

HEAVY EQUIPMENT MECHANIC

KIND OF WORK

Skilled heavy equipment repair and maintenance work.

NATURE AND PURPOSE

Under general supervision, an employee in this class is responsible for skilled diagnostics, maintenance and repair of engines and hydraulics, transmissions, and electrical systems powering heavy duty equipment, including trucks, road construction and maintenance machinery and vehicles, medium and light weight equipment, and high performance engines. Performs equipment and electrical troubleshooting to test operational efficiency of engines and drive trains, hydraulic and exhaust systems, etc. and determines cause(s) of malfunction(s). Prescribes and performs repairs to equipment. May provide lead work direction to semiskilled or unskilled workers. Performs related work as required.

This class differs from the Heavy Equipment Service Attendant in that it performs skilled repair and maintenance to internal parts of heavy equipment machinery and engines. It differs from the Heavy Equipment Mechanic Supervisor in that it does not supervise staff.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Troubleshoot equipment for hydraulic, mechanical, and electrical problems so that equipment is kept in operational condition by using a variety of computerized testing equipment and other precision measuring instruments to analyze malfunctions.

Maintain and repair light, medium, and heavy equipment so that down time is minimized and equipment is available when needed by repairing and overhauling engines, cooling system, heating and air conditioning, air, and hydraulic and electronically operated brakes and other equipment, transmission and drive train systems, and electrical monitoring systems on equipment such as loaders, pavers, draglines, crawlers, dozers, tractors, and high performance engines.

Repair and/or fabricate parts so that equipment is operational when needed by fabricating, modifying, and installing special equipment; making use of acetylene and arc welding equipment; restoring vehicle bodies to manufactured condition; making use of special tools and body paint colors.

Check equipment to monitor condition so that needed repairs are completed and down time is minimized by making preventive maintenance inspections; checking for major repairs; diagnosing defective components; making arrival inspections on new equipment; recommending repairs; performing emergency repairs; completing written reports on unit repair records.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

Heavy equipment maintenance, diagnostics and repair techniques sufficient to perform installation, repair, and maintenance on light, medium, and heavy equipment.

Heavy equipment repair tools and rebuilding equipment sufficient to make correct and safe use of these in the repair, modification and maintenance of equipment.

Metal forging, forming and tempering sufficient to repair equipment to working order.

Arc and acetylene welding sufficient to repair damaged equipment and to modify existing equipment per required specifications.

Ability to:

Detect, diagnose, and repair mechanical and electrical defects sufficient to perform preventive maintenance on equipment.

Use electronic, computerized, and/or precision measuring instruments sufficient to diagnose malfunctions in electrical systems and other essential systems in order to repair, and maintain equipment.

Understand and follow oral and written instructions sufficient to carry out repair orders and understand maintenance records and equipment specifications.

Keep repair records sufficient to log, track, and retrieve repair and maintenance histories on equipment.

SPECIAL WORK CONDITIONS

Positions in this class may require the employee to lift and handle medium to heavy weight materials, such as equipment and tools. The work environment may include exposure to dust, noise, and occasional adverse weather conditions (heat, cold, snow, rain, wind).

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T.C.:
Former Title(s):