

SENIOR EQUIPMENT MECHANIC

(Class Code 3712)

TASK LIST

- 1) Reviews operator's written trouble reports, inspector's shop order report, memos, and verbal reports of vehicle, mechanical and electrical problems.
- 2) Reads vehicle work history file or accesses information from the section's computer terminal by typing in appropriate codes in order to determine the previous work history of the vehicle and other background information relating to the vehicle.
- 3) Diagnoses and services diesel particulant filter (p-traps), air-to-air coolers, catalytic converters, turbo and exhaust performance, diesel exhaust fluid, engine knocks and noises using stethoscopes, cylinder balance tester, and relevant experience.
- 4) Tests wiring, ignition circuits, and electrical parts such as coils, condensers and distributors using digital volt ohm meter (D.V.O.M), ohm and dwell meters or dwell tachometers, oscilloscopes, hand-held scanners, laptop computer programs and on-board computer testers.
- 5) Inspects, schedules and performs repairs on mechanical, hydraulic, air brake, anti-lock braking (ABS) and traction control systems using micrometers, dial indicators, pressure, vacuum, feeler gauges, ultra-sonic leak detector, laptop computer softwares, scan tools and basic hand tools.
- 6) Inspects, schedules and performs repairs on liquefied natural gas (LNG), compressed natural gas (CNG), diesel fuel and gasoline fuel systems including carburetor, pumps, filters, lines, fittings, fuel injection system, and computer controlled carburetors, using pressure and vacuum gauges, volume container, exhaust gas analyzer, combustible leak detectors and road tests.
- 7) Inspects, schedules and performs repairs on clutch assemblies, transmissions, drive shafts, drive chains, and rear-axle assembly using pressure gauge, stethoscope, scan tools and computer softwares.
- 8) Inspects, schedules and performs repairs on cooling system and components using thermometer, hydrometer, litmus test strips, system pressure tester, chemical and block check tester.
- 9) Visually inspects tires, tread depth using a gauge and maintain tire pressure records in accordance to California Air Resources Board (CARB) regulations.

- 10) Visually inspects, schedules and performs repairs on undercarriages for damage to frame, hoses, lines, rear suspension, shocks, springs, body parts, air suspension system and traction control system.
- 11) Schedules and performs repairs on starter batteries and charging system components using hydrometer, voltage ampere tester (V.A.T.) and battery starter tester.
- 12) Visually inspects, schedules and performs repairs on interiors and exteriors of vehicles including dash, instruments, seats and belts, glass, mirrors, decals, paint, body surfaces, airbags, HVAC system, climate control system, restraint system and safety cameras.
- 13) Tests, schedules and performs repairs on faulty equipment such as red, blue and amber lights, spotlights, sirens, power converters and inverters, and other specialized equipment using test light, and ohm and volt meters.
- 14) Repairs faulty electrical circuits using ohmmeter, volt meter, soldering gun, and hand tools.
- 15) Visually inspects and replaces lubricants, fluid levels, coolants and fuel products using hydrometer, hand pneumatic lube guns and pumps and hand tools.
- 16) Writes shop orders by examining vehicle, customer complaint and equipment work history, results of diagnostic and other equipment tests, and actual condition of vehicle and equipment to determine type and extent of repairs necessary.
- 17) Tracks inventory of tools, repair and replacement parts and housekeeping supplies using controlled supply system, material requisition forms and equipment repair records to ensure that tools, parts and supplies are available when needed.
- 18) Writes daily, weekly, and monthly standard and memo-type activity reports to keep track of the status of overall shop operations using records of man-hours spent, accidents, deployment of personnel and repair work status.
- 19) Reviews and approves work being done by subordinate personnel such as Equipment Mechanics, Garage Attendants, and Construction Equipment Services Workers by visually inspecting and road testing both completed work and work in progress to determine quantity and quality of work completed.
- 20) Inspects work locations, equipment and tools and maintains proper regulatory documentation to ensure compliance with proper safety regulations using CAL/OSHA and other general safety rules on a daily, weekly, and/or monthly basis.

- 21) Dispatches subordinate personnel either verbally or using written instructions for the purposes of making emergency field repairs.
- 22) Schedules and reports work hours of personnel using computer-based time system to ensure completion of necessary work.
- 23) Schedules and reports monthly deployment period/work schedules for all subordinate personnel.
- 24) Approves staff's time on computer-based time sheet based on actual presence of subordinate employees for use in reporting information to timekeeper.
- 25) Writes and updates vehicle work history files, by reviewing for accuracy and completeness, entries on maintenance record forms and computer records for the purpose of maintaining a permanent record of vehicle repair history.
- 26) Provides input and writes evaluations pertaining to subordinates' probationary and annual performance to supervisors, as appropriate.
- 27) Conducts periodic meetings with subordinates in order to provide information regarding changing policies, general and safety procedures.
- 28) Documents the minutes of the periodic meetings in a standard written report form.
- 29) Communicates, verbally and in writing, with vendors, outside agencies, and dealers in order to secure and negotiate parts, enforcement of warranties, completion of repairs, and dealing with factory recalls.
- 30) Oversees and performs Preventative Maintenance Inspection (PMI) program, California Highway Patrol Biennial Inspection Terminal (BIT), smog and opacity including scheduling vehicles, assigning work, and monitoring records.
- 31) Writes abuse reports in order to document noncompliance with maintenance schedules.
- 32) Determines the need for outside training by comparing the needs of the shop with the skills of individual subordinates.
- 33) Researches unusual and abnormal problems with vehicle in order to determine their causes and methods for needed repairs and to remedy the problem.

- 34) Trains employees on the proper use of department vehicles by test driving vehicle, and by giving written and oral instructions on the use of new and existing vehicle equipment.
- 35) Schedules work to be done by other sections such as body shop, machine shop, and radio shop in order to secure necessary repairs.
- 36) Performs daily and monthly gasoline, diesel, liquid natural gas (LNG), compressed natural gas (CNG) and hydrogen fuel site inspections and LNG offloading.
- 37) Inspects and repairs hybrid vehicles.
- 38) Inspects and repairs hydraulic systems in trucks and forklifts.
- 39) Tracks air conditioning storage and monthly Freon logs.
- 40) Visually Inspects and repairs electric-powered vehicles (EV).
- 41) Inspects and repairs tire pressure monitor system (TPMS) and suspension for wear or damage.
- 42) Maintains on-site records regarding regulatory compliance (such as Certified Unified Program Agency, Storm Water and Injury Illness Prevention Program).
- 43) Fulfills supervisory Equal Employment Opportunity (EEO) responsibilities such as conducting performance evaluations of subordinate personnel related to their required duties and provides counseling and/or disciplinary action if necessary, recommends training, and prepares all employees for advancement.