

# WAGE GRADE CAREER PATH

**WG 5803**

## Heavy Mobile Equipment Mechanic

This occupation covers nonsupervisory work involved in the maintenance, repair, and modification of heavy duty vehicles and mobile equipment which have utility systems or special hydraulic, pneumatic, mechanical, electrical, or electronic systems, features, or controls designed for such purposes as construction, combat, earth moving, ship loading, firefighting, and comparable industrial or special applications. Examples of heavy duty equipment covered by this series include bulldozers, road graders, crawler tractors, power shovels, locomotives, combat tanks, cranes, large missile transporters, and fire trucks. The repair of major systems (such as diesel, gasoline, multifuel, and turbine engines; automatic, standard, and cross-drive transmissions; heavy duty drive line systems; and hydraulic, electrical, and mechanical utility systems) is included, whether accomplished as part of or apart from repair of the total piece of heavy mobile equipment involved.

WG02 - Step  
WG05

### Part 1

#### Apprentice/Helper/Trainee; Trade/Less than Journeyman+C5:C24C24C5:C23A5:C31C24C5:C23A5:C33A5:C32C5:C24

- |  |   |
|--|---|
|  | 1 Complete New Hire Orientation                                     |
|  | 2 Complete Civilian Training Plan requirements for current position |
|  | 3 Complete task qualifications for current position                 |
|  | 4 Complete task certifications for current position                 |
|  | 5 Master simple to common work tasks under supervision              |
|  | 6 Maintain successful to above average performance ratings          |

### Part 2

#### Trade/Less than Journeyman

- |  |   |
|--|---|
|  | 1 Continue required on-the-job and formal classroom training required in Civilian Training Plan   |
|  | 2 Complete task qualifications for current position   |
|  | 3 Complete task certifications for current position   |
|  | 4 Master common to complex work tasks. At grade 8, work involves making repairs that can be accomplished by removing, adjusting, or replacing defective or worn parts and components; or assisting higher level heavy mobile equipment mechanics in disassembling, repairing, and assembling major systems, components, and operating mechanisms. For example, grade 8 heavy mobile equipment repairers replace seals and shaft sealing rings, horns, wiring harnesses, starting switches, ignition distributors, sensors, fuel pumps, and water pumps; adjust voltage and current control units, engine idle, brakes, and transmission linkages; and clean or replace filters, battery cables, engine components, and injector nozzles. They assist heavy mobile equipment mechanics in the complete overhaul and repair of major systems, such as engines, transmissions, drive lines, and hydraulic utility systems. |
|  | 5 Maintain successful to above average performance ratings  |

### Part 3

#### Journeyman

- |  |   |
|--|---|
|  | 1 Continue required on-the-job and formal classroom training required in Civilian Training Plan   |
|  | 2 Complete task qualifications for current position   |
|  | 3 Complete task certifications for current position   |
|  | 4 Master common to complex work tasks. At grade 10, the work at the grade 10 level involves determining the cause of malfunctions and making repairs to a variety of heavy mobile equipment and vehicles, such as bulldozers, road graders, rollers, and similar heavy construction and earth moving vehicles; front-end loaders, backhoes, and similar power shovels; mobile cranes; heavy combat equipment; and heavy special purpose vehicles such as large runway snow removal vehicles, missile transporters, fire engine and pump trucks, ladder trucks, and similar equipment which have mechanical, hydraulic, pneumatic, and electric systems, controls, or features not commonly found on automobiles and ordinary transport trucks and buses. In comparison with grade 8 heavy mobile equipment repairers who replace or adjust parts in accordance with oral instructions or work orders, grade 10 level mechanics have a greater knowledge of how the various mechanical, hydraulic, pneumatic, electrical, electronic, and fuel systems work together. They have greater skill than grade 8 level workers in using a wider variety of test procedures and equipment in tracing hard-to-locate problems, and they complete major repairs, overhauls, and modifications with little or no technical advice.<br><br>They conduct functional and performance tests on completed work assignments. The work may involve one of the following kinds of assignments:<br>(1) troubleshooting and repairing the full range of systems on the vehicles or equipment;<br>(2) overhauling one type of major system, such as engines or transmissions, on a wide range of vehicles and equipment of the kind described above; or<br>(3) repairing one type of major system on one of the vehicles described at the next higher level, such as crossdrive transmissions.  |
|  | 5 Master common to complex work tasks. At grade 11, mechanics at this level repair, overhaul, or modify vehicles and equipment that are clearly more complex, involve more complicated and varied systems, or entail unusually difficult problems because available guidelines do not apply. Vehicles and equipment at this level contain more numerous, interconnected, and complex mechanical and nonmechanical systems than those described at the grade 10 level, and are found in such vehicles as tank retrievers, attack tanks, large missile carrying tanks, locomotives, locomotive cranes, portal or dock and floating cranes, aircraft crash cranes, and diesel electric floating derricks. These vehicles have a variety of interconnected systems. Examples include: (1) integrated electric, air, and hydraulic systems; (2) complex state-of-the-art electrical and electronic systems requiring a substantial amount of training and specialized diagnostic equipment to identify problems for replacement of standard components or for referral to electronics mechanics; (3) intricate timing requirements such as dual engines or complex fuel injections systems, e.g., those with several injectors which have precise timing sequences; (4) numerous interconnected gear-reduction systems; or (5) other similarly complex systems.<br><br>Mechanics at this grade level have overall responsibility for a variety of systems or for the entire vehicle involving the repair, overhaul, or modification of engines, transmissions, or other major systems which are more complex than those described at the grade 10 level. For example, systems may require difficult and unusually precise fitting and adjusting of moving parts; or more systems may be combined into a single, complex, mechanical assembly, such as crossdrive transmissions or similar multisystem transmissions. On a regular and recurring basis, they diagnose difficult performance problems and improvise replacement, assembly, repair, and troubleshooting techniques when standard procedures do not suffice. They modify components for use or placement into systems for which they were not specifically designed. |
|  | 6 Provide production support services   |
|  | 7 Maintain successful to above average performance ratings  |

*This list is not all inclusive. For more information on your series, visit the OPM site below. Copy and paste the link in your browser.*

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