

CITY OF MONTGOMEY

FLEET MANAGEMENT DEPARTMENT

PREVENTIVE MAINTENANCE AND DAILY SAFETY INSPECTION PROGRAM

In our continuing effort to serve our City customers more effectively and efficiently, the Fleet Management Department is embarking on the implementation of a more robust Preventive Maintenance (PM) program. We are certain that by implementing this preventive measure, we can reduce the amount of time vehicles are off the road due to maintenance emergencies and repairs, and will prolong the life of your vehicles and equipment. For this program to be effective however, it is going to have to be a collaborative effort. Below is a brief explanation of the PM program and what it entails. Also outlined below is the customer's role in the PM process and that is daily vehicle inspection requirements by you, the vehicle operators. With your help, we can reduce maintenance costs, emergency repairs, and keep your vehicles on the road longer between PM intervals.

What is Preventive Maintenance?

A PM consists of scheduled servicing, inspections, and vehicle repairs to prevent potential problems and maximize vehicle availability. Preventive maintenance is used to proactively avoid or reduce vehicle breakdowns and is based on time, mileage, engine hours, or gallons of fuel used. The Fleet Management Department is initiating a PM program that will be based on time (every six months) for the Heavy Equipment side and on mileage (manufacturer recommendations) for the auto light side. Preventive maintenance actions include vehicle inspection, lubrication, adjustment, cleaning, testing, repair, and/or worn parts replacement.

Why be Concerned with Preventive Maintenance?

To maximize the availability of vehicles and to prolong the use of vehicles, PM services must be performed on a scheduled basis. If preventive maintenance is not performed regularly, vehicle life span will be greatly reduced and maintenance costs will continue to rise. Some vehicles may be prone to excessive breakdowns requiring expensive repairs, causing a vehicle to be out of service when least expected and possibly when needed most. Vehicles may become unsafe due to lack of PM. Proper maintenance will also help prevent litigation from negligence.

A strong Preventive maintenance program is as important as driver safety programs. If a vehicle becomes unsafe due to lack of maintenance or repair, the City can be held liable for negligent entrustment. As defined, liability is premised upon providing an employee with a dangerous tool or instrument, such as a vehicle, while knowing, or having reason to know, that use of the vehicle creates unreasonable risk or harm to others. Simply stated, the vehicle must be safe to operate. Should the brakes fail causing a serious crash or fatality, the vehicle is impounded by authorities for investigation. Should the investigation determine that bad brakes or other vehicle malfunctions contributed to the accident, the authorities can seek a court order to obtain vehicle maintenance records. If the City's Fleet operation fails to practice preventive maintenance under these circumstances, we could be prosecuted for a negligent act which we failed to prevent.

Preventive Maintenance Methods

Vehicle maintenance and repairs can be performed in one of two methods:

- Proactive: scheduled preventive maintenance.
- Reactive: unscheduled breakdown maintenance.

A scheduled vehicle service consists of preventive maintenance, scheduled component repairs/replacements, and driver inspections. Unscheduled breakdown maintenance is most often due to lack of preventive maintenance. Reactive maintenance can be costly and should be minimized by a proactive preventive maintenance program. The object is to have the majority of vehicle maintenance and repairs scheduled rather than unscheduled.

Developing an Effective PM Program

An effective PM program should consist of the following:

- Checklist of PM service tasks performed
- PM service interval or frequency to perform tasks
- Driver written-up inspections (Daily Inspections Form) and/or complaints using the Preliminary Vehicle Diagnosis (PVD) Form
- An automotive facility with trained professional Heavy Equipment/Automotive Technicians
- Scheduling and electronic recordkeeping

PM Service Checklist

Our PM program will include a task list of both preventive maintenance and safety items. The following will be addressed during a routine preventive maintenance service: engine oil and filter changes; transmission fluid; fuel system; cooling system; engine and transmission mounts; drive shafts or CV joints; belts and hoses; tune-ups; electrical system components; braking system; steering and suspension system; tires, wheels, and rims; exhaust system; undercarriage and frame; exterior and interior lights; body, glass, and mirrors; windshield wiper system; horn; seatbelts and seat structures; fluid leaks; and auxiliary systems.

Each City Vehicle Operator is the First Line of Defense (Vehicle Inspections)

The vehicle operator is the first line of defense against unexpected breakdowns and repairs. It is important that drivers communicate vehicle problems immediately to their Vehicle Control Officer (VCO) and/or to the Fleet Management Department. This allows the vehicle operator to participate in the PM program by being proactive which will help reduce breakdowns. It is the responsibility of each Department VCO to ensure that vehicles assigned to his/her department that are scheduled for PM's arrive to Fleet Management when scheduled. VCO's will be notified one month prior to the scheduled PM's which should allow plenty of time to coordinate the service. With more than 1800 pieces of equipment to service, Fleet Management must be able to

rely on each Department VCO to ensure vehicles scheduled for PM's arrive as scheduled. The following vehicle systems should be monitored by the driver on a regular basis:

- Vehicle safety items (e.g., tires, wipers, horn, brakes, steering, fluids, etc.).
- Vehicle drivability items (e.g., misfire, rough idle, etc.).
- Vehicle body (e.g., glass, body damage, cleanliness, etc.).
- Vehicle miscellaneous repair items (heater, radio, A/C, etc.).

The vehicle operator should inspect the oil level and safety items listed on the inspection form. The PM program depends on the driver for continued success. Should the vehicle operator fail to inspect the vehicle prior to its use a potential problem may go unnoticed causing a breakdown and/or an unsafe driving situation. Training can be conducted by Fleet Management personnel to ensure all operators know what an inspection includes. As a team effort, the PM program can be a great success.

Determining the PM Intervals

The Fleet Management Production Scheduling Superintendent is responsible for the scheduling of all vehicle PM scheduling. He/she will contact each department VCO to schedule PM's and will maintain a master PM schedule. Because many of the City's vehicles are being used past their recommended life cycle, many of the PM's performed will fall under the classification of "severe" duty operation and will be scheduled well before the manufacturer recommended PM scheduling interval. This is not unusual as much of our fleet operates under what is considered severe duty, including:

- Towing a trailer or using a camper or car-top carrier.
- Extensive idling and/or low-speed driving (such as inner-city driving or stop-and-go traffic).
- Vehicles used for commercial applications such as deliveries, taxi, livery, Sanitation, or patrol car.
- Vehicles used by multiple drivers such as fleet or motor pool operations.
- Vehicles operated in off-road or dusty conditions.

Vehicle Inspection Forms and their Use

The Fleet Management Department has developed the attached Weekly Vehicle Inspection Form for use by all City vehicle operators. These inspections are critical to the maintenance and safety of all City vehicles.

The Weekly Vehicle Inspection Form should be used for all automobile, light trucks and heavy equipment not requiring a CDL to operate. Department Directors will determine whether operators/inspectors sign the Weekly Vehicle Inspection Form.

The attached **CMV Pre-Trip/Post-Trip Inspection Form** is completed by all Heavy Equipment Operators whose vehicles require a CDL to operate. This checklist must be completed in accordance with Department of Transportation (DOT) guidelines by all CDL operators prior to operating a vehicle and upon completing the use of a vehicle. These forms will be turned into

the Department VCO or Supervisor daily who will maintain the checklist for future reference. Any discrepancies noted on the inspection form must be addressed, either by the VCO or by Fleet Management.