

UDOT

RPMS



**VEHICLE RECORDS,
PREVENTIVE
MAINTENANCE &
SURVEILLANCE**

VEHICLE RECORDS, PREVENTIVE MAINTENANCE & SURVEILLANCE

VEHICLE RECORDS
AND PREVENTIVE
MAINTENANCE

Prepared by:

UTAH DEPARTMENT OF
TRANSPORTATION
OFFICE OF
PLANNING AND
PROGRAMMING

IN COOPERATION WITH:

FEDERAL TRANSIT
ADMINISTRATION

NOTICE

Record all vehicle repairs, service (including wash and wax) and replacement parts on the appropriate pages of this record.

The record is intended to provide a complete history of maintenance and repairs performed during the service life of the vehicle and must remain in a safe, conspicuous location inside the vehicle.

Enter preventive maintenance (PM) performed as either PM-4, PM-12 or PM-24. PM definitions and related schedules are listed under “Vehicle Preventive Maintenance” and is recommended for UTAH’S FEDERAL TRANSIT ADMINISTRATION (FTA) program contractors use. The foregoing is a requirement of the Utah Department of Transportation and complies with the U.S.D.O.T. FTA.

PM program practice is compliance dependant.

VEHICLE PREVENTIVE MAINTENANCE

Preventive maintenance is a must for all equipment and passenger carrying vehicles are no exception. A strict maintenance and inspection program is as necessary as fuel in the tank, if the vehicle is expected to provide dependable service.

Properly maintained equipment last longer, cost less to operate, are involved in fewer accidents and provide more trouble-free service. Effective preventive maintenance (PM) services must be performed repeatedly as governed by preventive maintenance intervals and schedules are recommended as a minimum for your FTA program vehicle(s).

PREVENTIVE MAINTENANCE INTERVALS

Detailed PM schedules corresponding with the following PM intervals are compiled categorically and presented on the following pages. Contractors are expected to acquaint themselves with all schedules, cause timely vehicle PM (implement following “Reminder” to plan PM performance) and properly maintain the “Vehicle Maintenance and Repair Record” located in the last section of this log.

PM-4 Perform all items listed on the pm-4 schedule every 4,000 miles.

PM-12 Perform all items listed on the pm-12 schedule every 12,000 miles.

PM-24 Perform all items listed on the pm-24 schedule every 24,000 miles.

Perform these schedules in accord with vehicle manufacturer PM mileage intervals, should they be less than the foregoing mileages. Record in “Vehicle Maintenance and Repair Record” however, as PM schedule performed e.g. PM-4, PM-12, PM-24. Adjust “Reminder” to correspond with the lesser mileage interval.

PREVENTIVE MAINTENANCE SCHEDULE
PM-4

VEHICLE RAISED OR OVER PIT

1. Drain engine oil and change oil filter.
2. Lube front axle spindle pins/ball joints.
3. Lube U-joints equipped with zerk fittings and check drive shaft components.
4. Lube steering linkage.
5. Check differential lube level.
6. Check standard/automatic transmission oil level, fill as needed.
7. Clean differential breather.
8. Check for wear and damage on all wheels and tires.
9. Inflate tires to proper pressure.

The following items should be “eye ball” inspected when the vehicle is off the ground or over pit:

- (a) Fluid leakage of all types at all locations.
- (b) Brake and exhaust systems components.
- (c) All springs, shock absorbers and fasteners.
- (d) Engine and transmission mounts.

PM-4 (CONT'D)

VEHICLE LOWERED

ENGINE COMPARTMENT

1. Install oil filter and engine oil.
2. Clean air cleaner and oil cap.
3. Lube distributor shaft oil cup(if equipped).
4. Test throttle and kickdown linkages.
5. Lube hood, doors and wheelchair lift/ramp hinges, latches and rails.
6. Check brake master cylinder fluid level.
Refill as needed.
7. Lube exhaust control valve. Check for proper operation.
8. Check radiator coolant level and protection.
Refill as needed.
9. Check windshield washer reservoir. Refill as needed.
10. Clean battery posts and terminals. Check for volt leakage. Load test battery. Fill battery water.
11. Check brake pedal reserve.
12. Check foot (service) brake assist.
13. Check steering wheel play.
14. Check power steering reservoir. Fill as needed.

PM-4 (CONT'D)

START ENGINE

1. Check for oil leaks.
2. Check automatic transmission fluid level.
3. Road test brakes and check for proper operation of all other systems.
4. Record **PM** service in permanent vehicle records.
5. List required repairs as separate operations and acquire necessary authority clearance or arrangements before repair is undertaken.

PREVENTIVE MAINTENANCE SCHEDULE
PM-12

VEHICLE RAISED OR OVER PIT

1. Drain engine oil and change oil filter.
2. Lube front axle spindle pins/ball joints.
3. Lube U-joints equipped with zerk fittings.
and check drive shaft components.
4. Lube and adjust parking brake.
5. Lube steering linkage. Check steering
linkage play.
6. Check differential oil level, refill as required.
7. Check standard transmission(if equipped) oil
as required.
8. Clean differential breather.
9. Check for wear and damage on all wheels.
and tires.
10. Adjust clutch if equipped.
11. Drain automatic transmission fluid and replace
filter if necessary.
12. Adjust automatic transmission bands.
13. Inspect fuel filter and fuel line connections.
14. Inflate tires to proper pressure.
15. Re pack front wheel bearings if required.
16. Balance wheels if necessary.

PM12- (CONT)

The following items should be “eye ball” inspected when the vehicle is off the ground or over pit:

- (a) Fluid leakages of all types at all locations.
- (b) Brake and exhaust system components.
- (c) All springs, shock absorbers and fasteners.
- (d) Engine and transmission mounts.

VEHICLE LOWERED

Engine Compartment

1. Install oil filter and engine oil.
2. Clean air filter, breather element and oil cap, replace any if necessary.
3. Lube distributor shaft oil cup (if equipped).
4. Test throttle and kickdown linkage.
5. Lube exhaust control valve. Check for proper operation.
6. Lube hood and wheelchair lift/ramp hinges, latches and rails.
7. Lube/clean choke and throttle controls and linkage.
8. Lube transmission shift and throttle linkage, adjust if required.
9. Lube door locks, hinges, striker plates and glove box door. Adjust as required.

PM-12 (ENGINE COMPARTMENT-CONT'D)

10. Check brake master cylinder fluid level, refill as required.
11. Check radiator coolant level and protection, refill as required.
12. Check windshield washer reservoir, refill as required.
13. Check steering gear box oil level and/or power steering reservoir. Refill as required.
14. Check condition of and adjust fan belts. Replace if necessary.
15. Torque alternator/generator mounting bolts.
16. Clean PCV valve. Replace if necessary.
17. Replace leaking vacuum hoses and fittings.
18. Torque intake manifold bolts.
19. Test transmission vacuum modulator(if equipped).
20. Clean battery posts and terminals. Load test battery, check for volt leakage.
21. Fill battery water to proper level.
22. Check integrity of ignition system components. Advise management if repair/replacement required.

PM-12 (ENGINE COMPARTMENT-CONT'D)

24. Check A/C components for damage and leakage.
25. Check brake pedal reserve and travel. Adjust as required.
26. Check foot (service) brake assist.
27. Check for proper steering wheel play.

START ENGINE

1. Check for oil leaks
2. Check transmission fluid level, fill to proper level as necessary.
3. Clean carburetor(if equipped) or fuel injection system. Perform necessary adjustment. Check for leakage.
4. Check governor setting (if equipped), adjust if necessary.
5. Check starter amperage. Check alternator output.
6. Road test brakes and check for proper operation of all other systems.
7. Check headlights alignment. Adjust as necessary.
8. Check torque on lug nuts. Re-torque as necessary.
9. Check front end alignment. Align if required.
10. Wash and wax vehicle. Clean and vacuum inside.
11. Record **PM** service in permanent vehicle records.
12. List additional required repairs as separate operations and obtain authority clearance before repair is undertaken.

PREVENTIVE MAINTENANCE SCHEDULE
PM-24

VEHICLE RAISED OR OVER PIT

1. Drain engine oil and change oil filter.
2. Lube front axle spindle pins/ball joints.
3. Lube U-joints equipped with zerk fittings and check drive shaft components.
4. Lube and adjust parking brakes.
5. Lube steering linkage. Check steering linkage play.
6. Check differential lube level, refill if required.
7. Check standard transmission oil level, refill to proper level if required.
8. Clean differential breather.
9. Check for wear and damage on wheels and tires.
10. Check lower speedometer lock, replace if missing, and lubricate speedometer cable.
11. Adjust clutch if equipped.
12. Drain automatic transmission fluid and replace filter.
13. Adjust automatic transmission bands if necessary.
14. Change fuel filter.
15. Inflate tires to proper air pressure.
16. Torque spring hanger bolts, U-bolts, differential carrier bolts and drive line bolts.
17. Inspect front brakes.
18. Re pack front wheel bearings.
19. Inspect rear brakes.

PM-24 (CONT'D)

The following items should be “eye-ball inspected when the vehicle is off the ground or over pit:

- (a) Fluid leakage of all types at all locations.
- (b) Brake and exhaust system components.
- (c) All springs, shock absorbers and fasteners.
- (d) Engine and transmission mounts.

VEHICLE LOWERED

Engine Compartment

- 1. Install engine oil.
- 2. Clean air filter, breather element and oil cap, replace any if necessary.
- 3. Lube/clean throttle and kick down linkage.
- 4. Lube exhaust control valve. Check for proper operation.
- 5. Lube hood and wheelchair lift/ramp hinges, latches and rails.
- 6. Lube/clean choke and throttle controls and linkage.
- 7. Lube transmission shift and throttle linkage, adjust if required.
- 8. Lube door locks, hinges, striker plates and glove box door. Adjust as required.
- 9. Flush radiator and replace w/new coolant.

PM-24 (ENGINE COMPARTMENT-CONT'D)

10. Check windshield washer reservoir, refill as required.
11. Check steering gear box oil level and/or power steering reservoir, refill as required.
12. Check condition of and adjust fan belts. Replace if necessary.
13. Torque alternator/generator mounting bolts.
14. Clean PCV valve. Replace if necessary.
15. Replace/tightened leaking vacuum hoses and fittings.
16. Torque intake manifold bolts.
17. Test automatic transmission vacuum modulator.
18. Clean battery posts and terminals. Load test battery, check for volt leakage, fill water to proper level.
19. Replace fuel filter.
20. Pressure test cooling system for leaks
21. Check integrity of ignition system components. Advise management if repair/replacement required.
22. Drain and re fill automatic transmission with approved fluid.
23. Check brake pedal reserve.
24. Check foot (service) brake assist.
25. Check steering wheel play, adjust as required.

PM-24 (START ENGINE-CONT'D)

START ENGINE

1. Check for oil leaks.
2. Check transmission fluid level, fill to "full".
3. Clean carburetor and adjust air fuel (if necessary).
4. Check fuel injectors for leaks.
5. Check governor setting (if equipped) adjust as required.
6. Check starter amperage. Check alternator output.
7. Road test brakes and check for proper operation of all other systems.
8. Check headlights alignment. Align if required.
9. Balance and rotate tires/wheels.
10. Torque lug nuts.
11. Check front end alignment. Align if required.
12. Steam/or chemically clean engine.
13. Wash and wax vehicle. Clean and vacuum inside.
14. Record PM service in permanent vehicle records.
15. List additional required repairs as separate operations and obtain authority clearance before repair is undertaken.

