

Caltrans Heavy Equipment Mechanic

***This is only a **preview** of the exam statements for the Training & Experience Examination. You will be asked to respond to each statement indicating how your training and experience relate to each. To take the actual exam, please refer back to the bulletin and click the "Click here to go to the Internet exam" link at the bottom of the bulletin.

Training and Experience Examination

1. Operating advanced electronic and computerized diagnostic equipment (e.g., scanners, laptops, meters, digital volt ohm meters (DVOM)) for the diagnosis, testing, and repair of automotive vehicles and heavy maintenance and construction equipment.
2. Operating and maintaining powered hand tools and shop equipment (e.g., welding equipment, lifts, drill presses, machine tools) necessary for the service, repair, and maintenance of gas and diesel powered highway maintenance and construction equipment.
3. Conducting regular and mandated inspections (e.g., opacity, crane, biennial inspection of terminals (BIT), safety) of automotive vehicles and heavy maintenance and construction equipment to determine maintenance and repairs.
4. Inspecting emissions control systems on gas and diesel powered vehicles (e.g., On Board Diagnostics (OBD), diesel particulate filters) in compliance with State and federal air quality control standards and regulations.
5. Diagnosing automotive vehicles and heavy maintenance and construction equipment to locate and determine the need or extent of repairs and corrective action.
6. Jacking, hoisting, cribbing, suspending, and securing automotive vehicles and heavy maintenance and construction equipment for maintenance and repair using vehicle lifting devices.
7. Performing preventive maintenance and service (e.g., fluid changes, brakes, steering, hydraulics, air systems) on automotive vehicles and heavy maintenance and construction equipment.
8. Performing repairs to various systems (e.g., engine, powertrain, suspension, heating and air conditioning, brakes, hydraulics) on automotive vehicles and heavy maintenance and construction equipment.
9. Disassembling and assembling automotive vehicles and heavy maintenance and construction equipment for repair or maintenance in compliance with State and federal Occupation Safety and Health Administration (OSHA) standards and regulations.
10. Building, overhauling, and/or modifying automotive vehicles and heavy maintenance and construction equipment in compliance with engineering guidelines.
11. Welding, fabricating and cutting metal for the construction and repair of automotive vehicles and heavy maintenance and construction equipment.
12. Documenting and maintaining records of inspection, preventive maintenance, and repairs (e.g., the nature of inspection, repair and service type, labor hours, and replacement parts/modified) performed on automotive vehicles and heavy maintenance and construction equipment.