findings requires comprehensive approach. *ASE Task Reference: L1 Domain F — I/M Failure Diagnosis. Review subsection L.6.*

5. C — Both Technician A and Technician B. I/M test failures can have multiple coexisting causes (correct), and addressing all related findings is required for complete repair (correct). Both observations describe accurate principles. *ASE Task Reference: L1 Domain F — I/M Failure Diagnosis. Review subsection L.6.*

6. A — Verify all repairs, road test through proper drive cycle, allow all monitors to complete, perform I/M test. I/M test repair verification requires comprehensive approach including monitor completion and retest. *ASE Task Reference: L1 Domain F — I/M Failure Diagnosis. Review subsection L.6.*

7. B — Address all findings: address fuel pressure, repair boost leak, clear DTCs, road test, verify operation. Multi-domain turbo-related findings each contribute to symptoms. *ASE Task Reference: L1 Domain D — Fuel Systems and Air Induction Diagnosis. Review subsection L.4.*

8. D — Technician A only. Drivability issues with multiple findings require comprehensive repair. Addressing only the loudest symptom leaves issues unresolved. *ASE Task Reference: L1 Domain D — Fuel Systems and Air Induction Diagnosis. Review subsection L.4.*

9. C — Verify all repairs, monitor boost pressure, road test, verify proper operation. Turbo system service verification requires comprehensive approach. *ASE Task Reference: L1 Domain D — Fuel Systems and Air Induction Diagnosis. Review subsection L.4.*

10. D — Verify enabling criteria, identify the blocking factor, address the cause, allow monitor completion. Failed monitor after service requires criteria verification and root cause identification. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

11. A — Verify all repairs, identify enabling criteria, follow manufacturer drive cycle, verify completion. Failed monitor completion after service requires comprehensive approach. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

12. B — A cascade failure where lean condition produces misfire that damages catalyst. Multi-domain DTCs (P0420, P0171, P0301) suggest cascade where root cause produces downstream effects. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

13. C — Identify the root cause, address it first, then address downstream effects, verify operation. Cascading multi-domain diagnosis requires root cause identification. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

14. A — Use scan tool data recorders, monitor for symptom recurrence, capture data when symptom occurs. Intermittent diagnosis with no current symptoms requires data capture. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

15. D — Both Technician A and Technician B. Intermittent symptoms can have multiple coexisting causes (correct), and addressing intermittent issues requires capturing data during the symptom (correct). Both observations describe accurate principles. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

16. B — Verify the concern under matching conditions, capture data when symptom occurs, identify the cause. Intermittent multi-domain diagnosis requires symptom-matching and data capture. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

17. C — Service-related issue (improper procedure, contamination, calibration loss). Symptoms appearing after recent service strongly indicate service-related cause. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

18. A — Verify the concern, identify potential service-related causes, address the cause, verify operation. Post-service diagnosis requires consideration of recent service. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

19. D — Verify the concern, follow manufacturer-specified procedure with PPE, perform required service. Hybrid powertrain service requires PPE, manufacturer specifications, and systematic approach. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

20. B — Both Technician A and Technician B. Hybrid powertrain service requires high-voltage isolation procedures (correct), and all related findings must be addressed (correct). Both observations describe accurate principles. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

21. C — Verify all repairs, restore the high-voltage system properly, verify proper operation per manufacturer. Hybrid powertrain service verification requires comprehensive approach. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

22. D — Address all findings: address marginal sensors, replace worn components, verify operation under conditions. Multi-domain extreme-temperature findings each contribute to symptoms. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

23. A — Verify all repairs, verify proper operation under extreme conditions, road test, verify performance. Extreme-temperature service verification requires testing under extreme conditions. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

24. B — Address all findings: address timing issue, address fuel mixture, replace plugs, verify resolution. Multi-domain knock-related findings each contribute to symptoms. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

25. C — Verify all repairs, monitor knock sensor activity, road test, verify proper operation. Knock service verification requires monitoring knock sensor activity. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

26. D — Mechanical degradation, accumulated component wear, or factor outside OBD-II scope. Gradual fuel economy decline indicates accumulated issues outside OBD-II scope. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

27. A — Verify the concern, perform mechanical testing, evaluate accumulated wear, identify the cause. Gradual decline diagnosis requires mechanical investigation. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

28. C — Calibration loss requiring complete multi-module relearn. Multi-module DTCs after battery replacement strongly indicate relearn requirement. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

29. B — Verify all relearns completed, verify all functions, clear DTCs, road test, verify operation. Post-battery-replacement service verification requires comprehensive approach. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

30. D — Post-update issue requiring rollback, additional update, or manufacturer-specified procedure. Post-OTA multi-module faults require manufacturer guidance. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

31. B — Verify all repairs, verify successful update or rollback, verify all functions, clear DTCs, road test. Post-update powertrain service verification requires comprehensive approach. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

32. A — Address all findings: address contaminated fuel, replace worn components, clear DTCs, verify operation. Multi-domain fuel quality issues require comprehensive approach. *ASE Task Reference: L1 Domain D — Fuel Systems and Air Induction Diagnosis. Review subsection L.4.*

33. C — Verify all repairs, verify proper fuel quality, verify proper engine operation, clear DTCs. Fuel quality service verification requires comprehensive approach. *ASE Task Reference: L1 Domain D — Fuel Systems and Air Induction Diagnosis. Review subsection L.4.*

34. D — Verify the symptom under matching temperature conditions, identify the cause, address all findings. Temperature-related multi-domain diagnosis requires symptom-matching conditions. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

35. B — Verify all repairs, verify proper operation in matching conditions, clear DTCs, verify operation. Temperature-related service verification requires verification under matching conditions. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

36. A — Verify the symptom during motion, perform wiggle testing during operation, address marginal connections. Motion-related multi-domain diagnosis requires testing during motion. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

37. C — Verify all repairs, verify proper operation during motion, road test, verify resolution. Motion-related service verification requires testing during motion. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

38. B — Address all findings comprehensively: repair each component requiring service, perform proper service. Multi-domain L1 findings require comprehensive approach. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

39. A — Verify all repairs, perform proper service procedures, clear DTCs, road test under varied conditions, verify all symptoms resolved. Multi-domain L1 service verification requires comprehensive approach. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

40. D — Verify the symptom under matching heat conditions, identify the cause, address all findings, perform service. Heat-related multi-domain diagnosis requires matching conditions. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

41. B — Verify all repairs, verify proper operation under matching heat conditions, road test, verify performance. Heat-related powertrain service verification requires testing under heat conditions. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

42. C — Identify the common cause, address findings systematically, perform required service, verify operation. Engine-transmission integration findings often share common root causes. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

43. C — Verify all repairs, verify both systems operate properly, clear DTCs, road test, verify resolution. Engine-transmission integration service verification requires verification of both systems. *ASE Task Reference: L1 Domain B — Computerized Powertrain Controls Diagnosis. Review subsection L.2.*

44. A — Address all findings: replace emission components, address engine performance, perform required service. Emissions test failure with multiple findings requires comprehensive approach. *ASE Task Reference: L1 Domain F — I/M Failure Diagnosis. Review subsection L.6.*

45. B — Verify all repairs, road test through proper drive cycle, allow all monitors to complete, verify operation. Emissions test service verification requires comprehensive approach including monitor completion. *ASE Task Reference: L1 Domain F — I/M Failure Diagnosis. Review subsection L.6.*

46. D — Address all findings comprehensively across all domains: perform proper service, clear DTCs, road test, verify. Multi-domain L1 findings require comprehensive approach. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

47. C — Verify all repairs, perform proper service procedures, clear DTCs, road test under varied conditions, verify all symptoms resolved. Multi-domain L1 service verification requires comprehensive approach. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

48. D — Inform the customer of all findings, document the wear pattern, provide recommendations based on interval and use. L1 inspection recommendations support proper service planning. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

49. A — Inspect all relevant components, measure relevant specifications, record findings, identify required service, document service performed, provide recommendations. L1 inspection documentation requires comprehensive recording. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*

50. B — Test relevant components, verify performance and condition, evaluate against the manufacturer's interval, provide recommendations. L1 powertrain service recommendations require comprehensive evaluation. *ASE Task Reference: L1 Domain A — General Powertrain Diagnosis. Review subsection L.1.*