

PRACTICE EXAM 7 SIMULATION

1. A specialist fills a phone order exactly as the customer stated, without verifying, and the wrong part ships to a down truck. The root cause of this failure was most likely a breakdown in:

- A. The supplier's shipping department
- B. The truck's diagnostic system
- C. Confirming and clarifying the request before acting
- D. The dealer management system's pricing module

2. A customer describes a symptom poorly and the specialist pulls a single part from memory without questioning. Even if the part happens to fit, the larger risk this habit creates is:

- A. Missing related needs and shipping wrong parts on the next vague request
- B. Charging the customer too little for the part
- C. Recording an extra lost sale in the system
- D. Triggering an unnecessary warranty claim

3. A wholesale account emails an order and a different customer phones in during the same minute. The principle that should guide handling both is that:

- A. Phone customers always take priority over email
- B. Email orders never require a response
- C. Each channel needs the same information, gathered by its own method
- D. The newest contact should always be served first

4. A long-time fleet customer is furious about a backordered part with no delivery date. The response that best preserves the account is to:

- A. Tell the customer backorders are the manufacturer's fault

- B. Promise a delivery date you cannot confirm
- C. Be honest about timing and offer a comparable alternative or expedited option
- D. Suggest the customer find another supplier

5. A specialist records every completed sale but never logs requests they couldn't fill. The most significant consequence over time is:

- A. The operation cannot see unmet demand to adjust stocking
- B. The completed sales are double-counted
- C. The fill rate automatically reaches 100%
- D. Core charges are refunded twice

6. A customer says "it's a Freightliner" and expects that to be enough to look up a clutch. The specialist should recognize that this information:

- A. Fully determines the correct clutch by itself
- B. Identifies the engine and transmission precisely
- C. Sets the axle gear ratio automatically
- D. Narrows little, because one model spans many drivetrains

7. A specialist resolves a complaint, then calls the customer days later to confirm the fix held. This follow-up most directly:

- A. Builds the trust that keeps the account returning
- B. Eliminates the need to document the original sale
- C. Replaces the manufacturer's warranty
- D. Increases the part's core charge

8. A customer buying a clutch disc declines the pressure plate and bearings, wanting "just the disc." The most likely consequence of selling only the disc is:

- A. The clutch will last twice as long
- B. The technician calls back mid-job for the worn companion parts
- C. The core charge is waived entirely
- D. The transmission gear ratio changes

9. A fleet manager weighing economy versus premium brake linings for severe vocational use should be guided toward the premium grade primarily because:

- A. Premium parts carry a larger markup
- B. The application's heat and load demand the higher-rated friction
- C. The store needs to clear premium stock
- D. Economy linings are never available for trucks

10. A customer paying a core charge on a reman water pump asks if the money is gone for good. The accurate explanation, and the consequence of not returning the core, is:

- A. It is refundable on return; an unreturned core forfeits the deposit
- B. It is a permanent fee regardless of return
- C. It is a tax that the customer can reclaim from the state
- D. It is automatically refunded whether or not the core is returned

11. A customer wants OE-level quality but a lower price and is told about an OES option. The accurate description of an OES part is that it is:

- A. A salvaged used unit of unknown history
- B. The cheapest economy aftermarket grade
- C. Made by the OE supplier, sold under the supplier's own brand
- D. Identical to OE in both brand and price

12. A specialist recommends a premium part for a light-duty truck the owner will sell in two months. This crosses from upselling into overselling because:

- A. The premium part is unavailable
- B. The customer asked for the cheapest part
- C. Premium parts cannot fit light-duty trucks
- D. The grade serves the sale, not the customer's actual need

13. A customer buying a reman alternator is surprised the price is lower than new. The correct framing of a reman part is that it is:

- A. An untested used unit with no standard
- B. Rebuilt to specification at lower cost, carrying a core charge
- C. Always inferior in performance to new
- D. More expensive than new once the core is added

14. A customer replacing a water pump leaves before the specialist mentions companion parts. The mid-repair problem this is most likely to create involves:

- A. The truck's brake linings wearing out
- B. The battery losing its charge
- C. Missing coolant, thermostat, gaskets, or belt during the job
- D. The axle gear ratio becoming mismatched

15. A customer profile shows a high-mileage linehaul tractor in for one wear item. A specialist anticipating needs would recognize that:

- A. The truck needs severe-service vocational grades
- B. Other wear items are likely near replacement too
- C. The truck should be converted to hydraulic brakes

D. No additional parts could possibly be relevant

16. Two customers request "front brake parts" for the same truck model — one a highway sleeper, one a local dump truck. The correct approach is to:

- A. Sell identical parts since the model is the same
- B. Sell the cheapest grade to both
- C. Refuse both until VINs are provided
- D. Match the friction grade to each truck's application

17. A medium-duty truck comes in with a brake complaint mentioning a master cylinder and brake fluid. The specialist who assumes air-brake parts would most likely:

- A. Sell the correct hydraulic components on the first try
- B. Identify the system correctly from those terms
- C. Pull the wrong parts, since those terms indicate a hydraulic system
- D. Need no further information to proceed

18. A customer needs "brake pads" for a tractor confirmed to run S-cam drum brakes. The consequence of filling the request literally is:

- A. The correct drum shoes are supplied
- B. A wrong part, since drums use shoes and linings, not pads
- C. The brake system is upgraded to disc
- D. No effect, since the terms are interchangeable

19. A driver reports the truck's spring brakes won't release in the morning even with the engine running. Among air-system causes, the specialist should connect this to:

- A. A failed alternator

- B. A worn clutch disc
- C. A leaking heater core
- D. Insufficient air pressure or a spring-brake control fault

20. A long combination vehicle exhibits rear brakes that grab late. Selling and explaining a relay valve addresses this because the valve:

- A. Stores air for the entire system
- B. Converts air pressure into hydraulic force
- C. Regulates the alternator output
- D. Supplies the rear chambers locally to cut brake lag

21. A customer doing a drum brake reline asks what else the job needs. The most complete answer reflects that a reline typically also involves:

- A. A new master cylinder and brake fluid
- B. Hardware kits, drums if worn, and exposed wheel seals
- C. The diesel particulate filter and DEF
- D. A replacement steering gear box

22. A truck's air dryer cartridge is neglected, and downstream valves begin failing. The link between the two is that a failed dryer:

- A. Reduces the alternator output
- B. Increases the axle gear ratio
- C. Lets moisture and oil reach and damage the valves
- D. Drains the battery overnight

23. A customer reports an ABS warning light but the foundation brakes work normally. Selling foundation brake shoes would be a mistake because:

- A. ABS faults always require new drums
- B. The shoes would fix the ABS light
- C. ABS and foundation brakes are the same system
- D. The ABS layer (sensors, modulators) is distinct from the foundation brakes

24. A spring brake chamber is needed, and the customer asks to "just rebuild the old one." The specialist should explain that the consequence of disassembly is:

- A. Improved air capacity in the chamber
- B. A serious hazard from the stored spring force; sold as a sealed unit
- C. A lower core charge on the new unit
- D. Conversion of the chamber to hydraulic operation

25. A truck's slack adjusters are worn, causing poor braking. The specialist explains that the slack adjuster's role, and thus the consequence of wear, is:

- A. Storing compressed air for the spring brakes
- B. Multiplying pushrod force and taking up lining wear
- C. Regulating the compressor cut-out pressure
- D. Protecting the tractor air if the trailer separates

26. A truck keeps killing batteries even after two replacements. The specialist who sells only a third set of batteries has likely missed:

- A. A weak alternator or corroded cables in the charging loop
- B. A clogged cabin air filter
- C. A worn set of brake shoes
- D. A misaligned front axle

27. A blower fan that runs only on high speed sends a customer to the counter. Selling a new blower motor would be a mistake because the likely failed part is:

- A. The blower motor resistor or speed control
- B. The A/C compressor
- C. The heater core
- D. The condenser

28. A truck gives one click and won't crank, and the batteries test strong. The most probable remaining cause to pursue is:

- A. A clogged diesel particulate filter
- B. A worn front brake lining
- C. The starter solenoid
- D. A leaking charge-air boot

29. A customer demands a higher-amperage fuse because the original "keeps blowing." Supplying the larger fuse would be dangerous because:

- A. It defeats the circuit protection and risks a wiring fire
- B. It would overcharge the battery
- C. It would raise the axle gear ratio
- D. It would cool the intake air too much

30. A customer needs repair wire for a high-current circuit and grabs a thin spool to save money. The specialist should redirect them because undersized wire will:

- A. Improve current flow
- B. Trace more easily in the harness
- C. Lower the circuit's resistance to zero

D. Overheat under the circuit's load

31. A truck's starting circuit clicks but the engine does not turn, and the drive gear is heard grinding. The component most consistent with this combination is the:

A. Alternator regulator

B. Cabin air filter

C. Starter drive or flywheel ring gear

D. Power steering pump

32. A truck cranks slowly, and the specialist confirms the batteries and cables are good. The next logical component to consider is the:

A. Starter motor itself

B. Diesel particulate filter

C. Front-end alignment

D. Cabin air filter

33. A customer with an AMT-equipped tractor asks whether it needs a torque converter rebuild. The specialist should clarify that an AMT:

A. Uses a torque converter like a true automatic

B. Has no clutch and no converter

C. Uses a friction clutch, not a torque converter

D. Requires double-clutching on every shift

34. A driveline clunks on acceleration and vibrates with speed; selling only a center bearing may not fix it because the more likely culprit is the:

A. Heater core

- B. Worn universal joint
- C. Cabin air filter
- D. Power steering reservoir

35. A customer replacing one carrier in a tandem orders a different ratio than the other axle. The consequence the specialist must warn about is:

- A. Driveline binding, heat, and component damage
- B. Improved highway fuel economy
- C. Better cab heating performance
- D. A higher battery cranking rating

36. A vocational operator wants maximum startability under heavy loads. Recommending a numerically higher axle ratio works because it:

- A. Lowers engine speed at cruise
- B. Reduces torque to the wheels
- C. Multiplies torque for pulling power
- D. Improves top-end highway economy

37. A customer requests service involving a torque converter and transmission fluid and filters. This tells the specialist the truck has, and should be sold parts for:

- A. A manual transmission clutch kit
- B. An AMT clutch and actuators
- C. A non-synchronized gearbox
- D. A fully automatic transmission

38. A tandem-drive truck whines at the rear and leaks at the pinion. The most complete parts conversation includes:

- A. The cabin air filter and blower motor
- B. The front leaf springs and shackles
- C. The A/C condenser and drier
- D. The pinion seal, pinion bearings, and possibly the power divider

39. A heavy clutch is replaced on a high-torque engine but underrated for it. The consequence the specialist should anticipate is:

- A. The clutch outlasts the engine
- B. Premature clutch failure under the torque load
- C. A change in the truck's gear ratio
- D. Improved fuel economy

40. A customer needs axle parts and gives the truck's model year, make, and model. Before quoting, the specialist must obtain the gear ratio because:

- A. The model year sets the ratio automatically
- B. Ratio does not affect axle parts
- C. The same model can carry different ratios and axle makes
- D. The ratio is printed on the cab data plate only

41. A tractor on air suspension sits two inches low at one corner. Selling air springs alone may not fix it because the more likely cause is the:

- A. Height control (leveling) valve
- B. Engine oil cooler
- C. Diesel particulate filter
- D. Power steering pump

42. A vocational tandem on rough terrain uses a pivoting beam between axles. The high-wear pivot part the specialist should anticipate selling is the:

- A. A/C compressor
- B. Cabin air filter
- C. Fuel injector
- D. Center (saddle) bushing

43. A truck wanders and wears its steer tires unevenly; the specialist confirms loose tie rod ends. The connection between the two is that worn tie rod ends:

- A. Allow play that disturbs toe and scrubs the tires
- B. Reduce the alternator output
- C. Clog the cabin air filter
- D. Drain the brake air supply

44. A truck with tight linkage still wanders and wears front tires unevenly. The component to consider next, and sell as a matched set, is the:

- A. A/C condenser
- B. Blower motor resistor
- C. Fuel filter
- D. Kingpins and bushings

45. A clunk and wander on an air-suspension tractor, with linkage checked, points the conversation toward:

- A. The fuel injectors and common rail
- B. The DPF and SCR catalyst
- C. The clutch brake and pilot bearing

D. Trailing-arm bushings and ride height

46. A customer's steer tires wear rapidly and unevenly. Explaining that toe is the cause, and that it is adjusted through the tie rod, connects the wear to:

- A. The alternator's output voltage
- B. Worn tie rod ends disturbing toe
- C. The diesel particulate filter
- D. The transmission torque converter

47. A kingpin job is being quoted; the specialist sells the set fitted to the specific axle. The reason a generic set won't do is that:

- A. Kingpins are universal across all axles
- B. The set only includes the pins
- C. Kingpin sets are never sold complete
- D. Front axles vary, so the set must match the axle's make and capacity

48. A customer reports a sweet smell, fogged windshield, and coolant loss. The complete picture for the specialist is that the heater core failure also:

- A. Affects only the air conditioning
- B. Has no link to the cooling system
- C. Loses engine coolant, tying it to the cooling system
- D. Disables the alternator

49. A customer buys an A/C compressor but skips the receiver-drier to save money. The consequence the specialist should warn about is:

- A. The compressor will run cooler

- B. The refrigerant will last longer
- C. Moisture left in the system can damage the new compressor
- D. The system will self-charge with refrigerant

50. A newer truck's A/C uses neither R-12 nor R-134a, and the customer asks what to buy. Selling the wrong refrigerant is serious because:

- A. Mixing incompatible types damages the system and breaks regulations
- B. All refrigerants are interchangeable
- C. Refrigerant type only matters on gasoline engines
- D. The type sets the axle gear ratio

51. A truck has no airflow from any vent in any mode. Selling a new heater core would be a mistake because the shared component that likely failed is the:

- A. Blower motor
- B. Condenser
- C. Expansion valve
- D. A/C clutch

52. A customer servicing an A/C compressor is sold the drier, refrigerant, and oil together. The reason the oil specification matters is that:

- A. The wrong oil improves cooling
- B. Oil type has no effect on the compressor
- C. The wrong oil type or amount can harm the new compressor
- D. Oil is only needed on gasoline systems

53. A customer with a diesel asks for spark plugs and ignition coils. The specialist should explain that a diesel:

- A. Uses spark plugs only at high RPM
- B. Shares ignition coils with the HVAC system
- C. Ignites by compression and has neither part
- D. Uses one coil per two cylinders

54. A customer rebuilding an engine in the chassis is sold an inframe kit. The reason this kit fits the job is that it contains:

- A. A complete aftertreatment system
- B. A new automatic transmission
- C. The truck's batteries and starter
- D. Liners, pistons, rings, bearings, and gaskets for an in-chassis rebuild

55. A diesel's injectors failed after running contaminated fuel. The specialist who sells injectors without the fuel filters risks:

- A. Overcharging the customer for the filters
- B. The new injectors failing from the same contamination
- C. A mismatched axle ratio
- D. A drained battery

56. A truck shows low power and black smoke; the owner blames the turbo. Checking the charge-air boots first can save money because a split boot:

- A. Leaks boost pressure, mimicking a turbo problem at lower cost
- B. Always means the turbo is fine forever
- C. Affects only the cab heating
- D. Drains the diesel exhaust fluid tank

57. A customer asks why cooling the intake air helps a turbocharged diesel. The specialist explains that the charge-air cooler:

- A. Raises air density for more efficient combustion
- B. Filters soot from the exhaust
- C. Stores DEF for the SCR system
- D. Lubricates the turbo bearing

58. A heater core leak and a cooling-system service request arrive together. The specialist recognizes the overlap because the heater core:

- A. Is part of the brake air system
- B. Belongs only to the electrical system
- C. Has no connection to engine coolant
- D. Carries engine coolant, linking HVAC and cooling

59. A customer requests generic "diesel oil" for an emissions-equipped engine. The specialist insists on the correct low-ash specification because the wrong oil can:

- A. Damage the diesel particulate filter
- B. Raise the cold cranking amps
- C. Improve the air conditioning
- D. Change the axle gear ratio

60. A customer needs the consumable the SCR system injects to reduce NOx, and asks how often it refills. The correct answer is that DEF:

- A. Is a permanent fill that never needs topping up
- B. Is consumed continuously and refilled regularly
- C. Is the same fluid as engine coolant

D. Is only used on gasoline engines

61. A customer asks which emissions part traps soot and burns it off, and whether it can clog. The specialist identifies the:

A. Diesel oxidation catalyst, which never clogs

B. Diesel particulate filter (DPF), which can clog and require cleaning

C. SCR catalyst, which stores DEF

D. EGR cooler, which traps no soot

62. A replacement turbo fails again within weeks. Selling a third turbo without investigating would repeat the failure because the root cause likely involves:

A. The oil supply or charge-air system feeding the turbo

B. The front brake friction material

C. The cabin air filter element

D. The steering tie rod ends

63. A customer asks what the EGR system does and why it matters for emissions. The accurate explanation is that EGR:

A. Generates the spark to ignite the fuel

B. Stores air for the parking brakes

C. Recirculates exhaust to lower combustion temperature and NO_x

D. Converts hydraulic pressure into braking

64. A shop buys 10 units at \$7 and 10 at \$9, then sells 10 under FIFO. The cost of goods sold per unit, and the value left in inventory, are:

A. \$7 sold, \$9 remaining in inventory

- B. \$9 sold, \$7 remaining in inventory
- C. \$8 sold, \$8 remaining in inventory
- D. \$7 sold, \$7 remaining in inventory

65. A part sells 5 units per week with a 3-week lead time. Setting the reorder point too low, below lead-time demand, would cause:

- A. Excess holding cost only
- B. Improved fill rate
- C. Lower ordering cost with no downside
- D. Stockouts before replenishment arrives

66. A department fills 266 of 280 requested lines from stock. Its fill rate, and what a falling rate would signal, are:

- A. 95%, signaling overstock
- B. 95%, signaling stockouts and lost sales
- C. 85%, signaling perfect service
- D. 50%, signaling no demand

67. A manager skips cycle counts and relies only on the perpetual system. Over time, the consequence is that:

- A. The system becomes more accurate on its own
- B. Undetected errors and shrinkage make the records drift from reality
- C. The fill rate automatically rises
- D. Obsolete stock disappears from the shelves

68. A pile of returned cores sits unshipped past the supplier's window. The specialist recognizes that the consequence is:

- A. Lost credit, since unreturned cores forfeit their value
- B. The cores gain value over time
- C. The cores become the staff's property
- D. The original sales are voided

69. A slow-moving/obsolete report flags parts that haven't sold in a year. The action this report supports is:

- A. Ordering more of those parts immediately
- B. Increasing their reorder points
- C. Charging a core deposit on them
- D. Returning eligible stock to suppliers or discounting it

70. A warranty claim is submitted without the failed part the supplier requires. The most likely consequence is:

- A. The claim is paid in full automatically
- B. The claim is denied, leaving the operation to absorb the cost
- C. The core charge is doubled
- D. The part's gear ratio changes

Answer Key & Explanations

1. C — Confirming and clarifying the request before acting. Filling a poorly described request without verification is a breakdown in the confirm-and-clarify discipline. That step exists precisely to catch wrong parts before they ship to a down truck.

2. A — Missing related needs and shipping wrong parts on the next vague request. Skipping questioning may work by luck once but builds a habit that misses related needs and produces wrong parts on the next unclear request. The risk is systemic, not one-time.

3. C — Each channel needs the same information, gathered by its own method. The information required — vehicle, component, quantity, application — is identical across channels; only the gathering method differs. Neither channel inherently outranks the other.

4. C — Be honest about timing and offer a comparable alternative or expedited option. Honest timing plus a real alternative preserves a backorder-frustrated account, since trust rests on not overpromising. Blaming others or pushing the customer away loses the account.

5. A — The operation cannot see unmet demand to adjust stocking. Logging only completed sales hides the requests that went unfilled, blinding the operation to demand it should stock. Lost-sale data drives better stocking.

6. D — Narrows little, because one model spans many drivetrains. A model name alone covers many engine, transmission, and axle combinations on heavy trucks. The VIN and drivetrain details are what produce one correct part.

7. A — Builds the trust that keeps the account returning. Following up to confirm a fix held is what builds lasting trust, since customers remember whether you did what you said. It does not replace documentation or warranty.

8. B — The technician calls back mid-job for the worn companion parts. The disc, pressure plate, and bearings wear together, so selling the disc alone leaves the technician calling back mid-job. The companion parts belong in the sale.

9. B — The application's heat and load demand the higher-rated friction. Severe vocational use generates heat and load that require higher-rated friction, which is why the premium grade is correct here. The application drives the grade.

10. A — It is refundable on return; an unreturned core forfeits the deposit. The core charge is a refundable deposit, but failing to return the core forfeits it. Returning the rebuildable unit recovers the money.

11. C — Made by the OE supplier, sold under the supplier's own brand. OES parts come from the OE supplier under its own brand, offering OE-level quality at lower cost. They are neither salvage nor economy grade.

12. D — The grade serves the sale, not the customer's actual need. Recommending a premium part for a light-duty, soon-to-be-sold truck serves the sale rather than the customer, which is overselling. Upselling would match the grade to a genuine need.

13. B — Rebuilt to specification at lower cost, carrying a core charge. A reman part is restored to a defined performance standard, sold below new with a core charge. It is not untested or inferior.

14. C — Missing coolant, thermostat, gaskets, or belt during the job. A water pump job needs its cooling companions, so omitting them risks a mid-repair shortfall. Related-item selling prevents the callback.

15. B — Other wear items are likely near replacement too. A high-mileage tractor in for one wear item likely has others near the end of their life, which a specialist anticipates. Reading the profile surfaces these needs.

16. D — Match the friction grade to each truck's application. Identical models in different applications need different friction grades — the dump truck's severe duty versus the highway sleeper. The application, not just the model, selects the grade.

17. C — Pull the wrong parts, since those terms indicate a hydraulic system. "Master cylinder" and "brake fluid" signal a hydraulic system, so assuming air-brake parts would yield the wrong parts. Identifying the system type comes first.

18. B — A wrong part, since drums use shoes and linings, not pads. The tractor runs S-cam drums, which use shoes and linings, so filling a literal "pads" request produces a wrong part. Clarifying the type prevents the error.

19. D — Insufficient air pressure or a spring-brake control fault. Spring brakes release only when air holds the springs off, so a no-release points to low air pressure or a spring-brake control fault. The other options are unrelated systems.

20. D — Supplies the rear chambers locally to cut brake lag. The relay valve supplies the rear chambers locally on signal, minimizing the lag of air traveling the vehicle's length. It exists specifically to reduce brake lag.

21. B — Hardware kits, drums if worn, and exposed wheel seals. A drum reline typically needs the hardware kit, drums if worn, and the wheel seals exposed during the job. Anticipating these completes the repair.

22. C — Lets moisture and oil reach and damage the valves. A neglected air dryer admits moisture and oil that damage the downstream valves. Replacing the cartridge protects the expensive air-system valves.

23. D — The ABS layer (sensors, modulators) is distinct from the foundation brakes. An ABS light with normal braking points to the ABS electronic layer, not the foundation shoes. Selling shoes would not address the ABS fault.

24. B — A serious hazard from the stored spring force; sold as a sealed unit. A spring brake chamber stores tremendous spring force and must be caged before service, so it is sold as a sealed unit. Disassembly is hazardous and should not be advised.

25. B — Multiplying pushrod force and taking up lining wear. The slack adjuster multiplies the chamber pushrod force and takes up lining wear via the S-camshaft, so wear degrades braking. It does not store air or set pressure.

26. A — A weak alternator or corroded cables in the charging loop. Repeatedly killed batteries point to a weak alternator or corroded cables in the charging loop, not just the batteries. Addressing the loop prevents another failure.

27. A — The blower motor resistor or speed control. A fan stuck on high speed is the classic failed-resistor symptom; the motor still runs. Selling a motor would miss the actual fault.

28. C — The starter solenoid. With strong batteries and a single click but no crank, the solenoid that should close the high-current circuit is the prime suspect. The other options are unrelated.

29. A — It defeats the circuit protection and risks a wiring fire. A higher-amperage fuse no longer protects the wiring, risking overheating and fire. The repeated blowing signals a fault to diagnose, not a fuse to upsize.

30. D — Overheat under the circuit's load. Wire too small for a high-current circuit overheats, which is why gauge must match the load. Undersized wire is unsafe.

31. C — The starter drive or flywheel ring gear. A click with grinding and no engine rotation points to the starter drive or flywheel ring gear failing to engage cleanly. The other components are unrelated to cranking.

32. A — The starter motor itself. With batteries and cables confirmed good, the next logical slow-crank suspect is the starter motor. The other options do not affect cranking speed.

33. C — Uses a friction clutch, not a torque converter. An AMT is a manual gearbox with automated actuators and a friction clutch, not a torque converter, so it needs no converter rebuild. It simply has no clutch pedal.

34. B — Worn universal joint. A clunk on acceleration and speed-related vibration are classic worn-U-joint symptoms, which a center bearing alone may not address. U-joints are a top driveline wear part.

35. A — Driveline binding, heat, and component damage. A mismatched ratio on a tandem makes the axles fight each other, causing binding, heat, and damage. Both drive axles must share the same ratio.

36. C — Multiplies torque for pulling power. A numerically higher ratio multiplies torque more, giving the startability a loaded vocational truck needs. It trades away highway economy.

37. D — A fully automatic transmission. A torque converter with fluid-and-filter service identifies a true automatic, so automatic parts apply. Manuals and AMTs use a friction clutch instead.

38. D — The pinion seal, pinion bearings, and possibly the power divider. A rear whine and pinion leak point to the pinion seal and bearings, and on a tandem the power divider may be involved. The configuration shapes the parts.

39. B — Premature clutch failure under the torque load. A clutch underrated for the engine's torque will fail early under that load. Matching the clutch to engine torque prevents this.

40. C — The same model can carry different ratios and axle makes. A model year and name do not fix the axle ratio or make, since the same model is built with various axles. The ratio must come from the differential tag.

41. A — The height control (leveling) valve. A corner sitting low on air suspension points to a faulty leveling valve, so air springs alone may not fix it. The valve maintains ride height.

42. D — Center (saddle) bushing. The walking-beam's central pivot rides on saddle bushings, a major wear point under severe duty. These are the high-wear pivot parts to anticipate.

43. A — Allow play that disturbs toe and scrubs the tires. Worn tie rod ends introduce play that disturbs toe, scrubbing the tires and causing uneven wear. This links the linkage wear to the tire wear.

44. D — Kingpins and bushings. Wander with uneven front wear and tight linkage points to worn kingpins and bushings, sold as a matched set fitted to the axle. They are the next component to consider.

45. D — Trailing-arm bushings and ride height. A clunk and wander on an air-suspension tractor, with linkage checked, commonly involve trailing-arm bushings and ride height. These wear parts go together.

46. B — Worn tie rod ends disturbing toe. Toe is set through the tie rod, so worn tie rod ends disturb toe and cause rapid uneven wear. This connects the wear to the linkage.

47. D — Front axles vary, so the set must match the axle's make and capacity. Kingpin sets must fit the specific axle's make and capacity, since front axles vary. A generic set will not fit.

48. C — Loses engine coolant, tying it to the cooling system. A leaking heater core loses engine coolant, linking the HVAC complaint to the cooling system. The sweet smell and fog confirm the leak.

49. C — Moisture left in the system can damage the new compressor. Skipping the drier leaves moisture that corrodes and can destroy the new compressor. The drier must be replaced whenever the system is opened.

50. A — Mixing incompatible types damages the system and breaks regulations. Refrigerant types are not interchangeable; the wrong one damages the system and violates regulations. The type must be confirmed before selling.

51. A — Blower motor. The blower moves cab air in every mode, so its failure kills all airflow regardless of setting. Selling a heater core would miss the shared component.

52. C — The wrong oil type or amount can harm the new compressor. A/C oil must match the system's specification, since the wrong type or amount harms the compressor. Oil selection is part of a correct A/C service.

53. C — Ignites by compression and has neither part. Diesels use compression ignition and have no spark plugs or ignition coils. Glow plugs only aid cold starting.

54. D — Liners, pistons, rings, bearings, and gaskets for an in-chassis rebuild. An inframe kit fits the in-chassis rebuild because it contains liners, pistons, rings, bearings, and gaskets. Aftertreatment and transmissions are separate.

55. B — The new injectors failing from the same contamination. Selling injectors without the fuel filters leaves the contamination that destroyed the originals, risking repeat failure. The filters are the essential companion.

56. A — Leaks boost pressure, mimicking a turbo problem at lower cost. A split charge-air boot leaks boost and mimics a turbo fault at far lower cost, so checking it first can save the turbo. It is the cheaper cause to rule out.

57. A — Raises air density for more efficient combustion. Cooling the compressed intake air raises its density for more efficient combustion. Denser air supports more power.

58. D — Carries engine coolant, linking HVAC and cooling. The heater core carries engine coolant, so a leak links the HVAC complaint to the cooling system. Recognizing the overlap guides the right parts.

59. A — Damage the diesel particulate filter. Emissions diesels require low-ash oil; the wrong oil can harm the DPF. Matching the specification protects the aftertreatment.

60. B — Is consumed continuously and refilled regularly. DEF is consumed continuously as the SCR reduces NO_x and must be refilled regularly. It is a recurring consumable, not a permanent fill.

61. B — Diesel particulate filter (DPF), which can clog and require cleaning. The DPF traps soot, regenerates, and can clog enough to require cleaning or replacement. The other components serve different roles.

62. A — The oil supply or charge-air system feeding the turbo. A repeat turbo failure usually means an unaddressed oil-supply or charge-air problem. Selling another turbo without fixing the cause repeats the failure.

63. C — Recirculates exhaust to lower combustion temperature and NO_x. EGR routes some exhaust back to the intake, lowering peak combustion temperature and the NO_x formed. It works with the DPF and SCR.

64. A — \$7 sold, \$9 remaining in inventory. Under FIFO the oldest \$7 units are sold first, leaving the newer \$9 units in inventory. Cost of goods sold reflects the oldest costs.

65. D — Stockouts before replenishment arrives. A reorder point set below lead-time demand runs the shelf to zero before stock arrives. Covering lead-time demand prevents the stockout.

66. B — 95%, signaling stockouts and lost sales. Filling 266 of 280 lines is $266 \div 280 = 0.95$, a 95% fill rate, and a falling rate signals stockouts and lost sales. Fill rate gauges service from stock.

67. B — Undetected errors and shrinkage make the records drift from reality. Without cycle counts, errors and shrinkage accumulate undetected and the perpetual records drift from reality. Cycle counting keeps them accurate.

68. A — Lost credit, since unreturned cores forfeit their value. Cores must be returned within the program window to recover their credit; missing it forfeits the value. Unreturned cores are lost money.

69. D — Returning eligible stock to suppliers or discounting it. A slow-moving/obsolete report supports returning eligible stock to suppliers or discounting it, not ordering more. The point is to clear non-moving inventory.

70. B — The claim is denied, leaving the operation to absorb the cost. A warranty claim without the required failed part is likely denied, leaving the operation to eat the cost. Following the procedure protects the credit.