

HEAVY EQUIPMENT FIELD MECHANIC

KIND OF WORK

Skilled field and shop heavy equipment repair and maintenance work.

NATURE AND PURPOSE

Under general supervision, an employee in this class is responsible for field and shop 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 train, hydraulic and exhaust systems, etc. and determines the cause(s) of malfunction(s). Prescribes and performs emergency repairs to equipment in the field.-May provide lead work direction to other mechanics, semiskilled or unskilled workers and may direct shop operations in absence of supervisor. Performs related work as required.

This class differs from the Heavy Equipment Mechanic in that it prescribes and performs emergency repairs to equipment in the field and may provide lead work to other mechanics. It differs from the Heavy Equipment Mechanic Supervisor in that it does not directly 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, replace, and repair equipment in the field so that equipment is kept in operational condition by making emergency repairs; performing preventive maintenance tests on equipment; troubleshooting equipment for hydraulic, mechanical, and electrical problems; and performing body modifications and repair work to mechanical equipment at field sites.

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 systems, air, and hydraulic systems 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.

KNOWLEDGES, SKILLS AND ABILITIES REQUIRED

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.

Direct work of other maintenance staff to ensure that equipment is operational and safety practices are followed by assigning repair and maintenance work; directing mechanics and semi-skilled workers in field repair and maintenance activities.

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 regular exposure to adverse weather conditions (heat, cold, snow, rain, wind).

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T.C.:
Former Title(s):