
Vehicle Maintenance Schedule For Installation Fleet

1.0 Program Objective & Scope

This policy establishes a standardized preventive maintenance (PM) schedule for all vehicles in the installation fleet, including vans, trucks, and trailers used for field service and material transport. The primary objective is to minimize unplanned breakdowns, extend vehicle life, reduce total cost of ownership (TCO), and comply with Canadian provincial safety inspection requirements (e.g., Ontario CVOR, Quebec SAAQ). The scope covers all fleet vehicles operated by the installation department, including leased and owned units, and applies to both routine mileage-based services and calendar-based inspections.

2.0 Key Performance Indicators (KPIs) & Metrics

The following KPIs will be tracked to measure program effectiveness:

- (1) Fleet Availability Rate = $(\text{Total Fleet Hours} - \text{Downtime Hours}) / \text{Total Fleet Hours} \times 100$, target >95%.
- (2) Mean Distance Between Failures (MDBF) = $\text{Total Fleet Kilometers} / \text{Number of Roadside Breakdowns}$, target >50,000 km.
- (3) PM Compliance Rate = $\text{Number of PMs Completed On Time} / \text{Total Scheduled PMs} \times 100$, target >90%.
- (4) Cost per Kilometer = $\text{Total Fleet Maintenance Cost} / \text{Total Kilometers Driven}$, tracked monthly.
- (5) Average Vehicle Age and Replacement ROI trigger (when cumulative repair cost exceeds 50% of vehicle replacement value).

3.0 Roles & Responsibilities

Fleet

Manager: Owns the PM schedule, coordinates with external service providers, reviews KPI dashboards, and authorizes capital replacement requests.

Installation Supervisor: Ensures drivers report vehicle issues promptly and that vehicles are available for scheduled PMs.

Drivers/Operators: Perform daily pre-trip inspections (tires, lights, fluids), log mileage, and report any warning lights or abnormal sounds via the digital check-in tool. Maintenance Manager (Plant): Provides oversight for in-house shop work if fleet vehicles are serviced on-site, and ensures parts inventory for common filters and fluids.

4.0 Program Execution & Data Collection

All fleet vehicles are assigned a PM schedule based on odometer readings (every 10,000 km for oil/filter, 20,000 km for tire rotation, 40,000 km for transmission service) and calendar intervals (annual brake inspection, bi-annual safety inspection). Data collection is performed via a digital CMMS (ServiceGrid) where each vehicle has a profile. Drivers enter daily mileage and inspection results. Service events are logged with parts used, labour hours, and cost. The system auto-generates PM work orders when mileage or date thresholds are met. Completed PMs are verified by the Fleet Manager with a photo of the service receipt.

5.0 Review, Reporting & Continuous Improvement

A monthly Fleet Reliability Review is conducted by the Fleet Manager, Plant Manager, and Installation Supervisor. The review analyzes MDBF trends, PM compliance gaps, and cost-per-kilometer outliers. Any vehicle exceeding 3 unscheduled breakdowns in a quarter triggers a root cause analysis (RCA) and potential early replacement evaluation. Annual CapEx planning uses the collected data to justify fleet renewal, with a target replacement cycle of 5 years or 200,000 km for light-duty vehicles. Continuous improvement actions include updating PM checklists based on failure patterns and renegotiating service contracts based on volume data.

Regulatory Disclaimer: This program document is a generic strategic template. The end-user assumes all liability for aligning these metrics, KPIs, and reliability frameworks with specific corporate goals and OEM engineering standards.