



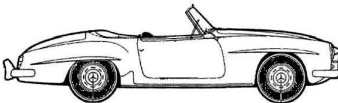
Mercedes-Benz

Service

Maintenance Manual

Model Year 1981 – 1993

Classic Cars & Cycles



www.ClassicCycles.org

Preface

This Maintenance Manual applies to vehicles starting model year 1981 and covers all maintenance jobs for the following models:

Sales Designation	Model	Engine	1981	1982/83	1984/85	1986	1987	1988	1989	1990	1991	1992	1993
107													
380 SL	107.045	116.960	●										
380 SL	107.045	116.962		●	●								
380SLC	107.025	116.960	●										
560 SL	107.048	117.967				●	●	●	●				
123													
240 D	123.123	616.912	●	●									
300 D	123.130	617.912	●										
300 D Turbo	123.133	617.952		●	●								
300 CD	123.150	617.912	●										
300 CD Turbo	123.153	617.952		●	●								
300 TD Turbo	123.193	617.952	●	●	●								
280 E	123.033	110.984	●										
280 CE	123.053	110.984	●										
124													
300 D 2.5 Turbo	124.128	602.962								●	●	●	●
300 D Turbo	124.133	603.960				●	●						
300 TD Turbo	124.193	603.960				●	●						
260 E	124.026	103.940					●	●	●				
300 E 2.6	124.026	103.940								●	●	●	
300 E 2.8	124.028	104.942											●
300 E	124.030	103.980				●	●	●	●	●	●	●	
300 E	124.032	104.992											●
300 E 4MATIC	124.230	103.980								●	●	●	●

Preface

Sales Designation	Model	Engine	1981	1982/83	1984/85	1986	1987	1988	1989	1990	1991	1992	1993
129													
300 SL	129.061	104.981								●	●	●	●
500 SL	129.066	119.960								●	●	●	
500 SL	129.067	119.972											●
600 SL	129.076	119.960											●
140													
300 SD	140.134	603.971										●	●
300 SE	104.032	104.990										●	●
400 SE	140.042	119.971										●	
400 SEL	140.043	119.971											●
500 SEL	140.051	119.970										●	●
600 SEL	140.057	120.980										●	●
500 SEC	140.070	119.970											●
600 SEC	140.076	120.980											●
201													
190 D 2.2	201.122	601.921			●								
190 D 2.5	201.126	602.911				●	●	●	●				
190 D 2.5 Turbo	201.128	602.961					●						
190 E 2.3	201.024	102.961/ 985			●	●							
190 E 2.3	201.028	102.985					●	●			●	●	●
190 E 2.6	201.029	103.942					●	●	●	●	●	●	●
190 E 2.3-16	201.034	102.983				●	●						

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 service
Up through model year 1991,
once at 800-1000 miles/1300-1600 km
As of model year 1992,
once at 800-3000 miles/1300-5000 km
- Lubrication service
All Diesel models except 140.134
every 5,000 miles/8,000 km
All Gasoline models and model 140.134
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 at specified mileage interval, 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

Starting model year 1992

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:

1. More than 50% short distance driving (less than 5 miles per trip) combined with engine operating at a temperature of less than 80°C (176°F), 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 2,500 miles or every 3,750 miles, depending upon model (*Vehicles occasionally exposed to severe operating conditions do not require an additional oil change.*)

Model year 1981 through 1991

In case of **severe operating conditions** or heavy use mainly in city traffic or over short distances, frequent mountain driving, poor roads, dusty and muddy conditions, trailer towing, hard driving, etc., it may be necessary to carry out maintenance work at shorter intervals, i. e.:

Oil and filter change: half the normally recommended interval.

Automatic transmission: Fluid change (without filter change) every 15,000 miles/24,000 km

Inspect tires.

Air cleaner, clean or replace element.

Maintenance System

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 annually, preferably in the spring, on all models except models 129 and 140 which should have a brake fluid change every 2 years.

Engine coolant should be checked for sufficient protection before the start of and during the cold season. Have the coolant (water/antifreeze mixture) replaced no later than after 3 years.

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, literature, 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 a 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 - during the break-in period not later than after 300 miles/500 km.

Automatic transmission fluid level

Brake (and clutch) 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 shafts and check for free movement and for wear every Lubrication Service, at least twice a year, and also after the use of engine cleaning solvent.

Use only Automatic Transmission Fluid. Refer to MBNA Factory Approved Service Products list for listing of approved ATF's.

Model 107 up to 07.1985

123

126 up to 08.1985

201 up to 12.1984

- Inspect all components - engine, transmission, shock absorbers, steering, power steering pump, rear axle, checking condition and for leakage. Remove lower engine compartment cover (6190) or noise encapsulation panel (9490).

Note:

Install the lower engine compartment cover or noise encapsulation panel only after all the other maintenance jobs have been completed.

Model 107 through 07.1985
123
126 through 08.1985
201 through 12.1984

- Inspect lines and hoses on engine, automatic transmission, and power steering pump checking condition and for leakage.

Model 107 starting 08.1985

124

126 starting 09.1985

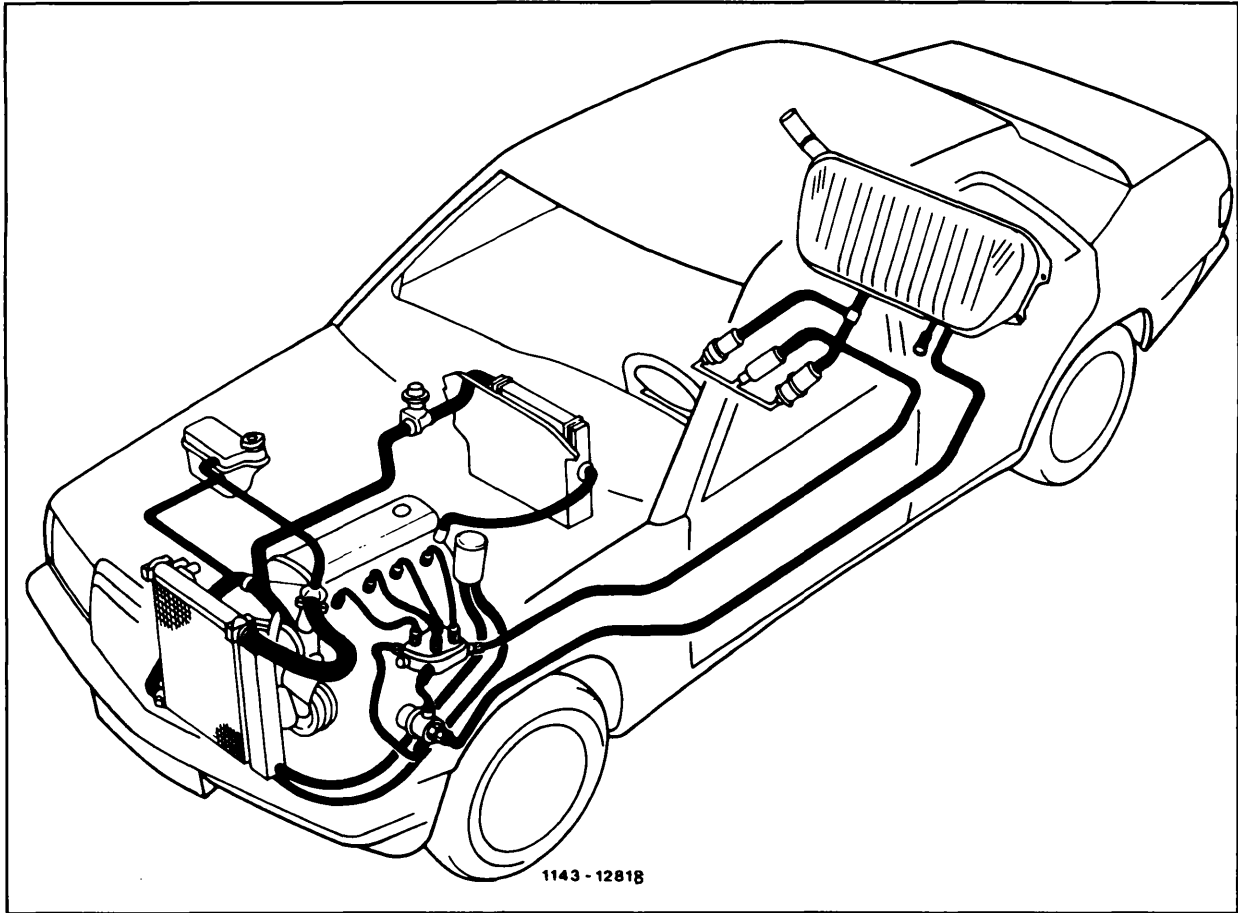
129

201 starting 01.1985

140

Note: To perform this job number, the engine compartment lower panels or the lower noise encapsulation panels must be removed and then reinstalled after completion of all maintenance work (see jobs 6190 or 9490, respectively)

Inspect engine and fuel system, including lines and hoses, for leaks. Check for chafe marks and proper routing.



Engine

Crankcase
Coolant pump and housing
Oil pan
Air-oil cooler with hoses

Crankcase seal, front
Timing housing cover
Coolant and heating hoses

Cylinder head cover
Radiator
Oil filter

Fuel system

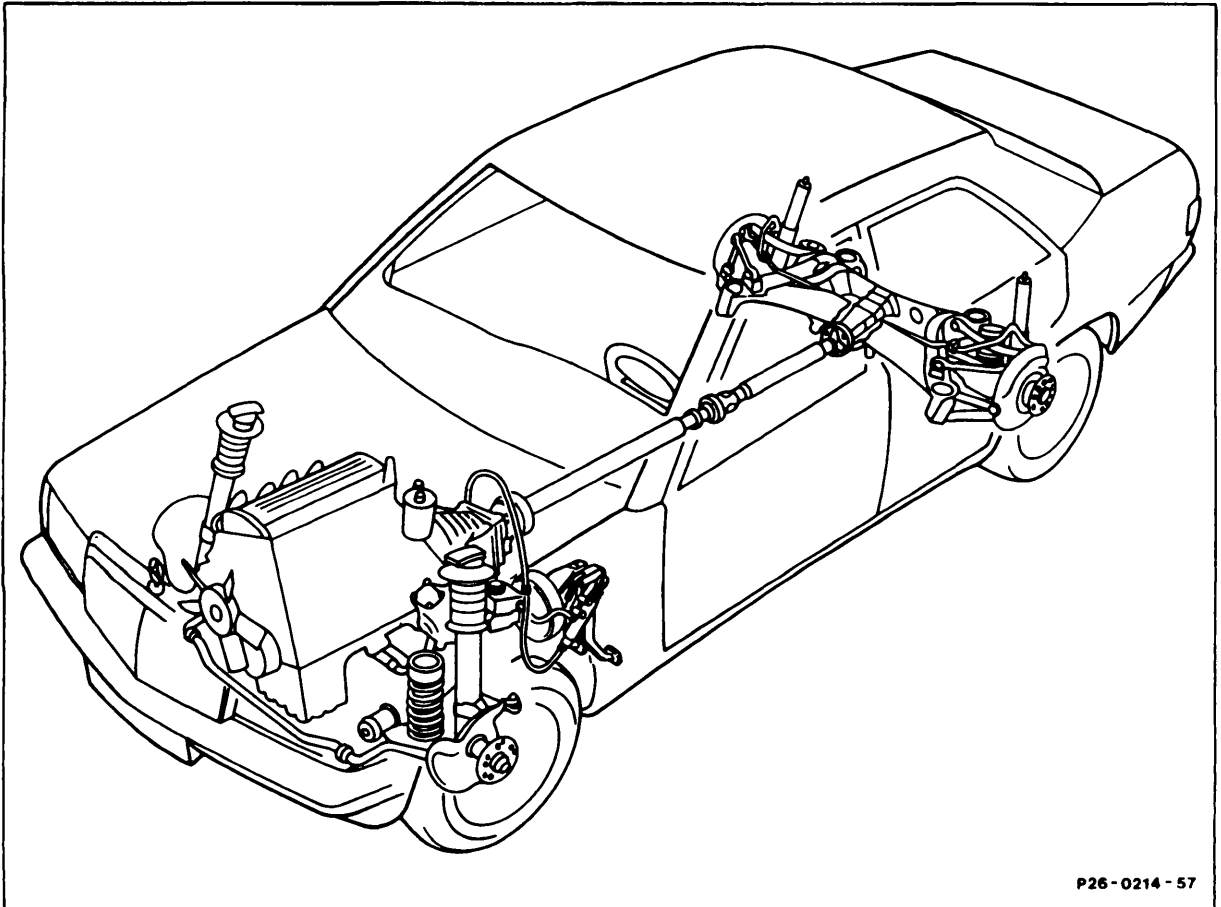
Fuel tank
Injection pump
Fuel pump

Fuel filters
Prefilter
Fuel cooler starting 1986

Fuel pump assembly
Injection system
Fuel preheating

Check condition of manual transmission, hydraulic clutch system, damper struts, shock absorbers, and rear axle.

If traces of oil are found on lower engine compartment panels, determine source.



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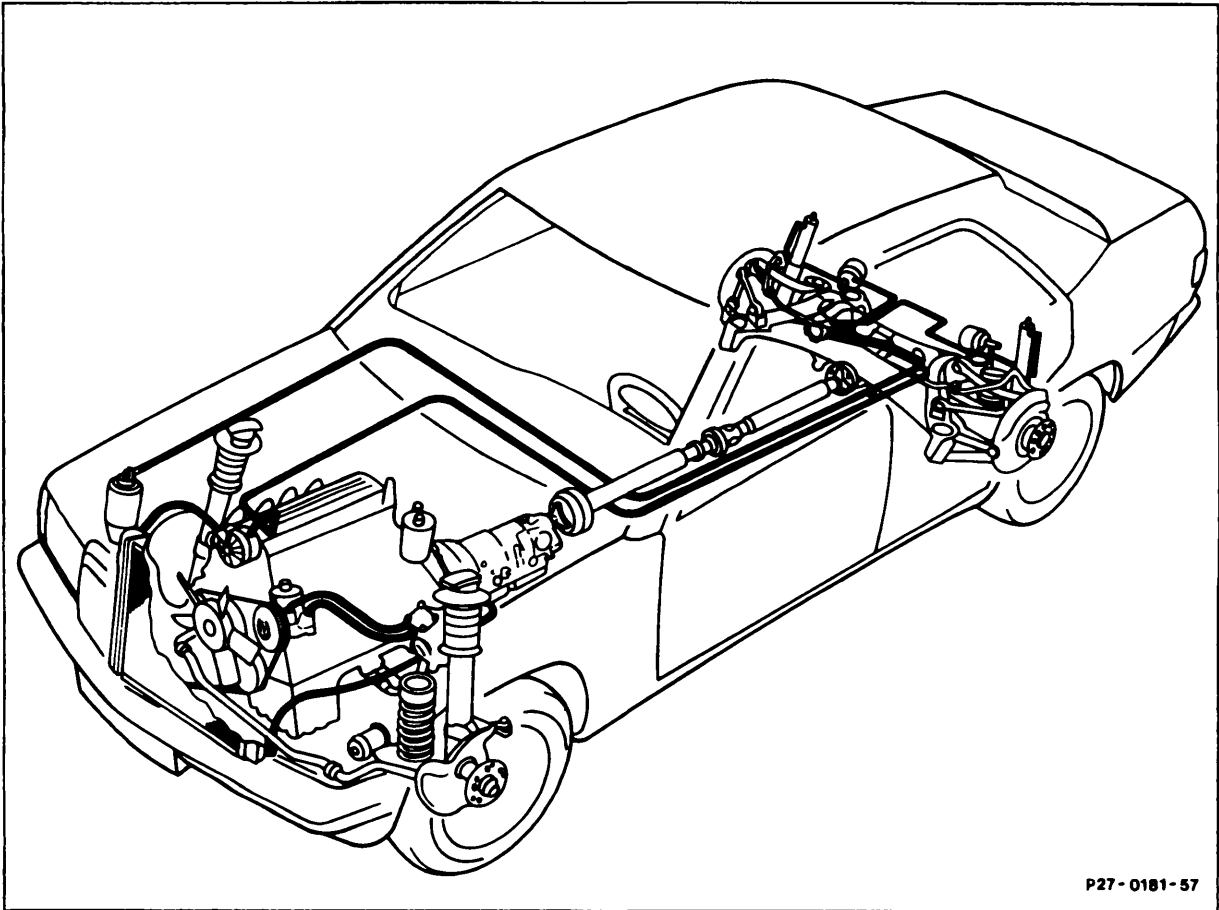
Manual transmission, clutch hydraulic system, and rear axle

Sealing rings
Fill and drain plugs
Housing cover
Clutch line and hose

Damper struts or shock absorbers

Leaks
Mounting

Check condition of automatic transmission, level control and power steering, including lines and hoses. Check for chafe marks and proper routing.

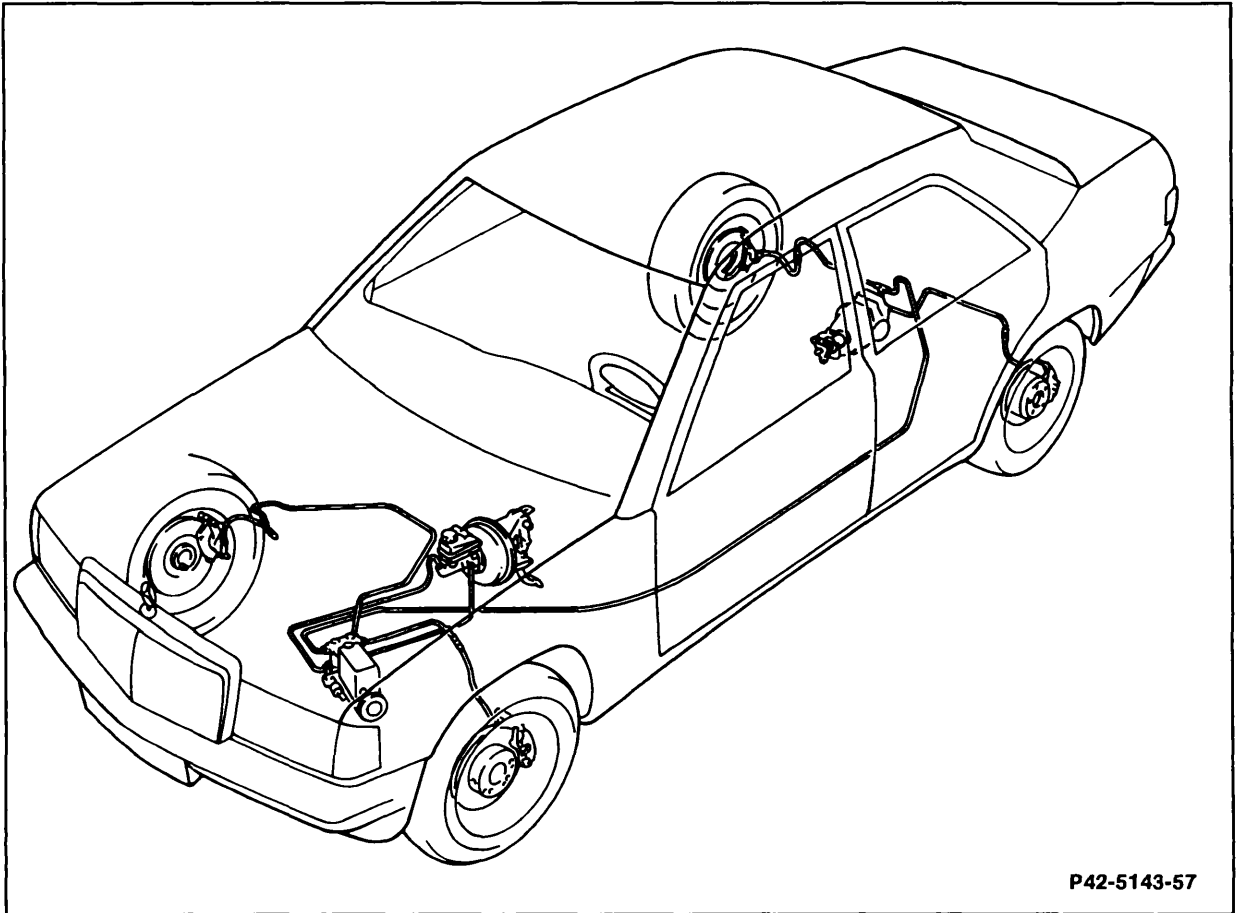
**Automatic transmission, power steering**

Torque converter
Sealing rings and gasket
Housing plugs
Line connections
Hoses
Oil pan

Level control/ADS

Suspension struts
Line connections
Hoses
Leveling valves
Hydraulic oil reservoir
Hydraulic oil pump
Suspension pressure reservoirs
Distribution valve
Control valve
Damping valve units

Check condition of brake system including lines and hose . Check for chafe marks and proper routing.



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Brake system

Lines

Hoses

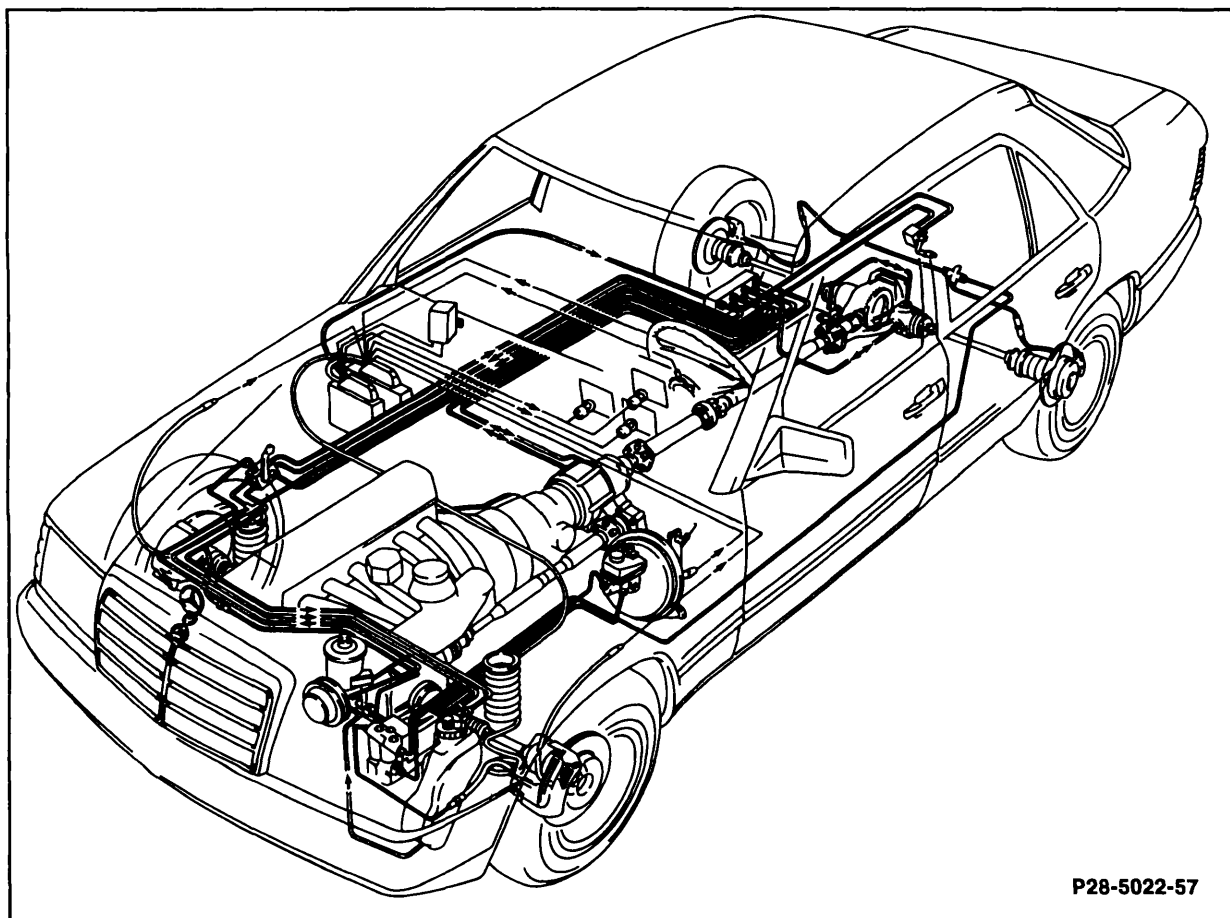
Master cylinder

Fluid reservoir

Brake calipers

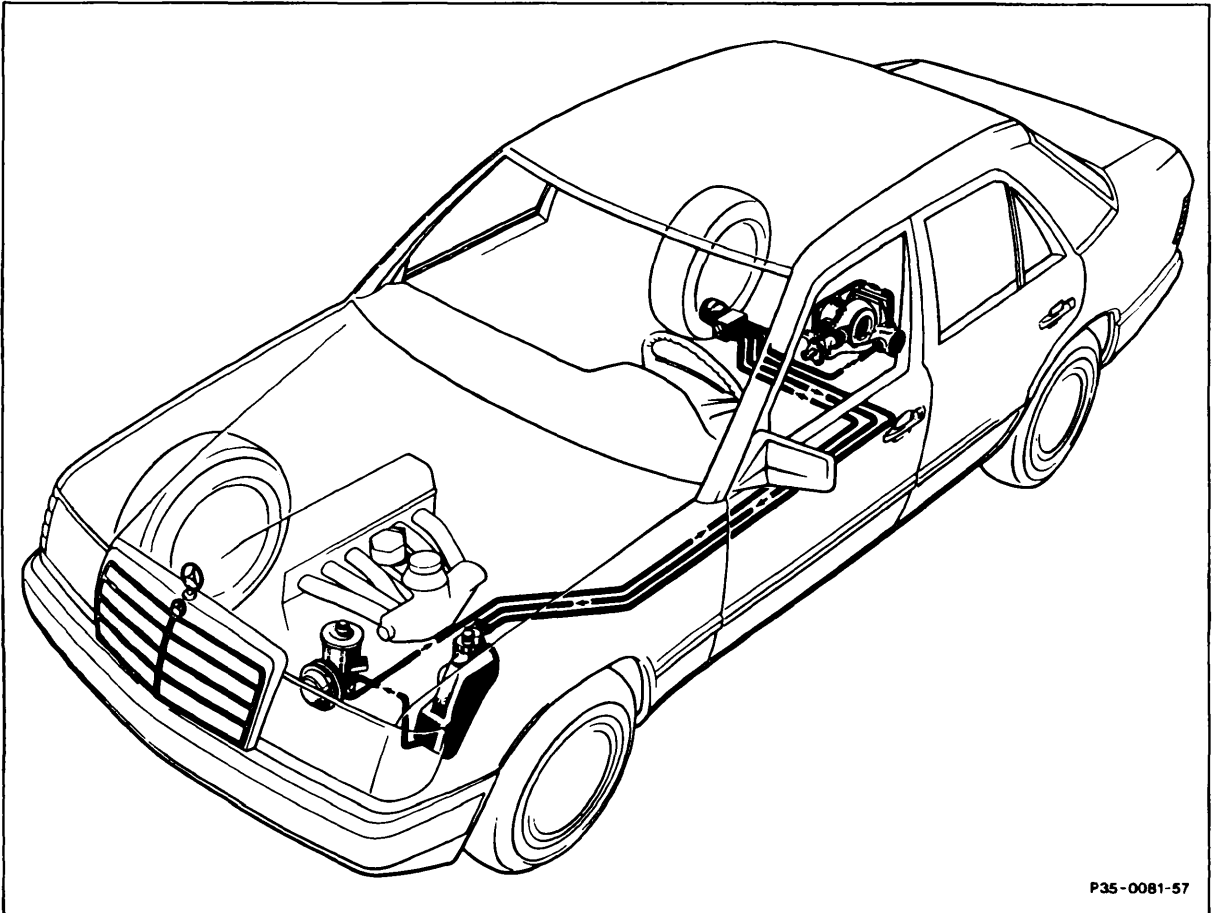
ABS hydraulic unit

Check condition of all lines and hoses. Check for chafe marks and proper routing.



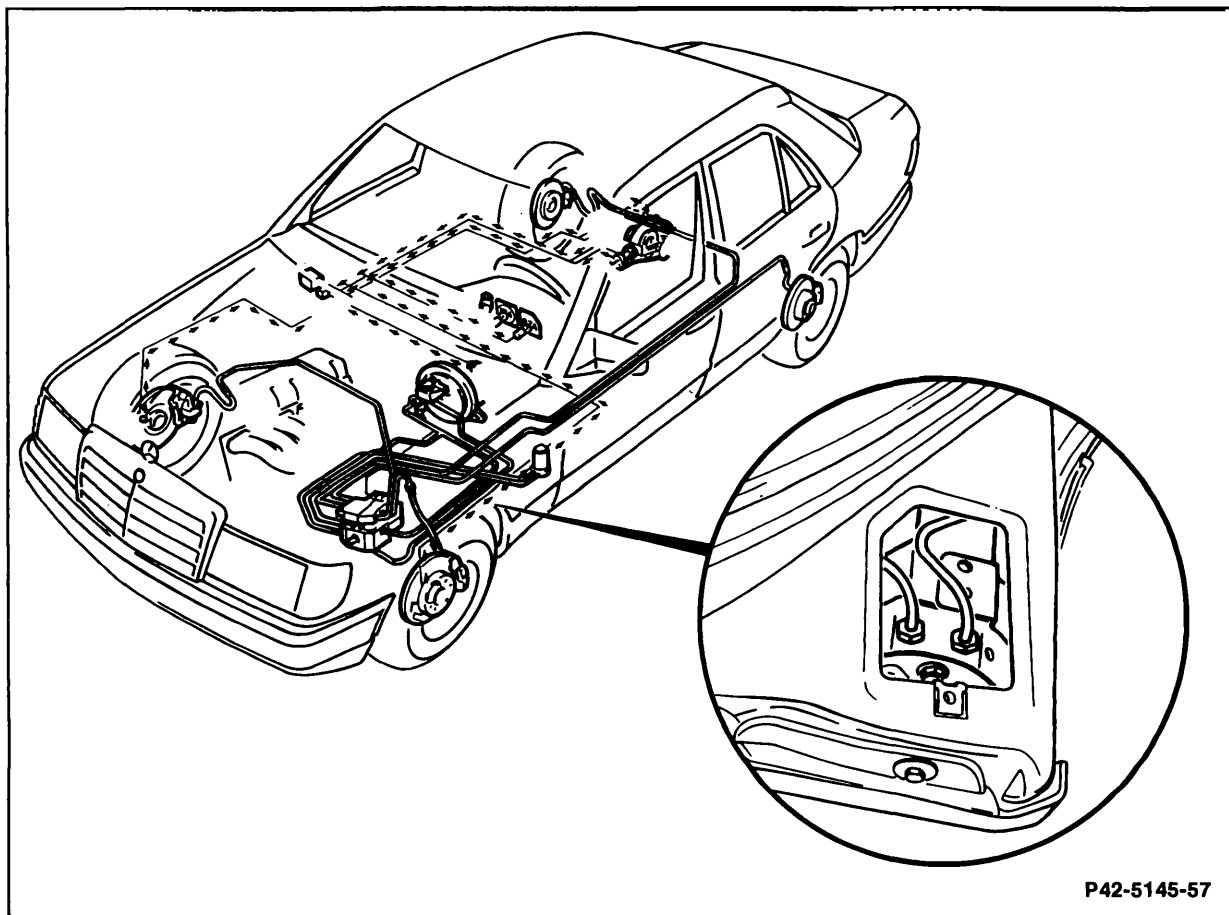
Vehicles with 4MATIC

Check condition of all lines and hoses. Check for chafe marks and proper routing.



Vehicles with ASD

Check condition of all lines and hoses. Check for chafe marks and proper routing.



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Vehicles with ASRII

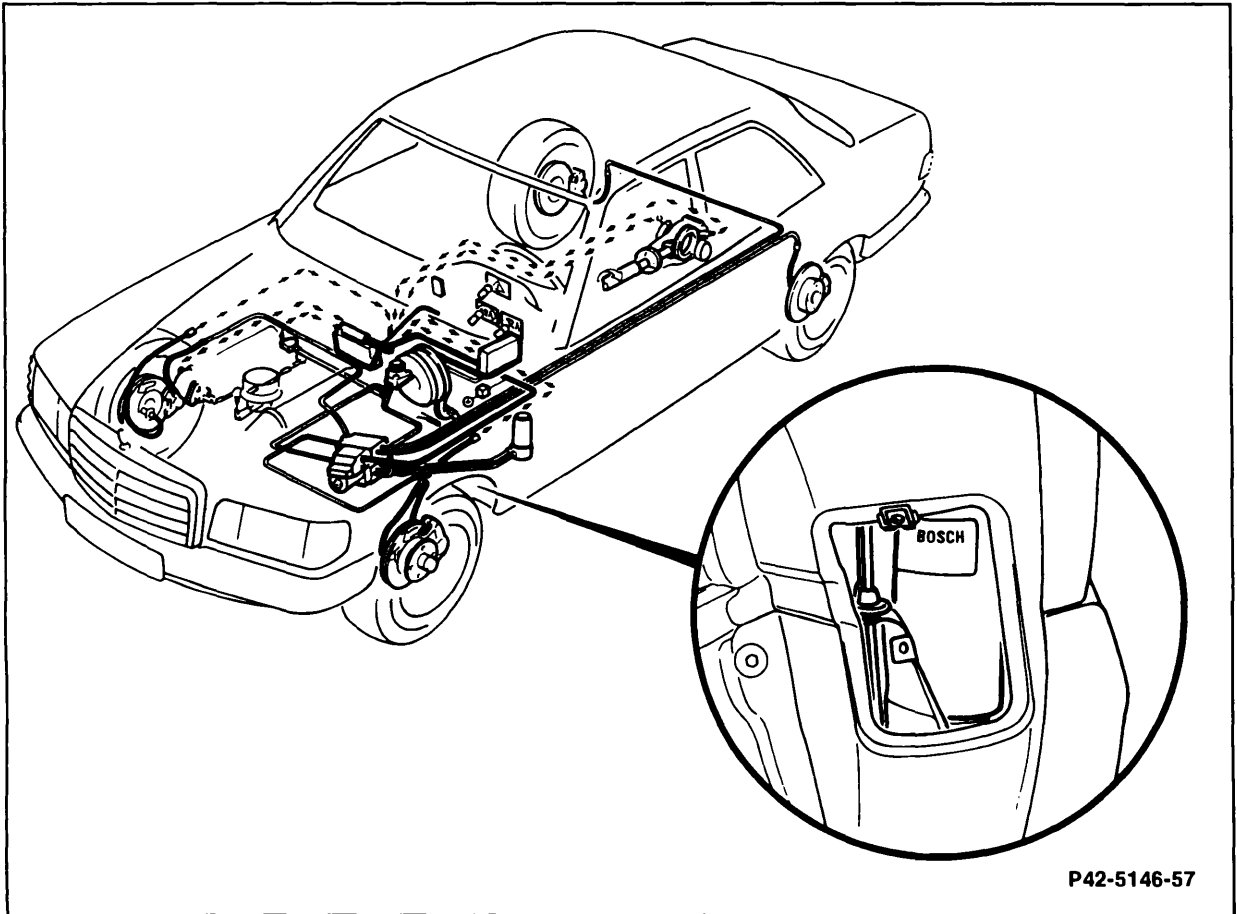
Models 124, 201

Vehicles with ASRIII

Models 124.034/036

- Inspect lines and charging pump. Inspect pressure reservoir through opening in plastic cover under left front fender.

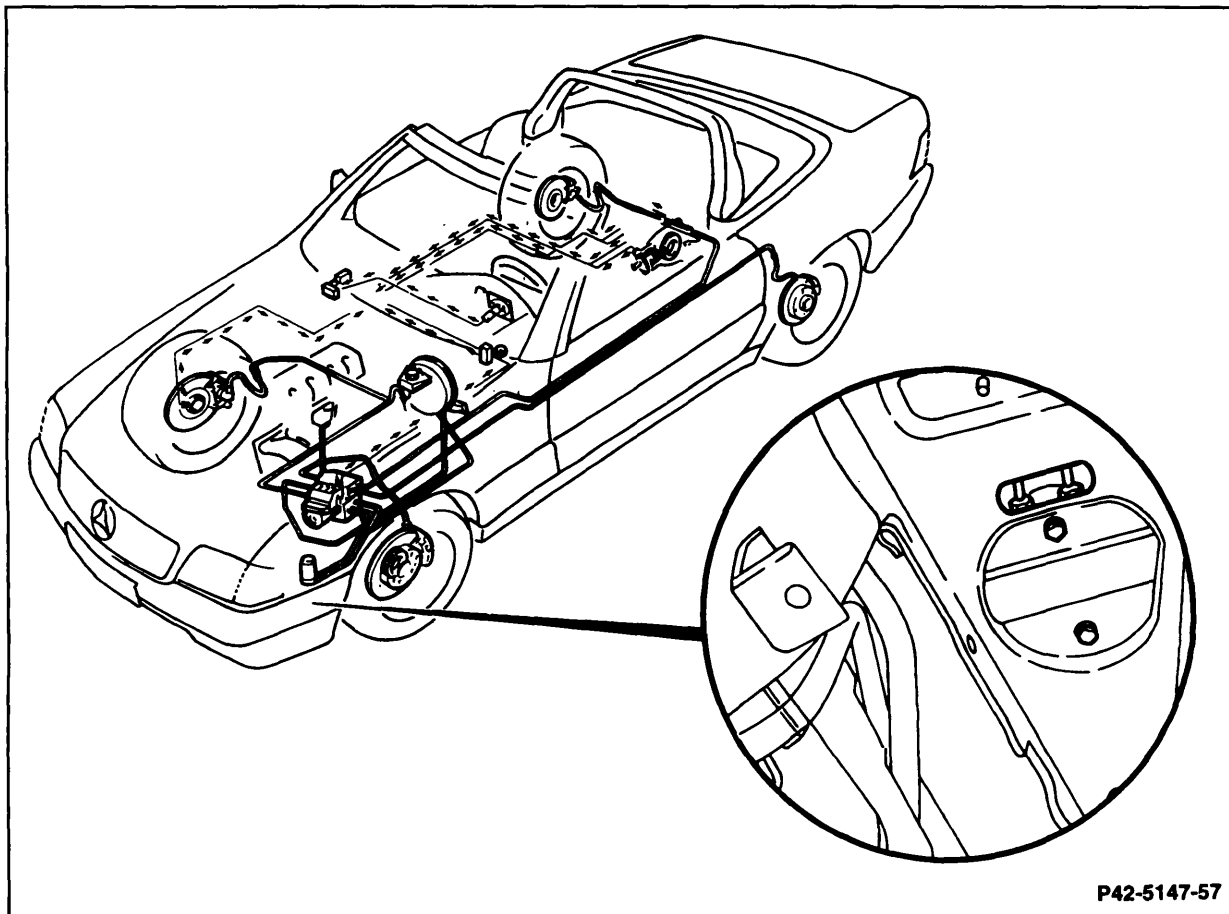
Check condition of all lines and hoses. Check for chafe marks and proper routing.



**Vehicles with ASRII
Model 126**

- Inspect lines and charging pump. Inspect pressure reservoir through opening in plastic cover under left front fender.

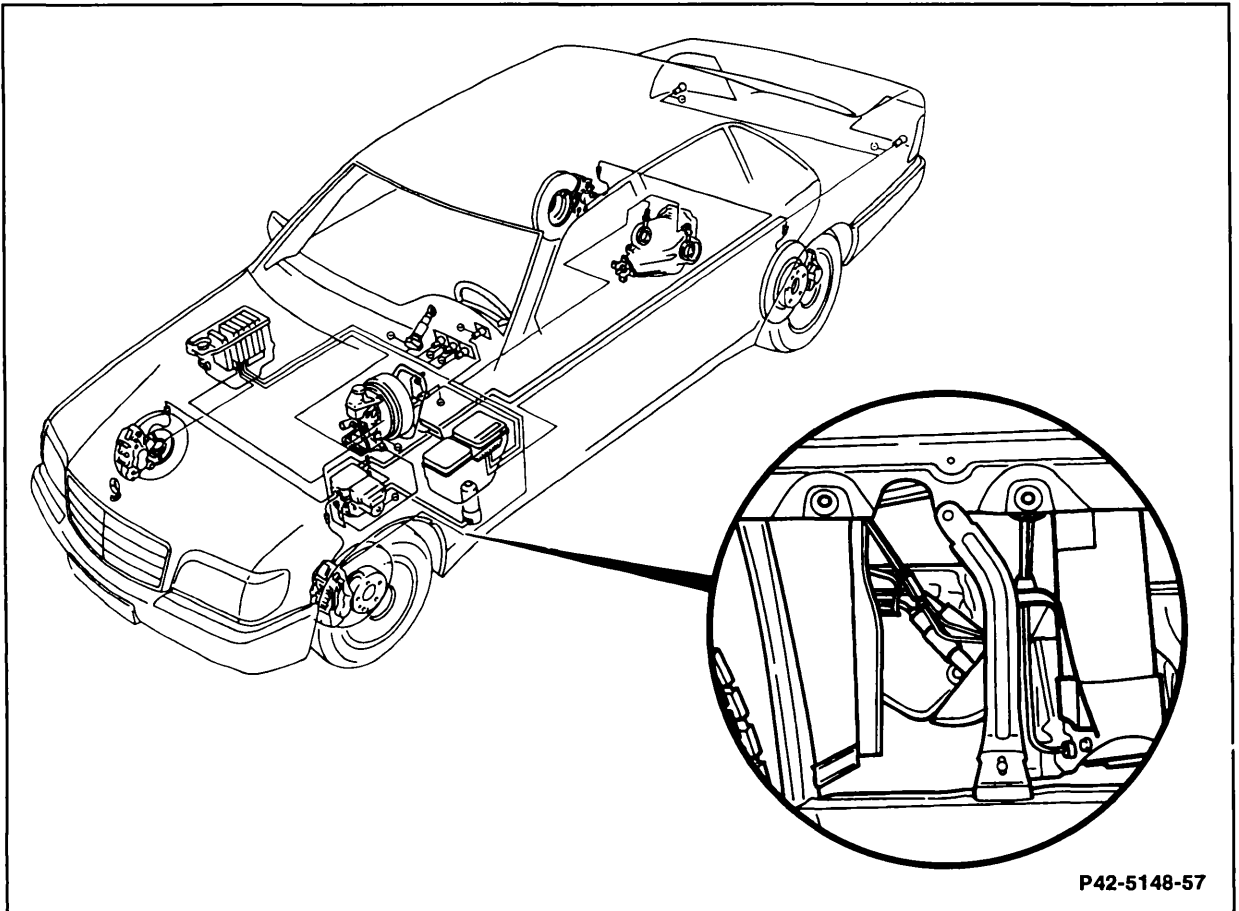
Check condition of all lines and hoses. Check for chafe marks and proper routing.



**Vehicles with ASRII
Model 129**

- Inspect the pressure reservoir connections from underneath the vehicle through opening in engine compartment left side wall.

Check condition of all lines and hoses. Check for chafe marks and proper routing.



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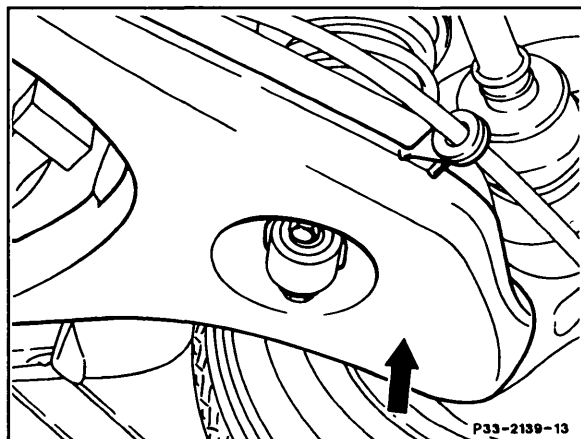
Vehicles with ASRIII Model 140

- Inspect the pressure reservoir connections by removing left front fender lower side panel.

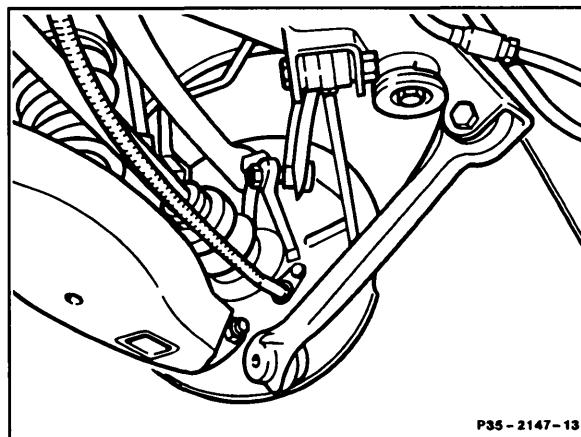
Suspension and body structure inspection

Check the following for damage and corrosion:

- Rear suspension control arms (semi-trailing arm suspension).



- Rear suspension links (multi-link suspension).



- A-arms and bushings.

