



Service Booklet Light Truck

PLEASE NOTE

SERVICE, REPLACEMENT, OR REPAIR OF THE EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY AUTOMOTIVE REPAIR ESTABLISHMENT OR INDIVIDUAL USING CERTIFIED PARTS.

THE USE OF DEFECTIVE OR NON-EQUIVALENT PARTS MAY RESULT IN YOUR EMISSION PERFORMANCE WARRANTY CLAIM BEING DENIED.

WE STRONGLY RECOMMEND, HOWEVER, TO HAVE YOUR VEHICLE SERVICED BY YOUR AUTHORIZED MERCEDES-BENZ LIGHT TRUCK CENTER WHO IS FULLY EQUIPPED TO PROVIDE THIS SERVICE.

License Plate No.	
License Plate No.	
License Plate No.	
License Plate No	
	License Plate No.

Notes:			

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Introduction

We want you to enjoy your Mercedes-Benz automobile. Vehicle safety and operational reliability are two very important factors and to maintain them, a certain amount of service and maintenance is necessary. The Mercedes-Benz Flexible Service System calls for all the necessary maintenance required for your engine.

We continuously strive to improve our product, and ask for your understanding that we reserve the right to make changes in the required periodic maintenance work which is required for our vehicles.

The vehicle comes equipped with the Flexible Service System (FSS) which evaluates engine temperature, oil level, vehicle speed, engine speed, distance driven and the time elapsed since your last service. It determines when your vehicle needs service and alerts you well in advance. The next necessary FSS service is indicated in the instrument cluster.

There are two types of scheduled services for your vehicle, a ("minor" =) A-service, and a ("major" =) B-service.

Under normal circumstances the driven distance between services is an average of approximately 12 000 miles. Under most circumstances, A and B-services will be called for by FSS alternatively, i.e. A will follow B which will be followed by an A-service.

Exception: A B-service will be followed by another B-service, if the FSS calculates an oil change interval of 14 000 miles or more.

Following each A or B-service your Mercedes-Benz Center will reset the FSS counter. The next service is indicated in the instrument cluster (see chapter "Flexible Service System" in your Operator's Manual).

Required service work which is not calculated by the FSS is listed in the section "Additional Work to be Performed" (see page 26).

Wear items such as, but not limited to, engine belts, brake discs, brake pads, brake pad wear sensors, clutch discs and clutch pressure plates are not covered by the Mercedes-Benz Maintenance Commitment.

A detailed listing of maintenance procedures performed are contained in this booklet, starting on page 21.

Special Service Requirements Beyond A- and B-Service

Brake fluid should be replaced every two years, preferably in the spring, see page 27. We recommend that you only use brake fluid approved by Mercedes-Benz.

A reminder for the next scheduled brake fluid replacement is affixed in the engine compartment.

Coolant should be checked for the proper concentration before the start of the winter season (or once a year in hot regions). Have the coolant (water/anticorrosion/antifreeze mixture) replaced every three years, see page 27.

Dust filter should be replaced at the scheduled B-service. Under severe dust conditions, or with the Automatic Climate Control frequently operating in the air recirculation mode, the dust filter should be replaced correspondingly sooner.

Tire rotations should be performed in accordance with the tire manufacturer's recommendations in order to maximize the useful life of the tires. In addition, tire rotation will be performed as part of the B-service on an if necessary basis. MBUSA recommends that you follow your tire manufacturer's schedule for tire rotation, which is specific to the tires installed as original equipment and most likely calls for tire rotations more frequently than the rotations performed with the B-service. Tire rotation performed at other than a B-service

is not covered by the Mercedes-Benz Maintenance Commitment. Please note that the useful life of tires will also vary depending on tire type, speed rating, road surfaces, and individual driving style.

The performance of all scheduled service work is required to maintain your vehicle in good operating condition and is essential to keep your warranty valid. We strongly recommend that you have scheduled maintenance service as well as all other repairs to your vehicle performed at an authorized Mercedes-Benz Light Truck Center because they are equipped with the tools, instruments, literature, and trained personnel necessary for the correct and proper performance of these jobs.

Spare Parts/Operating Materials

We recommend only the use of Genuine Mercedes-Benz parts for service and repairs, since they meet our specifications. It is also important to only use fuels, lubricants and anticorrosion/antifreeze coolant meeting factory specifications. Please refer to the Factory Approved Service Products booklet or see your Mercedes-Benz Light Truck Center for more information on this subject.

Routine Checks

In addition to the services, we recommend that you check the following items regularly (for example, weekly or each time you fill up) and prior to any long trip:

- Engine oil level at regular intervals (such as every fuel stop)
- Coolant level Please refer to the Operator's Manual for the correct procedure to check the coolant level.
- Fluid level of brake system If brake fluid has to be added, see an authorized Mercedes-Benz Light Truck Center to determine the cause, e.g. leaks or worn brake pads.
- Windshield washing system If the washer fluid level drops below 1/3, the windshield washer fluid level warning lamp will illuminate. Add washer fluid mixed with Mercedes-Benz windshield washer solvent/concentrate, test function and check wiper blades.
- Exterior lamps check for proper function
- Tire pressure at least every other week.

Recommended Synthetic Motor Oil

Mercedes-Benz recommends only the use of MB approved synthetic motor oil for all vehicles equipped with the Flexible Service System (FSS) as of Model Year 1998.

MB Approved Synthetic Engine oil	MB Sheet
Mobil 1 Tri-Synthetic Formula 15W-50	229.1
Mobil 1 Tri-Synthetic Formula 0W-40	229.1
Valvoline SynPower Full Synthetic Motor Oil 5W-40	229.1
Castrol Syntec 5W-50	229.1
Castrol Syntec 10W-40	229.1
Quaker State Full Synthetic European Formula 5W-40	229.1
Pennzoil Synthetic European 5W-40	229.1
76 Pure Synthetic Motor Oil 5W-40	229.1
Castrol TXT Softec Plus 5W-30	229.3
Shell Helix Ultra 5W-30	229.3
Shell Helix Ultra 5W-40	229.3

Conventional petroleum based oils are not recommended for vehicles equipped with the Flexible Service System.

Please refer to the Factory Approved Service Products booklet or see your Mercedes-Benz Light Truck Center for more information on selecting the proper motor oil for your vehicle.

Service Records

Your authorized Mercedes-Benz Light Truck Center will certify in the service booklet the services on your vehicle which it has carried out.

The service booklet does not record or reflect any repair work that may have been performed to your vehicle. Please keep those receipts with your vehicle records.

For information concerning warranty, see your Service and Warranty Information booklet.

Your authorized Mercedes-Benz Light Truck Center will gladly furnish additional information on the maintenance of your vehicle.

We extend our best wishes for many miles of safe, pleasurable driving.

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Emission System Maintenance

The U. S. Environmental Protection Agency and, in California, the Air Resources Board have certified that the emission control system of your vehicle meets exhaust emission standards for 2002. This vehicle also complies with the Canadian Motor Vehicle Emission Standards.

To be certain that the emission control system functions as designed, regular maintenance is necessary for all components of the vehicle which affect exhaust emission composition.

The vehicle owner is responsible for the regular maintenance of the emission control system, as well as the use of premium unleaded gasoline with an anti-knock index of at least 91 (displayed on the pump) in all models.

Refer to your Service and Warranty Information booklet and Operator's Manual for additional information.

Failure to properly maintain the emission system may result in repairs not being covered by the emission systems warranty.

Explanations of each maintenance job are given in numerical order on page 29.

Emission Control System Caution

Your Mercedes-Benz is equipped with both a three-way catalyst and a closed loop oxygen sensor system to comply with current exhaust emission regulations. Keep your vehicle in proper operating condition by following our recommended maintenance instructions as outlined.

The following has to be adhered to:

- a. In all models, use only premium unleaded gasoline with an anti-knock index of at least 91 (as displayed on the pump). Damage to the engine could occur if premium unleaded fuel is not used. Refer to the Operator's Manual or Factory Approved Service Products booklet for special precautions.
- b. Leaded gasoline should not be used under any circumstances. Damage to the emission control components will result.
- c. The specified engine maintenance jobs have to be performed completely and at the required intervals.
 Correct ignition timing and properly functioning spark plugs for instance are important for the service life of the catalysts. Failure to properly perform the specified maintenance jobs may adversely affect the emission control sys-

tem on the vehicle and reduce its service life.

- **d.** The operation of the emission control system must not be altered in any way. Alterations are not permissible by law. In addition, alterations may result in damage to the catalysts, increased fuel consumption and impaired engine running conditions.
- e. Irregular engine running conditions should be corrected immediately by an authorized Mercedes-Benz Light Truck Center. Such irregular running conditions can influence the proper function of the emission control system.

"CHECK ENGINE" indicator lamp in the instrument cluster: If the lamp comes on when the engine is running, it indicates a possible malfunction of the engine management system or emission control system.

We recommend that you have the malfunction checked as soon as possible.

Pre-delivery Inspection Confirmation Carried out in compliance with manufacturer's instructions	
	Rubber stamp
Date	Signature

Date:		Flexible Service System	Date:		Flexible Service System
Odometer:		Repair order no	Odometer:		Repair order no
Oil change			Oil change		
Type of service	A B	Distance remaining miles	Type of service	A B	Distance remaining miles
		or days remaining			or days remaining
Replaced	Yes/No	Oil brand / viscosity	Replaced	Yes/No	Oil brand / viscosity
Brake fluid			Brake fluid		
Coolant		MB Center rubber stamp	Coolant		MB Center rubber stamp
Spark plugs			Spark plugs		
Air filter			Air filter		
Fuel filter			Fuel filter		
Activated charcoal filter		Signature	Activated charcoal filter		Signature

Date:		Flexible Service System	Date:		Flexible Service System
Odometer:		Repair order no	Odometer:		Repair order no
Oil change			Oil change		
Type of service	A B	Distance remaining miles	Type of service	A B	Distance remaining miles
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Spark plugs			Spark plugs		
Air filter			Air filter		
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Activated charcoal filter		Signature	Activated charcoal filter		Signature

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Oil change			Oil change		
Type of service	A B	Distance remaining miles	Type of service	A B	Distance remaining miles
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Brake fluid			Brake fluid		
Coolant		MB Center rubber stamp	Coolant		MB Center rubber stamp
Spark plugs			Spark plugs		
Air filter			Air filter		
Fuel filter			Fuel filter		
Activated charcoal filter		Signature	Activated charcoal filter		Signature

Date:		Flexible Service System	Date:		Flexible Service System
Odometer:		Repair order no	Odometer:		Repair order no
Oil change			Oil change		
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Brake fluid			Brake fluid		
Coolant		MB Center rubber stamp	Coolant		MB Center rubber stamp
Spark plugs			Spark plugs		
Air filter			Air filter		
Fuel filter			Fuel filter		
Activated charcoal filter		Signature	Activated charcoal filter		Signature

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Coolant		MB Center rubber stamp	Coolant		MB Center rubber stamp
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Fuel filter			Fuel filter		
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Air filter			Air filter		
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Date:		Flexible Service System	Date:		Flexible Service System
Odometer:		Repair order no	Odometer:		Repair order no
Oil change Type of service	□ A B □ ○	Distance remaining miles or days remaining	Oil change Type of service	□ A B □ ○	Distance remaining miles or days remaining
Replaced Brake fluid	Yes/No	Oil brand / viscosity	Replaced Brake fluid	Yes/No	Oil brand / viscosity
Coolant Spark plugs		MB Center rubber stamp	Coolant Spark plugs		MB Center rubber stamp
Air filter			Air filter	□○	
Fuel filter Activated charcoal filter		Signature	Fuel filter Activated charcoal filter		Signature

If you wish to retain continuous proof that your vehicle has been properly maintained, please request a new service booklet from your authorized Mercedes-Benz Center.

Required Vehicle Service Work (including Emission System Maintenance)

A-Service B-Service

Notes:

For description of emission system maintenance jobs, see page 29.

The four digit-numbers in front of the maintenance jobs are reference numbers of the detailed maintenance job descriptions listed in the MB Maintenance Manual used by MB technicians.

A-Service

Interior



Function check

---- Check Tele Aid by pressing SOS button to make test call to Response Center

---- Horn, head lamp flasher, hazard flasher, turn signals

---- Warning/indicator, illumination and interior lighting

---- Exterior lighting including headlamps

8252 Windshield wiper, windshield washer systems

8252 Headlamp cleaning system

---- Reset FSS counter in instrument cluster

Wheels, brakes



4251 Check brake pads for lining thickness front

4051 Check tires for damage and condition

---- Correct tire inflation pressure

---- Correct tire inflation pressure in spare tire

Engine compartment



0101 Engine oil and filter change

Check and correct fluid level

If there is a loss of fluid, determine cause and perform repair with separate work order

2010 Engine coolant system, antifreeze and corrosion protection

2912 Differential lock mechanism: Engage differential locks, move vehicle short distance to engage locks, then unlock differential locks.
Model G500

4210 Brake system

8210 Windshield washer system

8821 Lubricating catch, safety catch and hinges on engine hood

Check Battery

0003 Check battery condition using "Midtronics MCR 717" tester

Model G500

Underside of vehicle



4121 Lubricate propeller shaft universal joints and collapsible sections

Model G500

B-Service

4290 Brake test, parking brake check

Interior



Function check

- ---- Check Tele Aid by pressing SOS button to make test call to Response Center
- ---- Horn, head lamp flasher, hazard flasher, turn signals
- ---- Warning/indicator, illumination and interior lighting
- ---- Exterior lighting including headlamps
- 3022 Throttle cable: operate accelerator cable slowly by foot through full range of travel; observe smoothness of operation. If roughness is detected, replace throttle cable

 Models ML320, ML500, ML55 AMG
- Models MES20, MES00, MESS AMO
- 8252 Windshield wiper, windshield washer systems
- 8252 Headlamp cleaning system
- 7221 Lubricate door locks, incl. rear door Model G500
- 9150 Check seat belts for damage and proper function
- ---- Reset FSS counter in instrument cluster
- 8381 Heating and ventilation: Replace dust filter

Wheels, brakes





- 4050 Remove and install wheels, rotate if necessary
- 4251 Check brake pads for lining thickness front
- 4251 Check condition/thickness of brake discs front and rear
- 4051 Check tires for damage and condition
- 4051 Measure tread depth, record in mm.
- ---- Correct tire inflation pressure
- ---- Correct tire inflation pressure in spare tire

Underside of vehicle





- Leakage Major components
 Chafe marks, line routing, components.
 In the event of leakage, determine cause and perform repair via separate work order.
- 3353 Check condition of front axle ball joints and rubber boots
- 3555 Check condition of rear axle ball joints and rubber boots

4650	Check condition of steering's mechanical components and rubber boots			
4121	Lubricate propeller shaft universal joints and collapsible sections Model G500			
Check	fluid level, top up if necessary			
If loss of fluid present, determine cause and rectify subject to separate repair order				
2810	Transfer case Model G500			
3310	Front axle Model G500			
3510	Rear axle Model G500			
Engiı	ne compartment			

Engine oil and filter change

0101

0053 Leakage - Major components
Chafe marks, line routing, components.
In the event of leakage, determine cause and perform repair via separate work order.

Check and correct fluid level

- 2010 Engine cooling system, antifreeze and corrosion protection
- 4210 Brake system
- 4611 Power steering
- ---- Battery

 Models ML320, ML500, ML55 AMG
- 8210 Windshield washer system
- 1351 Poly-V-belt (engine): Check for condition*
- 3022 Lubricate throttle linkage, check function and condition
- 8821 Lubricating catch, safety catch and hinges on engine hood

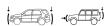
^{*} Mercedes-Benz urges that this procedure be performed to maintain peak performance although it is not required to maintain your emission warranty.

Check Battery

0003 Check battery condition using "Midtronics MCR 717" tester

Model G500

Body



8260 Check headlamp aiming, adjust if necessary

8252 Check condition of rear wiper blade

8280 Replace windshield wiper rubber insert(s)

Additional Work to be Performed together with the Respective Service

At approximately every 60000 miles or 4 years

Engine compartment

---- Air filter: Replace element

At approximately every 60000 miles or 5 years.

Underside of vehicle

0780 Fuel filter: Replace

Replacement not required at 60000 miles*

3301 Oil change in front axle

3501 Oil change in rear axle

2801 Oil change in transfer case

Model G500

^{*} Mercedes-Benz urges that this procedure be performed to maintain peak performance although it is not required to maintain your emission warranty.

Additional Work to be Performed together with the Respective Service

Every	2 years				
4280	Replace brake fluid				
0090	Inspect suspension and body structure Models ML320, ML500, ML55 AMG				
9850	Inspect body for paint damage				
4671	Bolts attaching steering Model G500				
3321	Joint housing of AWD front axle - inspect grease packing and correct Model G500				
3373	Front axle carrier - retighten bolts Model 4JG163, up to VIN end no. 221505				
3573	Rear axle carrier - retighten bolts Model 4JG163, up to VIN end no. 221505				
Every 3 years					
2080	Replace coolant Water/anticorrosion/antifreeze mixture				
7730	Sliding/pop-up roof: clean and grease sliding rails and sliders				

Every 4 years

3581 Rear axle carrier - replace retaining strap
Model 4JG163.172, as of VIN end no. 145273

Spark plug intervals

1580 Replace spark plugs

Spark plugs are subject to erosion and must be replaced according to schedule on page 28

Spark plug intervals		Model	ML320	ML500 ML55 AMG G500
1580	Replace spark plugs	Engine	112	113
At approximately every 1000	•	•		

Description of Emission System Maintenance Jobs

The composition of exhaust emissions is influenced not only by the special emission control equipment, but also by various engine components and their adjustments.

Therefore, emission system maintenance must include these engine components. Some maintenance jobs are actually only tests. They are important however, because they allow early detection of discrepancies which can later lead to increased exhaust emissions. It is generally less expensive to have such items adjusted immediately rather than allowing them to contribute to costly repairs. The maintenance intervals have been determined so that the vehicle, under normal conditions, should operate properly between services.

0101 Engine: Oil change and filter change

Change the engine oil and oil filter as indicated by the FSS service indicator in the instrument cluster. If oil consumption should increase, determine the cause and take necessary corrective steps. Reset FSS counter.

0780 Replace fuel filter*

Replace the fuel filter approximately every 60 000 miles or 5 years.

0980 Replace air filter element

Under normal dust conditions, replace air filter element approximately every 60 000 miles or 4 years. Clean air filter cover and housing

1351 Check engine Poly-V-belt condition

The Poly-V-belt is subject to wear and aging. It must be checked for cracks and wear.
Replace Poly-V-belt if necessary.

1580 Replace spark plugs

Spark plugs are subject to electrode erosion and must be replaced according to schedule on page 28.

^{*} Mercedes-Benz urges that this procedure be performed to maintain peak performance although it is not required to maintain your emission warranty.

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