

# **Maintenance Manual**

Starting Model Year 1994

Mercedes-Benz of North America, Inc.

S-2389-CUS

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This manual provides detailed descriptions of maintenance jobs, testing and adjustment data, filling capacities, torque specifications, and special tools. It has been compiled from Volume 3 of the three volume dealer Maintenance Manual set that covers M-B cars starting with model year 1972.

Each individual maintenance job is identified by a job number located at right or left heading of each page. The job numbers in the Maintenance Manual are identical with those on the Maintenance System Sheets and the Maintenance Booklets, so that the respective texts and data can be quickly located when performing maintenance work.

The first two digits of the 4-digit job number are the group numbers as used in the workshop literature. In this manner, each maintenance job is associated with the appropriate group.

The models and/or engines to which the jobs apply are listed below the job numbers.

Particularly extensive job numbers are subdivided according to models or engines.

Mercedes Benz of North America Service and Parts Literature

October 1993

# **Preface**

This Maintenance Manual applies to vehicles starting model year 1994 and covers all maintenance jobs for the following models:

Sales Designation	Budy style	Model	Engine
C 220	Sedan	202.022	111.961
C 280	Sedan	202.028	104 941
E 320	Sedan	124.032	104.992
E 320	Coupé	124.052	104.992
E 320	Cabriolet	124.066	104.992
E 320	Station wagon	124.092	104.992
E 420	Sedan	124.034	119.975
E 500	Sedan	124.036	119.974
S 350	Short wheelbase	140.134	603.971
Turbodiesel	sedan		
S 320	Short wheelbase sedan	104.032	104.990
E 420	Long wheelbase sedan	140.043	119.971
S 500	Long wheelbase sedan	140.051	119.970
S 600	Long wheelbase sedan	140.057	120.980
S 500	Coupé	140.070	119.970
S 600	Coupé	140.076	120.980
SL 320	Roadster	129.063	104.991
SL 500	Roadster	129.067	119.972
SL 600	Roadster	129.076	120.981

We want you to enjoy your MERCEDES-BENZ car for a long time to come. Vehicle safety and operational reliability are two very important factors, and in order to maintain them, a certain amount of maintenance and service work is necessary.

The MERCEDES-BENZ maintenance system includes all the necessary maintenance work which should be carried out at regular intervals if the vehicle is used under normal operating conditions.

#### **Routine Maintenance**

Inspection at 800-3000 miles/1300-4800 km
Lubrication service every 7,500 miles/12,000 km
Maintenance service every 15,000 miles/24,000 km
Additional work every 30,000 miles/48,000 km

In the case of **low mileage operation** (vehicle is driven infrequently), the maintenance service must be carried out at least once every 2 years.

## Engine oil and filter change

Required every 7,500 miles/12,000 km or at least once a year when using year-round multigrade oil; otherwise twice a year (spring and fall). A detailed list of maintenance jobs is contained in the maintenance booklet following the maintenance vouchers.

Vehicle and engine models are indicated on the vehicle data card.

# Severe operating conditions

As a result of technical product enhancements, improved engine management systems, upgraded fuels and lubrication products, true cases of severe operating conditions will rarely exist in non-commercial passenger car applications.

For a vehicle to qualify for severe operating conditions the following criteria must be met:

- More than 50% short distance driving (less than 5 miles /8 km per trip) combined with engine operating at a temperature of less than 176 °F (80 °C), especially at low outside temperatures.
- 2. More than 50% operation in lower gears combined with high engine load (mountain driving, poor roads, etc.)

If these requirements are met, it is recommended that an additional oil change (without oil filter change) be performed between the scheduled engine oil change intervals, i. e. engine oil change every 3,750 miles/6000 km. (Reminder: vehicles occasionally exposed to severe operating conditions do not require an additional oil change.)

### Non-scheduled MB Maintenance Service

Every 15,000 miles/24,000 km, the maintenance service consists of 3 parts:

- General and Lubrication Service
- Engine Maintenance
- Safety Inspection

These parts can be performed individually on request, if particular driving conditions so require, or on a precautionary basis before leaving on a long trip, etc.

# Special Maintenance Measures

Brake fluid should be replaced every two years, preferably in spring.

Coolant should be checked for sufficient protection before the start of and during the cold season. Have the coolant (water/antifreeze mixture) replaced every 3 years.

The dust filter should be replaced at every

30,000 miles/48,000 km maintenance service or at least every two years.

Under severe conditions, or if the Automatic Climate Control frequently operates in the air recirculating mode, the dust filter should be replaced sooner.

It is necessary to have all regularly scheduled maintenance work performed to maintain your vehicle in good operating condition and to keep your warranty valid. While it is not required that such work be performed by factory-authorized dealers, it is strongly recommended to have an authorized MERCEDES-BENZ dealer do such work because he is equipped with tools, instruments. Ilterature, and trained personnel necessary for correct and systematic completion of these jobs.

## Spare parts

It is recommended that only MERCEDES-BENZ parts be used for service and repairs, since they have been made according to the manufacturer's specifications. It is also important to use only fuels and lubricants that meet factory specifications. See your MERCEDES-BENZ dealer for more information.

#### **Routine Checks**

In addition to the lubrication and maintenance services, it is recommended that the following items be checked regularly and prior to any long trip:

Engine oil level - at regular intervals (such as every fuel stop) during the break-in period not later than after 300 miles/500 km.

#### Coolant level

#### Brake fluid level

If brake fluid needs to be added, see a MERCEDES-BENZ dealer to determine the cause, i.e. leaks or worn brake pads.

Battery - add distilled water only.

Windshield washer system - add water mixed with MERCEDES-BENZ windshield detergent, check operation and wiper blades.

Tire pressure - check at least every other week.

#### Lubrication

Lubricate engine throttle control linkage rods and shatts and check for free movement and for wear every 7,500 miles/12,000 km, or at least twice a year, and also after the use of engine cleaning solvent.

Use only recommended Automatic Transmission Fluid. Refer to MBNA Factory Approved Service Products list.

# Maintenance Vouchers

The MERCEDES-BENZ dealer will certify in the maintenance booklet that all lubrication and maintenance services have been carried out at the correct intervals.

The next lubrication of maintenance service is indicated in the window of the maintenance booklet cover. In addition, stickers are placed on the frame of the driver 's door.
These stickers indicate when the next lubrication service or maintenance service is necessary, or when the brake fluid must be changed, and are provided in the middle of the maintenance booklet.

Sticker attachment locations:

In driver's door frame:

- Lubrication service and maintenance service

In the engine compartment:

- Brake fluid change



If required, enter next date for next scheduled service or brake fluid replacement. Maintenance work does not include repair jobs. For information concerning warranty, see Owner's Service and Warranty Information booklet.