

## Job Title: Ground Support Equipment Mechanic (Heavy duty equipment – Diesel engine)

### Job Summary:

The **Ground Support Equipment (GSE) Mechanic** is responsible for preventative maintenance, diagnosing, repairing, adjusting, calibrating, rebuilding, servicing, and testing mobile and stationary heavy-duty equipment. This includes the maintenance, repair, and troubleshooting of various vehicles and equipment powered by diesel, gas, electric, and hydraulic systems.

This role ensures the optimal performance and reliability of all Ground Support Equipment (GSE), including but not limited to aircraft refuelers, de-icing trucks, snow removal tractors, pushback tractors, electric baggage tugs, belt loaders, aircraft tow tractors, ground power units (GPUs), air start units (ASUs), electric generator engines, and other essential equipment such as scissor lifts, forklifts, pickup trucks, utility vehicles, and water and lavatory carts.

The Ground Support Equipment Mechanic will work as part of the maintenance team and report to the Maintenance Manager.

### Key Responsibilities:

#### Equipment Maintenance and Repair:

- Perform daily inspections, preventive and corrective maintenance on all ground service equipment, diesel, gas or electric –powered vehicles, hydraulic system including various facility equipment.
- Diagnose and repair faults in engines, hydraulic systems, pneumatic systems, electrical systems, and transmissions.

- Strictly follow service manual procedures for inspections, diagnostics, repairs, and component replacements to ensure accuracy and compliance with manufacturer guidelines.
- Conduct overhauls on engines, braking systems, and hydraulic pumps to maintain peak performance.
- Read and interpret technical manuals, schematics, and service bulletins to assist in troubleshooting efforts.
- Perform welding, fabrication, and part replacements as required.
- Ensure maintenance activities align with operational requirements to minimize equipment downtime.

#### **System Troubleshooting and Inspections:**

- Conduct routine inspections to identify potential failures, wear, or required upgrades.
- Use diagnostic tools to assess engine performance, hydraulic pressure, and electrical circuits.
- Perform load testing on batteries, alternators, and starters to ensure reliability.
- Identify and resolve fluid leaks, pressure drops, and mechanical failures in vehicle and GSE systems.
- Assist in post-repair testing to confirm the proper functionality of equipment.

#### **Hydraulic System:**

- Service and maintain hydraulic lifting and propulsion systems used in various equipment.
- Adjust hydraulic valves, cylinders, and pumps to ensure proper operation.
- Conduct fuel system diagnostics, including injection pumps, turbochargers, and fuel filters.
- Overhaul hydraulic motors and troubleshoot pressure-related malfunctions.
- Perform fluid analysis and ensure proper lubrication across mechanical systems.

### **Documentation and Reporting:**

- Maintain accurate records of all maintenance activities, repairs, calibrations, and parts replacements using the Enterprise Asset Management (EAM) system.
- Complete service reports, work orders, and parts requisitions.
- Recommend corrective actions to minimize downtime and improve equipment reliability.
- Participate in asset tagging and pre- to post-commissioning activities for all ground support equipment including airport facility and tank farm.

### **Training and Knowledge Sharing:**

- Provide training and share essential information and skills to other member of maintenance team.
- Participate in internal training sessions on new equipment, diagnostic tools, and industry best practices.

### **Safety and Compliance:**

- Adhere to all local, provincial, and federal safety regulations.
- Follow lockout/tagout (LOTO) procedures and job hazard analysis (JHA) guidelines.
- Ensure compliance with transportation, aviation, and environmental regulations regarding fuel, hydraulic fluid disposal, and emissions.
- Participate in safety inspections and audits.
- Respond to emergency breakdowns and coordinate quick corrective actions to restore equipment operations.
- A strong safety-first culture is non-negotiable

### **Continuous Improvement and Collaboration:**

- Work closely with operations personnel, other members of maintenance team to optimize maintenance processes.
- Assist in inventory management for spare parts and consumables.
- Contribute to continuous improvement initiatives by suggesting innovative maintenance solutions.
- Carry out additional tasks assigned by the Maintenance Manager to meet operational needs.

#### Qualifications:

- CPA Journeyman card (Compétence de Professionnelle d'Automobile) Heavy duty/ Diesel Truck mechanic is required.
- Red Seal equivalent certification will be considered.
- Minimum 5-7 years verifiable experience as a Heavy-Duty Equipment Technician, Truck and Transport Mechanic, or an equivalent trade certification.
- Bilingual (French and English preferred).
- Valid driver's license. (Class 5)
- Strong technical expertise in:
  - Experience in ground support equipment.
  - Diesel engine diagnostics and repair (Kubota, Cummins, Kohler, CAT, Detroit Diesel, or similar).
  - Hydraulic systems, including pumps, valves, actuators, and cylinders.
  - Electrical and electronic control systems used in modern GSE and fleet vehicles.
  - Brake, suspension, and drivetrain systems for heavy equipment.
- Cross training is essential to the team. You must be willing to learn and share expertise on all vehicles in the ground support equipment fleet (electric, diesel, and gas).

- Must be able to obtain and maintain any applicable transportation security clearances and additional authorizations.
- Ability to lift, up to 50 lbs. frequently.
- Ability to work under pressure in a fast-paced environment, including evenings, weekends, and emergency shifts.

**Assets:**

- Welding and fabrication for repairs.
- CPA (Compétence de Professionnelle d'Automobile) Electric vehicle safety certification.
- CDL Driver's license (class 1 or class 3)
- Advance Fuel injection & Diesel Engine tune-up certificate/licenses.
- Gas engine and Electric system preventive maintenance experience.
- Current security clearances.

**Working Conditions:**

The Ground Support Equipment mechanic will work in both indoor workshops and outdoor environments, sometimes under adverse weather conditions. Evening and alternating weekend work is required to ensure operational efficiency. The role requires standing, climbing, crawling, lifting and occasionally working at heights. Emergency response and shift flexibility are required to support 24/7 airport operations, including holidays, power outages and other critical system failures. This position is full-time onsite with no option for hybrid or remote work. As part of a small maintenance team, the Ground Support Equipment mechanic is expected to actively participate in all maintenance tasks and assist as needed to ensure operational efficiency.