

# CIVILIAN JOB DESCRIPTION

## POSITION INFORMATION

Position Title: **Mechanic**

Number of Positions: 1

Location: Central

### PURPOSE:

To perform preventative maintenance, equipment/systems installation and removal, and repairs for the NAPS vehicle fleet, scheduling and prioritizing work. Negotiation and purchase of new vehicles and equipment and sale of surplus vehicle and equipment inventory.

### KEY RESPONSIBILITIES:

1. Fully equips service-wide police patrol, surveillance, and special unit vehicles according to specification by installing components such as emergency lighting, security screens, video equipment, mobile work stations, alarm systems, remote starter systems, power inverters, wiring and outlets; integrating existing systems with installed features; modifying components such as rear door locks; disabling rear window operation; and adjust vehicle computer settings as per manufacturer instructions for lighting adjustments. Logs and notes all wiring, routing and installation instructions.
2. Retrofits all police service vehicles and applicable equipment with police vehicle graphic decals.
3. Performs or coordinates scheduled maintenance service of minor and major repairs on fleet vehicles. Carries out road tests and other diagnostic procedures to locate faults and determine malfunctions. Researches vehicle specifications and equipment by manufacturer, model and year. Coordinate work done on brakes, suspension, exhaust, steering, removal and installation of engines, transmissions and repair of engine components. Diagnoses and repairs trucks and police emergency vehicle lighting and controls. Changes tires in summer and winter. Evaluation of vehicle equipment and repairs.
4. Design, implement and install vehicle components to adapt to changing police service needs and to constantly changing vehicle manufacturer design specifications.
5. Coordinates and performs the pick-up of vehicles out of service and the delivery of vehicles to be put in service, taking into consideration mechanical fitness of vehicles and urgency of replacement.
6. Coordinates and sends vehicles to outside vendors for warranty covered maintenance.
7. Develops installation plans and vehicle wiring diagrams (schematics) for equipping new vehicles as patrol and surveillance vehicles.
8. Coordinates with OPP customer service desk for Comm Radio repairs.
9. Places orders for mechanical parts and supplies and coordinates shipment of same to remote detachments.
10. Performs or coordinates service, repairs and maintenance to trailers, including wheel bearing service, tires, electric and hydraulic brake repairs, lighting repairs, and spring and axle repairs. Equips trailers with lighting and equipment such as power inverters and 12-volt accessory outlets.
11. Removes equipment from vehicles, stripping them of lighting, radar bracket, push bumpers, tires, decals, etc. Disconnects wiring and restores vehicle to factory specifications.
12. Research and provide quotes on vehicle and parts purchasing. Liaises with Director of Finance and management to facilitate the tendering process for purchasing and vehicle sales.
13. Performs other duties as assigned.

### Staffing and Licensing Requirements:

Must possess an Ontario G Drivers' Licence.

Must possess an Ontario Class A Drivers' Licence to transport police service vehicles and equipment to various locations on flat deck trailer.

**Job requires a valid Automotive Technician 310S Certificate of Qualification.**

Must possess own tools and garage.

Must be able to pass a security background check.

### COMPENSABLE FACTORS

#### KNOWLEDGE:

Knowledge of automotive technology, technical manuals, diagnostic procedures and techniques, and specialized equipment such as winches, hydraulic systems in order to conduct compression, electrical and hydraulic system testing to determine the nature and extent of vehicle problems, and to perform maintenance and repair to various automotive systems.

Knowledge of vehicles' electrical systems, emergency lighting systems, wiring and component locations, wiring and routing techniques and schematics, airbag restraint systems, and all other mechanical components to perform repairs and equipment/systems installations and removals.

Knowledge of Ministry maintenance policies and guidelines in order to adhere to established maintenance schedules and repair authorization requirements.

Knowledge of and training in relevant sections of the Occupational Health and Safety Act and WHMIS to safely perform servicing, maintenance and repair of vehicles and trailers.

#### INTERPERSONAL AND COMMUNICATION SKILLS:

Written communication skills to log and note changes in wiring and routing and to document installation plans and modifications.

Written and verbal communication skills to negotiate prices for new vehicles and parts with vendors and determine reasonable prices for the sale of used fleet vehicles.

Interpersonal skills to foster and maintain cooperative working relationships with management and officers when conversing regarding vehicles and in trouble shooting.

On occasion, misunderstandings or conflicts with external vendors and clients arise. Interpersonal skills to effectively resolve complaints from unsatisfied clients as well as vendor problems.

Oral communication skills to discuss resolution of repair problems, research on new vehicles, etc., with supervisor and other technician's research and provide recommendations regarding vehicle and equipment requirements to discuss the nature and, type of repairs needed; to provide detailed explanations on technical, mechanical and electrical problems and associated diagnostic procedures.

Organization and planning are required to ensure timely scheduling and coordination of repairs and maintenance.

Develops installation plans and wiring diagrams requiring planning and analysis.

#### PROBLEM SOLVING/COMPLEXITY:

Problem solving and analytical skills to perform mechanical and electrical diagnoses and troubleshooting, involving identifying and evaluating appropriate test procedures, assessing results and determining the nature of the problem. Determines how to approach and carry out technical modifications and adjustments, e.g., testing and correcting a no-start vehicle condition; locates and corrects open circuits and short circuits in wiring.

Evaluative skills to assess whether repairs can be made or equipment and/or parts must be replaced.

#### JUDGEMENT AND DISCRETION:

Decisions are made and work is performed in accordance with technical manuals, established techniques, maintenance policies, procedures and guidelines.

Decisions are made regarding scheduling for vehicle maintenance and repair, and vehicles to be put in and out of service, within the context of mechanical fitness and need/urgency for replacement.

Equipment modifications and changes that do not fall within standard procedures as noted on work orders must be approved by the Chief of Police or designate.

**RESPONSIBILITY FOR THE WORK OF OTHER EMPLOYEES:**

No formal responsibility for the work of others, however, may provide orientation, on-the-job training, or mentoring to Maintenance Mechanic, co-op students and new Technicians based on subject matter expertise.

**PHYSICAL AND SENSORY DEMANDS:****Physical Demands:**

Almost constant physical activity while performing service, installations, equipment removal, maintenance and repairs on vehicles and trailers, involving standing, walking, sitting, crouching, bending, safely lifting and carrying equipment and parts (36kg/80lbs).

Requires hand and finger dexterity and hand/eye coordination when installing wiring and equipment, and in the use of various tools, and in the application of decals to police service vehicles and equipment.

**Sensory Demands:**

Audio: listening for specific noises when diagnosing vehicle defects and problems.

Auditory demands when answering phone calls from field officers, vehicle and parts suppliers etc. Cellular and land based telephone discussion when trouble-shooting vehicle problems.

Visual: viewing wiring diagrams on computer; wiring vehicles; performing inspection and quality control checks of vehicles, materials and parts.

Concentration is required when focusing on descriptions and illustrations of a vehicle's computer and electrical system. Planning work according to time constraints when working on multiple ~~two~~ vehicles and one or more ~~both~~ are required within a short period of time

Frequent interruptions such as telephone calls, multiple customers/vendors interfere with tasks, but are manageable.

Concentration is required when reading and creating wiring diagrams and in trouble-shooting vehicles with Ford computer diagnostic tool.

**WORKING CONDITIONS:**

Works in a large, well lit, and clean area. Exposure to potential electrical and physical hazards (wiring, engines, etc.), fumes, chemical substances, grease and oil, odours, exhausts, temperature fluctuations, engine and equipment noise, and glare. Regular travel is required to various detachment locations and other sites to perform on-site work, requiring the use of highways, secondary and very isolated rural roads, sometimes travelling in inclement weather.

Flying in to isolated communities, at times for extended periods of time, performing necessary work in facilities that may not be fully equipped (having to adapt as necessary), and in some cases, having to perform vehicle work outdoors in inclement weather.