

Diesel Mechanic interview questions

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What to expect

Interviews for diesel mechanic roles usually combine a practical assessment with behavioural and technical questions. Employers want to see how you diagnose faults, prioritise safety and communicate with customers or site supervisors.

- **Technical diagnostic:** Questions that test your ability to troubleshoot engines, electrical and hydraulic systems using scan tools and systematic logic.
- **Safety and compliance:** Questions about WHS, site inductions, roadworthy standards and how you manage risk in the workshop or field.
- **Scenario-based:** Hypothetical breakdowns or priority calls that assess your judgement under pressure and your communication with others.
- **Behavioural:** Past examples of teamwork, problem-solving, learning new tools and handling difficult customers.
- **Process-oriented:** Walk-throughs of routine services, overhauls or inspections to check your method and attention to detail.

The process often starts with a phone screen, followed by a face-to-face or workshop interview. Many employers include a practical diagnostic task, such as finding a fault on a truck or piece of equipment. You may also be asked to complete a safety induction or a road test. The final stage is usually a conversation about pay, roster and site requirements.

1. Walk me through how you diagnose a persistent engine fault on a Cummins ISX.

Why they ask

This tests your technical diagnostic process and familiarity with Cummins INSITE.

How to structure your answer

Use a step-by-step walk-through: start with customer description and fault codes, then describe how you use scan tool data, check mechanical components, and verify the repair.

Example answer

"First, I ask the driver for details: when it happens, any recent work, and whether there are warning lights. Then I connect Cummins INSITE and check for active and historic fault codes. If codes point to a sensor or fuel issue, I check live data against specifications. For a persistent fault, I also inspect the wiring harness and connectors for damage or corrosion. I might run a cylinder cut-out test to isolate a weak injector. Once I find the root cause, I repair or replace the component, clear the codes, and road test the truck to confirm the fix. I document everything in the service record."

2. Tell me about a time you identified a safety hazard in the workshop.

Why they ask

Safety is critical in this role, and employers want to see you can spot and act on hazards.

How to structure your answer

Use STAR: describe the situation, the task, the action you took, and the result.

Example answer

"Situation: I was working on a truck's air system when I noticed a frayed lifting sling on the overhead crane. Task: I needed to lift a heavy transmission, but the sling was unsafe. Action: I stopped the job, tagged the sling out of service, and reported it to the supervisor. I then sourced a replacement sling"

and completed a pre-use inspection before continuing. Result: The faulty sling was removed from the workshop, and I avoided a potential dropped load. My supervisor thanked me for speaking up."

3. You're on a mine site and a haul truck breaks down. How do you prioritise?

Why they ask

This scenario tests your judgement under pressure, safety awareness and communication on a remote site.

How to structure your answer

Use a judgement-under-pressure structure: assess safety, communicate, diagnose, decide on repair or escalation, and document.

Example answer

"First, I ensure the area is safe: park the truck on level ground, apply the park brake, and check for any hazards like leaking fluids. I radio the supervisor to report the breakdown and get clearance to work. Then I quickly diagnose using the onboard diagnostic system or Cat ET. If it's a simple fix, like a faulty sensor, I repair it on the spot. If it needs parts or specialist help, I communicate the delay and arrange for the truck to be moved to a safe maintenance bay. I always log the fault and repair in the site system."

4. How do you approach a routine service on a heavy vehicle?

Why they ask

This process question checks your method, attention to detail and ability to follow schedules.

How to structure your answer

Walk through the steps: preparation, inspection, service tasks, testing, and documentation.

Example answer

"I start by reviewing the service schedule and any previous repair notes. I check the vehicle for safety: chock the wheels, disconnect the battery if needed, and set up signage. Then I work through the checklist: engine oil and filters, fuel filters, coolant, belts, hoses, brake adjustments, tyre pressures, and greasing. I use a torque wrench where specified. After the service, I run the engine, check for leaks, and take it for a short road test. Finally, I record everything in the service log and note any issues that need follow-up."

5. A customer questions your repair recommendation. How do you handle it?

Why they ask

This tests your client-facing skills and ability to explain technical issues clearly.

How to structure your answer

Use a listen-explain-evidence-options structure: hear their concern, explain your findings plainly, show evidence, and offer choices.

Example answer

"I listen to their concern without interrupting. Then I explain what I found in plain language: for example, 'Your brake pads are below the minimum thickness, and the rotors are scored.' I show them the worn parts and the measurements. I explain the safety risk and the cost of delaying. If they're unsure, I offer options: a full repair now or a temporary fix with a clear plan to revisit. I never pressure them, but I make sure they understand the consequences. Often they appreciate the honesty and agree to the repair."

6. Describe a time you had to learn a new diagnostic tool quickly.

Why they ask

Technology changes, so employers want to see you can adapt and learn new software.

How to structure your answer

Use STAR: situation, task, action, result.

Example answer

“Situation: My workshop bought Jaltest to diagnose a new fleet of European trucks. Task: I had never used it and needed to diagnose a transmission fault. Action: I spent my lunch breaks watching tutorials and practising on a spare vehicle. I also asked a senior mechanic for tips. Within a week, I could navigate the menus and interpret live data. Result: I successfully diagnosed and repaired the transmission fault, and I became the go-to person for Jaltest queries in the workshop.”