

UNITED STATES POSTAL SERVICE
2- TON DELIVERY TRUCK
PREVENTIVE MAINTENANCE
INSTRUCTIONS GUIDELINES



MORGAN
★ OLSON®

1801 S. Nottawa Street
Sturgis, MI 49091
Phone 800-233-4823
Fax (616-659-0499)
www.morganolson.com
www.morganolsonparts.com

PMI Guidelines for Light Delivery Vehicles

These tools are needed to perform the PMI:

- Miscellaneous hand tools
- Spray Lubricant
- Shop rags
- Flashlight
- Air pressure gauge
- Tread depth gauge
- Air chuck
- Grease gun
- Battery load tester
- Scan tool
- Engine analyzer with emission tester
- Anti-freeze test strips
- Coolant pressure tester
- Torque wrench
- Oil filter wrench

Latest version of all documents available at;
www.morganolsonparts.com/t-usps_manuals.aspx
Access code: usps2016

Explanation of Form 4546-B, Preventive Maintenance Inspection Guidelines - Light Delivery Vehicles

Approved By

Fill in the vehicle number, assigned location, due date (for PMI), and the type of PMI (level A or B).

Cab Area

1. Review vehicle jacket, modification orders, and repair tags (A & B)

Prior to each preventive maintenance inspection, review the vehicle jacket to determine the nature and extent of work to be performed. Reviewing the vehicle jacket provides maintenance personnel with the vehicle's history. Compare the current mileage with the mileage of the last PMI. Examine the file to determine when items such as brake work and tune-ups were performed last. Review the vehicle records for any pending Vehicle Modifications Orders and for any history of repetitive repairs. Review Forms 4565, Vehicle Repair Tag.

2. Road test (A & B)

Drive the vehicle and check the engine for smooth acceleration and power. Check transmission slippage and shift points. Check steering for ease of operation, wander, pulling, etc. Listen for any unusual noises.

3. Leaks, doors, handles and steps (A & B)

Check the operation of doors, tracks, latches, locks, hinges and strikers. Check door rails, rollers and weather seals. Inspect the handles for proper operation and security. Check the door and window seals for wear and damage. Check the condition of steps and wells.

4. Seat, belt and interior (A & B)

Examine seat mounts, seat coverings, adjusting mechanisms, seat belts, retractors and anchors. Check the sun visors and other inside cab components for proper operation and condition.

5. Key, ignition and door key assembly (A & B)

Check the keys for cracks and signs of wear. Inspect the lock assemblies for signs of wear. Lubricate all lock assemblies with spray lubricant.

6. Buzzer and warning devices (A & B)

Ensure that all warning lights located on the dash temporarily light up when the ignition key is in the "on" position. After the engine starts, ensure that the lights go out. If the lights and warning devices are not working correctly, refer to the manufacturer's service manual.

7. Starter action, unusual sounds and neutral switch (A & B)

Ensure that the engine will not crank except in neutral or park. Note the sound of the starter operation. Remove the shift lever and inspect the condition of the lever. Replace the lever if worn.

8. Gauges, horn, heater, oil pressure and mirrors (A & B)

With the vehicle on, check the operation of all gauges. Check the horn for operation and loudness. Turn on the heater, defroster and all other cab systems. Check the oil pressure gauge when the engine starts. If the engine is warm, note this pressure. Refer to the manufacturer's recommendations on the oil pressure for both idling and operating RPM. Examine all mirrors and mounting attachments for loose or damaged parts. Make sure that the mirrors are the proper mirrors for the vehicle and are in good condition.

9. Accessories, glass and windshield wipers (A & B)

Operate and examine all switches and controls. Check windshield washer operation. Examine all glass for cracks, chips or lamination separation. Check wiper arms and blades for proper operation and condition.

10. Steering play (A & B)

With the engine running and the wheels in a straight-ahead position, turn the steering wheel in one direction until the tires begin to pivot. Note the position of the steering wheel. Turn the steering wheel in the other direction until the tires start to move. Total movement of the steering wheel before the wheels begin to move should not exceed 1-1/2 inches. If the play exceeds this, check for parts that are worn or out of adjustment. Enter the amount of play in inches on form 4546-B.

11. Parking brake and foot brake test (A & B)

Check brake stopping ability and parking brake holding ability. Apply the foot brake. With the foot brake applied, apply the parking brake. Put the transmission into drive, Slowly accelerate engine to approximately 500RPM above idle. Allow the engine to return to idle, then place the gear selector to reverse and again slowly accelerate to 500 RPM above idle. If the vehicle does not move in either direction, the parking brake is properly adjusted. If the vehicle moves, the parking brake must be adjusted. Adjust the parking brake after inspecting/servicing the rear brakes. To adjust, remove the set screw and adjust the brake. Reinstall the set screw after adjustment.

12. Clean inside and out (A & B)

During each PMI, pressure clean the engine and chassis. Wash the vehicle before performing repairs. Take extreme precautions when washing inside of vehicles.

Note: The estimated repair time (ERT) shown on the back of Form **4546-B** was calculated assuming the use of an automatic truck washer. Add 0.3 hours if the vehicle is hand washed and 0.2 hours for cleaning windows and inside of vehicle.

13. Lights, turn signals and back-up lights (A & B)

Examine all lenses for cracks, deterioration and brightness. Check all lights for proper operation.

14. Under-dash wiring (A & B)

Examine wiring and harnesses for chafing and for proper connection and support. Ensure that the wiring is neatly taped and secured.

15. Reserved**16. Window, window locks, regulator and door slides (A & B)**

Test the windows and regulators to ensure they are working properly. Inspect the window guides and locks for proper operation.

17. Authorized cab decals and Label 70 (A & B)

Ensure that only authorized decals are present and that they are positioned properly on the dashboard for visibility. Remove any unauthorized decals. The following decals must be displayed in each vehicle;

- a. "Look Before Backing" decal.
- b. Label 70, Safety Check and Vehicle Dimensions.

18. General paint and body condition (A & B)

Inspect all painted surfaces for deterioration and condition. Repaint vehicles on an as-needed basis, as determined by the manager, Vehicle Maintenance. Do not delay any wear and tear repairs, painting, or accident-caused body work.

19. Wax vehicle (B only)

Wax the vehicle at least once per year. The estimated time to wax the vehicle is one hour. Add this as a line item on the work order.

20. Reserved**21. Tire inflation (A & B)**

Examine condition of all tires for damage, wear and proper inflation. If a tire is 10 PSI or more low, investigate the cause for the loss of air pressure and make corrections. Use a valve cap. Ensure that tire pressure decals are the correct ones for the vehicle and are positioned properly. Refer to poster 49, *Tire Pressure Chart*, for a list of proper tire pressures.

22. Lug nuts, wheels, hubs and alignment (A & B)

Inspect lug nuts, wheels and hubs for tightness and elongation around holes. Check wheels and rims for cracks, straightness, missing lug nuts and broken studs. Use a torque wrench to re torque the lug nuts. Visually inspect the front tires. Where there are signs of unusual tire wear, investigate the cause of the wear problems. Balance the tires and align the front end when indicated by uneven wear or abnormal steering conditions.

23. Tire probe, condition and tread depth (A & B)

Probe tires and remove foreign objects such as nails or glass. Check all tire tread depths. Replace a tire if the tread is less than 2/32 inch or if winter conditions are a factor. Record tire depth for each tire in the spaces provided on Form 4546-B.

24. Bumpers, reflectors, lenses and mud flaps (A & B)

Examine bumpers, reflectors and lenses for damage or environmental deterioration. Examine condition of mud flaps and mounting for damage.

25. Logos, marking, posters and belt-line (A & B)

Check exterior markings and decals to ensure they are not faded, scratched, torn or missing and that they are positioned properly. Update decals as needed. Check the belt-line and vehicle numbers in the same manner. Review Fleet Management Bulletin V-18-94 for more information on vehicle markings.

26. Rear door security and condition (A & B)

Check the rear door lock for proper operation and security. Inspect the overhead door pull-down strap and door seals.

27. Interior condition, cargo door, floors and roof (A & B)

Inspect the cargo light. With the rear door pulled down, inspect the roof and side panels for holes, signs of leaks or other damage. Inspect and lube the rear door spring assembly, cable, rollers, door hinges and other moving parts. Check the partition door for proper operation.

28. Cargo restraining devices (A & B)

Check the "E"-tracks. Ensure no bolts are loose or missing from the tracks. Inspect the track slots for cracks and wear.

29. Fuel cap, door and filler neck (A & B)

Remove the filler cap and inspect the cap, seal and retaining chain if equipped.

30. Accident Kit (A & B)

Pending

31. Accident damage (list on diagram) (A & B)

Pending

32. Reserved**33. Reserved****Underneath Inspection & Lube****34. Fluid leaks and engine mounts (A & B)**

Before changing the engine oil, inspect the engine and transmission for fluid leaks. Check the radiator for leaks. Inspect lower radiator hose for condition and leaks. Examine the motor mounts for deterioration and fatigue.

35. Change oil, filter and lubricate (A & B)

Change engine oil and filter during each PMI. Clean all fittings, perform complete lubrication and check fluid levels and condition in accordance with all items as shown on the manufacturer's lubrication chart. Write the lube, oil and filter as a line item on Form 4543, *Vehicle Maintenance Work Order*

Approved By

Note: If the lubrication is performed by someone other than the person doing the PMI, subtract 0.3 hours from PMI ERT.

36. Steering, tie rods and arms (A & B)

Check steering column, shaft assembly, and steering gear for any deficiency or looseness. Examine all steering linkage and arms for wear, looseness, or damage. Check steering damper for proper mounting and operation. Rotate components and check for end play. Examine ball joints/kingpins for excessive wear or for excessive resistance to turning front wheels. Check the condition of the ball joints and other steering components. Lubricate the tie rods and other steering components. Inspect the power steering hoses and connections to ensure the hoses are not rubbing, leaking, or deteriorating.

37. Brake linings (B only)

Approved By

Remove all wheels to inspect brake assemblies, linings, and drums. Record the findings in the spaces provided on Form 4546-B. Check all applicable brake components for leaks. Check the wear rate of the shoes and compare the shoes to new shoes. For example, brake linings that have 4/32 inch remaining are not worn out if the vehicle has gone three or four inspections since the brakes were new. The original amount of shoe may have been only 8/32 inch. The inspector must balance brake safety against the risk of throwing away good lining material. Brake linings with less than 2/32 inch must be replaced. Inspect the parking brake cables to make sure they are operating properly, secure, and not frayed.

Approved By

The B PM I ERT includes the time for the brake inspection. If the brakes need to be inspected during an A PM I, the inspection time must be written as a line item on Form 4543, Vehicle Maintenance Work Order. The estimated time to perform this brake inspection on a light delivery vehicle is 0.5 hours, which includes time to clean, inspect, and adjust all brakes.

38. Bearing play and condition (A & B)

Check the wheel bearing for excessive play. Adjust if necessary. If the vehicle has been driven 25,000 miles since the last front wheel bearing service or if operating conditions warrant (operation in hub-deep water, etc.), clean and pack the front wheel bearings and replace seals. Always service bearings when performing brake service.

39. Suspension, springs, shocks and hangers (A & B)

Examine all spring hangers, shackles, and bushings for wear. Check for sagging or broken spring leaves or broken center bolts. Inspect the condition of the stabilizer bar. Check tightness of spring U-bolts. Examine shock absorbers for leaks, damage, or worn grommets.

40. Transmission and mountings (A & B)

Check transmission fluid level and condition. Service transmissions only to correct a deficiency or if transmission fluid smells burned or contains metal or friction material particles. If fluid level is adequate and is not burned or contaminated, do not service. If doubtful about fluid condition, drain out a sample for closer examination. Examine transmission mounts for deterioration. Check the transmission cooler lines to make sure they are not rubbing against any other components. Inspect the speedometer cable and attachment. Ensure there are no kinks or leaks and that the cable bends smoothly and is protected from damage.

41. Exhaust systems, converter and muffler (A & B)

Examine complete exhaust system for leaks, damage, or loose hangers. Examine catalytic converter for evidence of overheating.

42. Driveline, alignment and condition (A & B)

Examine propeller shaft, universal joints, carrier bearing, and slip joint for wear or damage.

43. Body hold downs, hoses and wires (A & B)

Inspect the vehicle body hold downs to make sure they are intact and tight. Ensure that all hoses and wires are properly secured to the chassis.

44. Differential and breather (A & B)

Check the differential fluid level and check for leaks. Fill as necessary. Check the breather hose for restrictions and for proper operation.

45. Undercoating condition (A & B)

Inspect the condition of the undercoating. Touch up the undercoating annually to ensure the long life cycle for postal vehicles. After accident repairs are made, reapply rustproofing.

46. Reserved**47. Reserved****48. Reserved****Engine Compartment Area****49. Engine compartment (A & B)**

Raise hood and examine and lubricate hood latches, hinges, and hood support. Fill windshield washer reservoir and check the level of the brake master cylinder.

50. Antifreeze protection level (A & B)

Before removing the radiator overflow tank cap, squeeze the hoses to see if the system is pressurized or hot. Carefully remove the radiator cap and check the seal. Inspect the fluid level. Test coolant mixture for freeze protection with a refractometer or test strip. Add quantities as necessary to maintain a solution of 50% antifreeze and 50% water. Record the protection level in the space provided on Form 4546-B.

Approved By

51. Alkalinity protection (A & B)

Test corrosion resistant properties of the coolant with a coolant test strip. If test results are unsatisfactory, drain, flush, and refill cooling system with a solution of 50% antifreeze and 50% water.

52. Replace or recycle coolant as required (A & B)

Replace or recycle coolant as required by the type of coolant used. The service requirement might differ between coolant manufacturers. Refer to the coolant manufacturer's recommendations concerning the change or recycle interval.

53. Radiator, hoses and leaks (A & B)

Pressure test complete cooling system. Examine all hoses and connections for leaks or wear. Inspect water pump. Replace hoses as needed.

54. Belts and pulleys (A & B)

Check all belts for condition, alignment, and proper tension. When adjusting belts, use a belt tension gauge. Inspect all pulleys for alignment and condition.

55. Alternator and power steering (A & B)

Check alternator terminal connections and mounting. Check the fluid level of the power steering pump. Ensure there are no leaks.

56. Fuel lines, fuel system, and linkage (A & B)

Inspect fuel lines for routing and leaks. Inspect carburetor or fuel injection system linkage and lubricate as needed.

57. Fuel filter, air filter, and PCV filter (A & B)

Replace fuel filter, air filter, charcoal canister filter (if applicable), and PCV filters as necessary or when indicated by mileage, age, or condition.

58. Clean battery post and cables (A & B)

Clean battery posts and cables. Clean the terminals with a wire brush. If very corroded, clean the area with a solution of baking soda and water. Apply protective spray to the cleaned terminals. Make sure the battery posts bolts are properly tightened.

59. Battery box and hold-downs (A & B)

Examine battery box for signs of corrosion. Clean and paint box if needed. Check hold-downs for looseness and tighten if needed.

60. Wiring and hoses (A & B)

Check for proper routing of all wiring and hoses, including electrical wiring and fuel hoses. Ensure that these components are not rubbing against each other or any other metal surface.

61. Battery load test (A & B)

Perform a battery load test using a volt amp tester (Sun VAT 60 or equal equipment). Record the results in the space provided on Form 4546-B.

Approved By _____

62. Starter cranking test (A & B)

Perform a starter cranking test using a volt amp tester (Sun VAT 60 or equal equipment). Record the results in the space provided on Form 4546-B.

Approved By _____

63. Alternator output test (A & B)

Perform an alternator output test using a volt amp tester (Sun VAT 60 or equal equipment). Record the results in the space provided on Form 4546-B.

Approved By _____

64. Reserved**65. Emission control systems (B only)**

The vehicle emissions inspection/maintenance (I/M) program tests the emission system. Follow the step-by-step procedure as outlined.

Note: It is unlawful to modify or render inoperative any emission control device or to allow a vehicle to operate if the vehicle fails this test. The 1/M program is divided into three sections---the visual inspection, the emissions inspection, and the functional inspection. The first portion involves a thorough check of the vehicle to ensure that critical emission control components are present and operational. The second procedure tests the exhaust emissions from the tailpipe. The functional testing verifies that certain equipment is operating to Original Equipment Manufacturers (OEM) standards.

During the 1/M inspection, use the vehicle's service maintenance manual. Some states also require that specific emissions manuals must be available during the testing procedure for referencing the various specifications applicable to different vehicles. Many electronic analyzers will prompt you automatically for answers to questions as well as the next steps to be taken in testing. During the testing, all the information is recorded into the analyzer. When all the procedures have been completed, print the results from the analyzer and staple the printout to the work order as part of the permanent record.

A. Visual Inspection

1. Positive crankcase ventilation (PCV) system

Examine all the PCV hoses, connections, and grommets for deterioration. Replace valve if necessary

2. The thermostatic air cleaner

Inspect system to ensure all hoses and the heat stove tube are connected. Check for kinked, plugged, or deteriorated hoses. Check for the presence and condition of the gasket seal between the air cleaner and the throttle. With air cleaner assembly installed, the damper door should be open to outside air. Start the engine, and watch the damper door in air cleaner snorkel. When the engine is first started, the damper door should move and close off outside air. As the air cleaner warms up, the damper door should open slowly to outside air. If the air cleaner fails to operate as described above, perform a vacuum motor check. If it operates, the door may not be moving at the right temperature. If a driveability problem occurs during warm-up, perform a temperature sensor check.

3. Evaporative emission control system

Check operation of the total system. Replace vapor canister if it is damaged or if fuel is leaking from the bottom. Replace filter at the bottom of the canister. If a fuel tank filler cap requires replacement, use only a cap with the same Original Equipment Manufacturers (OEM) features. Failure to use the correct cap can result in a malfunctioning system. Check the condition of fuel lines, hoses, and connections.

4. Catalytic converter

Examine all connections for signs of leaking exhaust. The condition of converter may be checked following the procedures listed in the LLV technical manual.

5. Exhaust gas recirculation (EGR) system

Ensure the solenoid is in good condition and not stuck open. Check that the vacuum hose is connected to the valve.

6. Fuel injection, sensors, and connectors

Inspect the wiring and connections to all fuel injectors, sensors, switches, and to the electronic control module. Check that all connectors are properly fastened and the system has not been modified.

After all items have been located and passed the visual inspection, proceed to the tail pipe emission section of the test. If any of the visual items did not pass, repair all items before performing the tail pipe emission test.

B. Tail Pipe Emission Section

Below are guidelines for performing and recording engine analysis and emission test results for the vehicles. Use these instructions to complete items for each type of vehicle. All emission readings must be taken at 2500 RPM and then retested at idle. Record the results in the spaces provided on Form 4546-B.

Approved By

The engine must be at normal operating temperature while performing the tail pipe test. Turn off all accessories. Put the vehicle in park or neutral. Secure the emergency brake and insert wheel chocks or raise the drive axle(s) off the ground. Pre-condition the vehicle by running the vehicle for 4 minutes at 2,000 RPM. Turn the engine off.

Connect the vehicle to an engine analyzer and an infrared four gas exhaust analyzer and computer scanner for a careful examination of basic engine, ignition, fuel, and exhaust emission systems. Restart the engine and verify that it is being operated in closed loop.

The tester will measure the emissions of four gases: carbon monoxide (CO), carbon dioxide (CO₂), hydrocarbon (HC), and oxygen (O₂). Run the engine at 2250 to 2750 RPM for 30 consecutive seconds. Record the readings in the space provided on Form 4546-B.

Approved By

Run the engine at idle (between 400 and 1010 RPM) for 30 consecutive seconds. Record the readings in the space provided on Form 4546-B. If the basic engine and ignition

Approved By

conditions are within specifications and the CO, CO₂, HC, O₂, and scan data meet OEM specifications, do not perform any further tune-up repairs.

However, if a problem is indicated in the basic engine, ignition, or fuel emission system, or if serial data are not within specifications, perform a complete engine analysis and make repairs as necessary

List the results and repairs on Form 4546-B.

Approved By

C. Functional Test

1. Reserved

2. EGR System

This check has many variables. Refer to the vehicle's emissions or service manual for the proper procedure.

a. Begin by determining which EGR system is being used. There are three types of EGR valves: standard, positive back pressure, and negative back pressure. Knowing the type of valve is very important, since the testing procedures are different for each valve. To find out which valve is on the vehicle being tested, use the shop manual identification code. Then visually check the number on the valve itself. The LLV uses a negative EGR valve.

b. Check the vacuum source to the EGR system. Find the vacuum line leading to the Throttle Body Injection assembly and disconnect it from the EGR solenoid. Install a vacuum gauge to the end of the hose. Start the engine and run at approximately 2000 RPM. Vacuum should be present at the gauge. If there is no vacuum present, repair the system.

c. Turn the engine off. Remove the gauge from the hose and connect to the manifold side of the EGR solenoid. Apply at least 10 inches of vacuum to the solenoid. The solenoid must hold the vacuum. If the solenoid loses vacuum, replace the solenoid. Next turn the ignition switch to "on." The vacuum should still hold. If not, check for the proper operation of circuits. Refer to the EGR Systems Check in the service manual.

d. Ground the diagnostic test terminals. Once the test terminal has been grounded, the vacuum should fall to zero. If the vacuum does not drop, check for faulty circuits, EGR solenoid, or Electronic Control Module (ECM). Again refer to the manual. Remove the ground from the diagnostic test terminal and turn the ignition to “off.”

e. Check the EGR valve and hose. While performing this portion of the test, the shop exhaust system must be disconnected. Disconnect the vacuum harness that leads to the EGR valve from the EGR solenoid. Remove the vacuum pump from the manifold side of the EGR solenoid and connect to the vacuum harness. Apply approximately 20 inches of vacuum. Using a mirror, observe the EGR diaphragm. The diaphragm should move freely and hold a vacuum for at least 20 seconds. Crank the engine, but don't start it. Observe the vacuum and valve position. The valve is good if the valve moved to the seated position and the vacuum dropped. If the vacuum does not hold or the diaphragm does not move, check to see if the vacuum harness hose or valve is defective.

f. After completing the EGR systems test, make sure the system is reconnected. Remember the LLV uses a negative backpressure EGR valve. If the vehicle being tested uses a positive or standard EGR valve, follow the instructions in the service manual.

3. Park/Neutral Switch

D. Ignition Timing

The next function test is the ignition timing. Follow the procedure on the underhood emissions label.

1. Start the engine. Verify that the “check engine” light is not on. If the light is on, a code is stored in the Electronic Control Module (ECM) memory, and the emission system needs to be serviced.
2. With the engine at operating temperature, ground the diagnostic connector located under the dash. The “check engine” light will begin to flash. With timing equipment connected, check and adjust the average timing of cylinders one and four to specifications. Remove the ground from the diagnostic connector.

E. Check Engine Light Test

The final function test is on the emission control “check engine” or system malfunction light /indicator.

Turn the ignition key to the “on” position; the “check engine” light should come on. Turn the ignition key to the “off” position; the light should go off. Start the engine. The “check engine” light should be off when the engine is started and running.

The I/M testing procedure is now complete. If the vehicle fails any part of the testing, it must be repaired and then retested. After the test is complete, print one copy of the vehicle inspection report (VIR). Sign it and staple it to the work order and Form 4546-B. The I/M test procedures must be performed on all light delivery vehicles,

Procedures may vary depending on the type of vehicle being tested. Persons performing emissions tests should refer to that vehicle's service manual. In some states vehicles may be subjected to further testing at a state centralized test facility. Local management must ensure that all state-required tests are performed.

Approved By

66. List all repair actions on Form 4541 or 4543 (A & B)

List all repair actions on Form 4541, Order Invoice for Vehicle Repair, or Form 4543, Vehicle Maintenance Work Order Schedule work generated by the PMI.

Approved By

Approved By

67. Quality assurance road test (A & B)

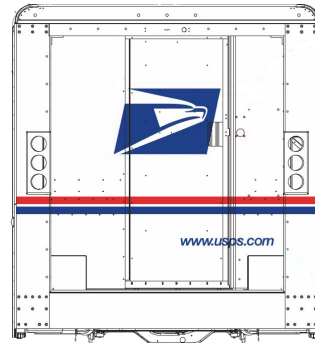
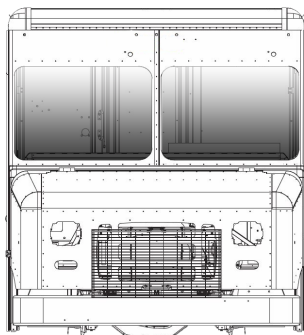
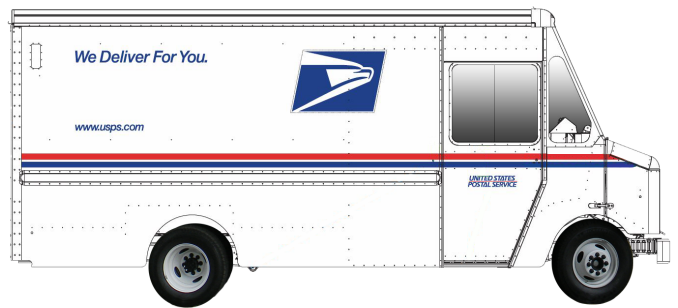
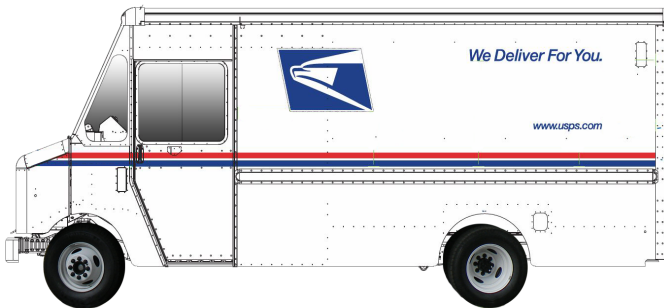
After the required repairs have been completed, drive the vehicle and check engine for acceleration, smoothness, and power. Check transmission shift pattern. Check steering for ease of operation, wander, pulling, etc. Listen for any unusual noise. Check brake stopping ability and parking brake holding ability. Before vehicle is released for service, ensure that seat, seatbelt, steering wheel, and shift lever are clean.

When the quality assurance road test is satisfactorily completed, enter the work order number and odometer reading in the spaces provided at the bottom of Form 4546-B. Sign and date the form. Return the vehicle to service.

Approved By

PREVENTIVE MAINTENANCE INSPECTION GUIDELINES (continued)

A	B	Engine Compartment Area (con' t)	A	B	
		60. Wiring and hoses			
		61. Battery load test __ volts			
		62. Starter cranking test __ amps			
		63. Alternator output test __ volts __ amps			
		64. Regulator voltage __ volts			
		65. Emission control systems HC ____ ppm CO ____ %at idle HC ____ ppm CO ____ %at 2500 RPM O ₂ ____ % CO ₂ ____ %at idle O ₂ ____ % CO ₂ ____ %at 2500 RPM			
		66. List all repair actions on Form 4541 or 4543			
		67. Quality assurance road test			



Note: If damage is more than normal wear and tear, a separate work order must be written and coded as an accident.

ERT to perform an "A" PMI on a light delivery vehicle is 1.5 hours.

ERT to perform a "B" PMI on a light delivery vehicle is 3.0 hours.

Completed By:	Date	Work Order No.	Odometer

FORD Recommended Maintenance Schedule For Extreme Duty Extensive idling and/or driving at low speeds

Mileage	5K	10K	15K	20K	25K	30K	35K	40K	45K	50K	55K	60K	65K	70K	75K	80K	85K	90K	95K	100K	105K	110K	115K	120K	125K	130K	135K	140K	145K	150K				
MEMO: Gas engine; Up to 6.0 quarts of oil	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Replace platinum-tipped spark plugs										X																								
Inspect complete exhaust system and heat shields		X			X										X												X							
Replace front 4x2 wheel bearings and grease seals, lubricate and adjust bearings																																X		
Replace accessory drive belts (if not replaced within last 100,000 miles)																																X		
Change Premium Gold engine coolant																					X											X		
Replace rear axle lubricant																					X													
Inspect and lubricate all non-sealed steering linkage, ball joints, suspension joints, half and drive-shafts and u-joints	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Inspect 4x2 front wheel bearings; replace grease and grease seals, and adjust bearings												X							X													X		
Change rear axle fluid (vehicles equipped with Dana axles)																																		
Change automatic transmission fluid and filter												X													X									
Inspect brake pads/shoes/rotors/drums, brake lines and hoses, and parking brake system	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Inspect cooling system and hoses			X						X																									
Inspect accessory drive belt(s)																																		