

# Mechanical Job Duties Worksheet

Minimal Job Duty Description	What do you need to do your Job?	Detailed Job Duty Description
<p>Diagnose, repair, replace, overhauling heavy equipment. Fabricate parts.</p>	<p><b><u>Software/Computer:</u></b> SAP Work orders, diagnostic programs, internet searches</p> <p><b><u>Tools:</u></b> Hand tools, engine hoists/jacks, air tools, lathe, mill machine, mig/tig welders, propylene torch</p> <p><b><u>Equipment:</u></b> Single/double axle dump trucks, tractor-trailers, loaders, motor graders, mowers; Cummins, Ford, and Detroit Diesel engines.</p> <p><b><u>Systems:</u></b> Brake, fuel, hydraulic, transmission, electrical, gas/diesel engines</p> <p><b><u>Rules/Regulations:</u></b> Federal Motor Carrier Safety Regulations, CDOT Procedures, Environmental regulations</p> <p><b><u>Customers:</u></b> Maintenance employees and supervisors</p> <p><b><u>Misc:</u></b> Manuals, Automotive Service Excellence (ASE) &amp; heating, ventilation and air conditioning certifications (HVAC)</p>	<ul style="list-style-type: none"> <li>• Diagnose, repair, rebuild and overhaul systems and parts, such as gas and diesel engines, transmissions, brakes, electrical, fuel and hydraulic systems, utilizing manuals, computer diagnostic programs, manufacturer websites, as well as Federal Motor Carrier Safety Regulations, CDOT Procedures, and equipment specifications.</li> <li>• Use hand tools, engine hoists/jacks, and air tools to work on vehicles and equipment such as: single and double axle dump trucks, tractor-trailers, loaders, motor graders, and mowers. Extensive experience on Ford and Detroit Diesel engines, some familiarity with Cummins engines. Use mig/tig welders and propylene torches, lathes, and mill machines to fabricate parts.</li> <li>• Process approximately 3-10 pieces of equipment each week, depending upon needed repairs.</li> <li>• Estimate the extent of repairs and associated costs and labor; order parts and supplies per CDOT Procurement procedures; update SAP work orders to accurately reflect all materials, time and equipment needed to complete the repair.</li> <li>• Explain clearly and in layman’s terms to customers what is wrong with the equipment, what is needed to fix it, and how long it will take; provide constructive and tactful feedback to equipment operators on the proper usage of equipment to prevent future failures.</li> <li>• Help other mechanics troubleshoot equipment malfunctions; share expertise on Ford and Detroit engines.</li> <li>• Prioritize own work to achieve shop’s goals; work efficiently to minimize turn-around time and return the equipment back to the road.</li> <li>• Responsible for troubleshooting and determining the “real” reason the equipment is not functioning, as well as identifying any other potential equipment problems.</li> <li>• Maintain current ASE certifications for medium/heavy trucks in Diesel Engines, Drive Trains, Brakes, Suspension and Steering, Electrical/Electronic System, HVAC.</li> </ul>

		<ul style="list-style-type: none"><li>• Responsible for maintaining cleanliness and safety of own work space each day; return all tools to proper locations; properly dispose of all fluids, broken equipment, and hazardous materials.</li><li>• While working, always keep the safety of myself, the equipment operators, and the traveling public in mind.</li></ul>
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