

## CITY OF HAMILTON

### COMMUNITY & EMERGENCY SERVICES DEPARTMENT (HAMILTON FIRE DEPARTMENT - LOCATION – 177 BAY ST. NORTH)

#### PROBATIONARY EMERGENCY VEHICLE TECHNICIAN/MECHANIC – HPFFA LOCAL 288

#### SUMMARY OF DUTIES

Reporting to the Chief Mechanical Officer, responsible for the diagnosis and repair either in a regular maintenance program or in emergency conditions to a variety of fire and ambulance apparatus including pumps, aerials, tankers, other emergency response units and standard light duty automotive fleet vehicles. These responsibilities shall include inspection, testing, replacing and repairing components so that new or repaired components are operational and comply with Underwriters Laboratory Canada (ULC), Underwriters Laboratory (UL), National Fire Protection Association (NFPA), Ontario Provincial Land Ambulance & Emergency Response Vehicle Standard (OPLAERVS) and Original Equipment Manufacturers (OEM) specifications for the installation, size tolerance and material composition.

#### GENERAL DUTIES

Perform preliminary diagnosis, so that complaints regarding apparatus are verified and documented.

Perform preventative maintenance and vehicle servicing including PMCVI by conducting visual inspections so that the vehicle meets Ontario Ministry of Transportation safety requirements and the vehicle is in safe operating condition.

Diagnose and repair both gas and diesel engines by performing inspections and tests to assess mechanical condition.

Diagnose and repair air supply by visually inspecting air supply system, inspecting and testing compressor air intake, air supply evaporator, and air storage tanks, the operation of check valves and related safety valves.

Diagnose and repair air and hydraulic brake systems by inspecting, and testing parking brake system, anti-lock brake system, traction control and service brakes.

Diagnose and repair clutches, manual and automatic transmissions, transfer cases, and driveline components.

Diagnose and repair suspension systems by visually inspecting rubber block, spring suspension and air suspensions systems.

Diagnose and repair steering systems by inspecting, testing adjusting, replacing and repairing.

Diagnose and repair starting and charging systems, including overhauling starters, alternators and their respective systems.

Inspect and repair engine cooling and exhaust systems by visually checking, testing and replacing cooling system and exhaust system components.

Diagnose and repair electronic engine and emission control systems for diesel and gasoline engines by using diagnostic test equipment.

Diagnose and repair electrical system by inspecting, testing, repairing and replacing electrical system components.

Diagnose and repair heating, ventilation, and air-conditioning systems by testing the systems and their components, discharging and recovering refrigeration gases from air conditioning systems.

Perform body work and exterior and interior repairs by inspecting, removing and repairing body of vehicle.

Diagnose and repair tires, wheels and rims by inspecting tires, rims, hubs, spacers, wheel bearings and seals.

Diagnose and repair diesel fuel systems by inspecting fuel delivery and return systems, testing fuel pressure and restrictions.

Perform in station Maintenance by servicing stand-by generators, maintaining air compressors, small power equipment and tools.

Design, fabricate and fit parts, components and assemblies and retrofits engines and transmissions by preparing sketches/drawings, compiling materials lists, and fabricating components.

Diagnose, maintain, repair and re-calibrate gas-monitoring equipment.

Diagnose and repair fire service equipment and appliances by testing and repairing hoses, nozzles, hose fittings, adapters, ladders, radios, portable generators and pumps.

Maintain, test and repair oxygen delivery and suction devices used by Hamilton Paramedic Service as per Ministry of Health standards.

Conduct accident investigations for the fire service apparatus by determining if a vehicle can be moved, checking for causes of accident, inspecting and estimating vehicle damage.

Diagnose and repair pumpers, aerials, tankers, other fire apparatus, ambulances and standard smaller fleet vehicles by inspecting, testing, replacing and repairing components so that new or repaired components are operational and meet ULC, UL, NFPA, OLAERVS (Ontario Provincial Land Ambulance & Emergency Response Vehicle Standard) and Original Equipment Manufacturers' (OEM) specifications for installation, size, tolerance and material composition.

Maintain professional currency and competency by attending training courses, meetings and in-service training sessions, reviewing new legislation and regulations and publications to keep up-to-date on repair and maintenance techniques and procedures.

Respond to major fire alarms to repair, maintain, and refuel Fire and Paramedic apparatus on-site.

Respond to vehicle breakdowns for assessment of repair needs – to be done on-site off to be moved to a repair facility.

Take charge of complicated repairs, changes, replacements, using judgement based on analytical ability and knowledge of equipment functions and tolerances, to assure correct operations and to minimize wear and failures.

In case of trouble or complaints by operators, must be able to diagnose and correct equipment malfunctions.

Demonstrate safe working practices and techniques by identifying health and safety hazards, wearing personal protective equipment and clothing, and maintain responsibility for good housekeeping practices and a clean work site.

Respond to vehicle breakdowns or repair needs including response to emergency fire situations and ambulance patient off loading sites such as hospital emergency centers or extended time incidents involving fleet vehicles on-call on a rotational basis.

Perform other duties as assigned which are directly to the responsibilities of the position.

**QUALIFICATIONS**

1. Must have and maintain a 310-S Certificate of Qualification in the trade of Motor Vehicle Mechanic with preference being given to those with a current Inter-Provincial Standard (Red Seal). If you do not have the red seal then as a condition of employment it must be obtained within 14 months of your hire date.
2. Must have and maintain a 310-T Certificate of qualification in the trade of Truck and Coach Mechanic, with preference being given to those with a current Inter-Provincial Standard (Red Seal). If you do not have the red seal then as a condition of employment it must be obtained within 14 months of your hire date.
3. Previous practical experience in the diagnosis and repair of fire-fighting apparatus and or Paramedic Ambulance and Emergency Support Unit (ESU) repairs.
4. Valid Drivers license, Class "D" with "Z" endorsement (air-Brake).
5. Demonstrated experience in the trade as a Licensed Journeyman.
6. Must have thorough practical and theoretical knowledge of all equipment as well as the analytical ability to diagnose, overhaul, adjust and install all components.
7. Must be able to perform work with a minimum of supervision.
8. In addition to the above requirements, it would be considered advantageous that the applicant be experienced in the following:
  - Welding and fabricating
  - Parts management – inventory
  - Schematic blueprint reading
  - Mechanical drafting
  - Experience or currently attending courses relating to computer-controlled emissions
  - Air-brake diagnosis and repair
  - Repair of Ambulance apparatus
  - Hydraulics low and high pressure
  - Machine-shop experience
  - Small engine overhaul and repair
  - Maintenance scheduling
  - Automotive electrical
  - Plumbing

Note: Must be able to work rotational shift system including day and afternoon shifts: on call on a rotational basis and will be required to carry a pager.

Note: If you are invited to an interview a photocopy of your 310-S Certificate of Qualification in the Trade of Motor Vehicle Mechanic including if applicable, Inter-Provincial Standard (Red Seal), must be presented at time of interview.

Note: If you are invited to an interview a photocopy of your 310-T Certificate of qualification in the trade of Truck and Coach Mechanic, including if applicable, Inter-Provincial Standard (Red Seal), must be presented at time of interview.

Note: The successful candidate will be required to participate in the Provincial and North American Emergency Vehicle Technician's Program (a series of training programs and proficiency endorsements developed through a steering committee of the Professional Standards Setting Body of the Ontario Fire Marshal's Office).

Note: The successful candidate must meet all current requirements (including medical) as a condition of employment.

Note: The successful candidate must be in good physical health and able to lift and move heavy weights.