



**Factory Approved Service Products September 2003**



**Mercedes-Benz USA recommends the use of genuine Mercedes-Benz parts, accessories and factory approved service products explicitly approved by us for your vehicle model.**

**We have subjected these parts, accessories and service products to special tests in which their reliability, safety and their special suitability for Mercedes-Benz vehicles have been verified.**

**Genuine Mercedes-Benz parts, accessories and factory approved service products approved by us are available at your authorized Mercedes-Benz Center.**

## Service Products

### Approved Engine Oils

For Vehicles Without Flexible Service System (FSS or FSS PLUS)

**IMPORTANT: Engine oils are labeled on the container with various ACEA (Association des Constructeurs Européens d'Automobiles) and/or API (American Petroleum Institute) designations of quality. Mercedes-Benz recommends the use of MB approved engine oils listed in the Mercedes-Benz oil specification sheet 229.3 or 229.5 which also meet ACEA and/or API classifications**

**listed on the chart below. If a MB approved or ACEA quality engine oil is not available, then an API quality engine oil meeting the below listed API classification can be used. Only engine oils (including synthetic) with any of the following classification grades, or combinations thereof, are approved.**

**Always refer to the viscosity chart for the proper viscosity grade based on ambient temperature. Note: This chart supersedes ALL previously published viscosity charts. For additional information please refer to the Operator's Manual.**

Engine	MB Sheet	ACEA Classification <sup>1)</sup>	API Classification <sup>1)</sup>
Gasoline	229.3 229.5	A3 B3	SJ SL
Diesel	229.3 229.5	B2 B3 B4	CF-4 CG-4

1) only if MB sheet 229.3 or 229.5 is not available

## Service Products

### Approved Engine Oils

For Vehicles With Flexible Service System (FSS or FSS PLUS)

**Mercedes-Benz recommends that you use only MB approved synthetic motor oil for all vehicles equipped with the Flexible Service System (FSS or FSS PLUS) as of Model Year 1998. Conventional petroleum based oils must not be used for vehicles equipped with the Flexible Service System**

**but may be used on older vehicles. If the engine oil used does not meet the above mentioned standard, engine damage is possible, which is not covered by the Mercedes-Benz New Vehicle Limited Warranty.**

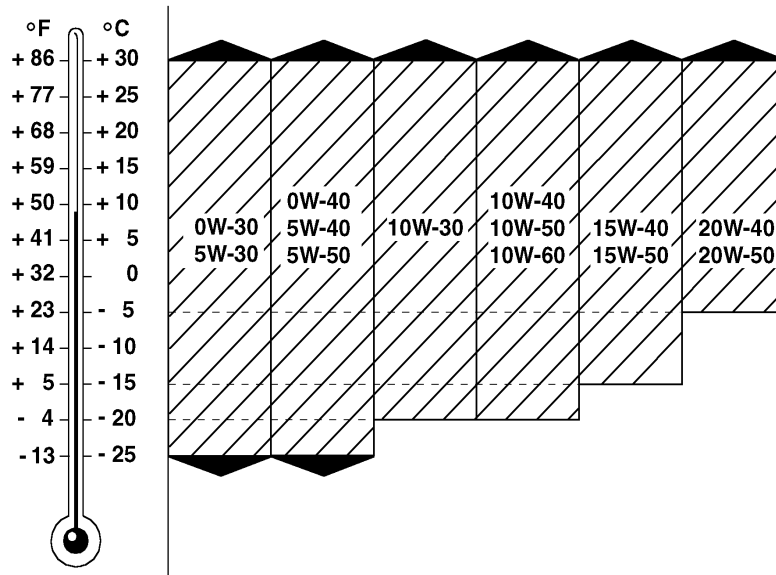
**Use of any oil additives is not recommended by Mercedes-Benz USA and may result in damage to the engine which is not covered by the Mercedes-Benz New Vehicle Limited Warranty.**

MB Approved Synthetic Engine oil	MB Sheet
<b>Mobil 1 SuperSyn European Car Formula 0W-40</b>	<b>229.5</b>
<b>Pennzoil European Formula Ultra 5W-30</b>	<b>229.5</b>
<b>Quaker State European Formula Ultra 5W-30</b>	<b>229.5</b>
<b>Mobil 1 SuperSyn European Car Formula 0W-40</b>	<b>229.3</b>
<b>Castrol Syntec 5W-40</b>	<b>229.3</b>
<b>Quaker State Full Synthetic European Formula 5W-40</b>	<b>229.3</b>
<b>Pennzoil Synthetic European Formula 5W-40</b>	<b>229.3</b>
<b>76 Pure Synthetic Motor Oil 5W-40</b>	<b>229.3</b>
<b>Kendall GT-1 Full Synthetic Motor Oil 5W-40</b>	<b>229.3</b>
<b>Motul 8100 E-Tech 0W-40</b>	<b>229.3</b>
<b>Motul 8100 X-Cess 5W-40</b>	<b>229.3</b>
<b>Shell Helix Ultra 5W-30</b>	<b>229.3</b>
<b>Shell Helix Ultra 5W-40</b>	<b>229.3</b>
<b>Valvoline SynPower MXL 0W-30</b>	<b>229.3</b>

## Service Products

### Viscosity Grades for Motor Oils

**Select oil viscosity according to the lowest air temperature expected before the next oil change using the chart below.**



## Service Products

Approved Dexron III Automatic Transmission Fluid <sup>1)</sup>

**Castrol Dexron-III/Mercon ATF F-30341**  
**Castrol Transmax M-22257 / 22096**  
**Chevron ATF Dexron III F-30108 / 30159**  
**Citgo Multi-Purpose ATF D-21571**

**Exxon Superflo ATF Dexron III F-30111**  
**Havoline ATF Mercon/Dexron-III F-30321**  
**Texaco ATF Mercon/Dexron-III F-30321**  
**Pennzoil ATF D-22413 / F-30110**

**Quaker State Dexron-III/Mercon F30161**  
**Sunoco ATF Dexron-III/Mercon F-30176**  
**Unocal Multi-Purpose ATF D-22413/22431**  
**Valvoline ATF Type D**

<sup>1)</sup> Please see your Mercedes-Benz Center regarding applications. Do not use in 722.6 or 722.9 transmission!

## Service Products

### Fuel Requirements

#### Gasoline Engines

**Reformulated gasolines (RFG) and/or unleaded gasoline containing oxygenates such as Ethanol, TAME, ETBE, IPA, IBA, and TBA can be used provided that the ratio of any one of these oxygenates to gasoline does not exceed 10%. MIBE may be added up to 15%. The ratio of Methanol to gasoline must not exceed 3% plus co-solvents.**

**Mixtures of Ethanol and Methanol must not be used. Gasohol, which contains 10% Ethanol and 90% unleaded gasoline, can also be used. These blends must also meet all other fuel requirements such as resistance to spark knock, boiling range, vapor pressure, etc.**

**Gasoline Additives: A major concern among engine manufacturers is carbon build-up caused by gasoline. MERCEDES-BENZ recommends to use only quality gasoline containing additives that prevent the build up of carbon deposits.**

**After an extended period of using fuels without such additives, carbon deposits can build up, especially on the intake valves and in the combustion area, leading to engine performance problems such as:**

- warm up hesitation,
- unstable idle,
- knocking / pinging,
- misfire,
- power loss

DO NOT blend other fuel additives with the fuel. These additional additives only result in unnecessary cost and may be harmful to engine operation.

Damage or malfunction resulting from poor fuel quality or from blending additional fuel additives are not covered by the MERCEDES-BENZ Limited Warranty or by any pre-owned or Extended Limited warranties.

**Use only premium unleaded gasoline meeting ASTM standard D439. The octane number posted at the pump must be at least 91 min. In the U.S., this octane number is an average of the Research octane number (R) and the Motor octane number (M):  $(R + M) / 2$ . The octane number is also known as the Anti-Knock Index.**

#### **i**

**To maintain the engine's durability and performance, only premium unleaded gasoline is to be used. If premium unleaded is not available and low octane gasoline is used, follow these precautions:**

- **Partially fill the fuel tank with unleaded regular gasoline and fill up with premium unleaded as soon as possible.**
- **Avoid full throttle driving and abrupt acceleration.**

Gasoline Engines (cont'd)

- Do not exceed an engine speed of 2000 rpm if the vehicle has a light load (two occupants and no luggage for example).
- Do not exceed 2/3 of maximum accelerator pedal position if the vehicle is fully loaded or operating in mountainous terrain.

**As of model year 1987**

**All gasoline engine models require premium unleaded gasoline.**

**Model year 1986**

**All gasoline engine models except 190E 2.3 require premium unleaded gasoline.**

**Model years 1975 - 1985 and model year 1986 190 E 2.3**

**Use unleaded regular gasoline meeting ASTM standard D439. The octane number posted at the pump must be at least 87 min.**

**Model years 1972 - 1974**

**Used leaded or unleaded gasoline meeting ASTM standard D439. The octane number posted at the pump must be at least 87 min. When only unleaded gasoline is being used, check the valve clearance on engines with mechanically adjustable valves at half the recommended interval.**

**Pre-model year 1972**

**Use premium unleaded gasoline meeting ASTM standard D439. The octane number posted at the pump must be at least 91 min. Check the valve clearance at half the recommended interval.**

Diesel Engines

**Use only commercially available vehicular diesel fuel number 2 or number 1 (ASTM D975 Number 2-D or Number 1-D).**

**For information on cold weather operation, refer to the vehicle Operator's Manual or Service Information MBNA 00/007(11-82).**

Flexible Fuel Vehicles

**Use premium unleaded gasoline (see gasoline engines) or Ethanol (E85) fuel to operate Flexible Fuel Vehicles. Models capable of operating with E85 are identified by a label reading Premium gasoline or E85 only! on the fuel filler flap.**

**For information on Flexible Fuel Vehicle operation, refer to the Operator's Manual**



## Service Products

### Product Information

		M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SILK Class (170)	CLK-Class (209)	SL-Class (230)	CL-Class (215)
<b>Brakes</b>	<b>Product Name / Part Number</b>									
<b>Brake Fluid (DOT 4 Plus)</b>	<b>MB Brake Fluid</b> <b>MB Part No. 000 989 08 07 10</b> (0.75 l container) <b>MB Part No. 000 989 08 07 11</b> (5.00 l container) <b>Mobil Brake Fluid DOT 4 Plus</b>	•	•	•	•	•	•	•	•	•
<b>Brake Pad Paste</b>	<b>MB Brake Pad Paste</b> <b>MB Part No. 001 989 10 51</b>	•	•	•	•	•	•	•	•	•
<b>Compressor (Air Conditioning)</b>										
<b>Compressor Oil (R134a)</b>	<b>MB Compressor Oil</b> <b>MB Part No. Q 1 13 0001</b>	•	•	•	•	•	•	•	•	•
<b>Differential (Front and Rear Axle)</b>										
<b>Hypoid Gear Oil<sup>1</sup></b> For front and rear axle differentials	<b>MB Hypoid Gear Oil (85W-90)<sup>2</sup></b> <b>MB Part No. 001 989 28 03 10</b>		•							
<b>Hypoid Gear Oil<sup>1</sup></b> For front and rear axle differentials	<b>MB Hypoid Gear Oil (85W-90)<sup>3</sup></b> <b>MB Part No. 001 989 17 03 10</b>	•		•	•	•	•	•	•	•

<sup>1</sup> Please see your Mercedes-Benz Center regarding applications. <sup>2</sup> Meets sheet 235.0 specification. <sup>3</sup> Meets sheet 235.7 specification.

## Service Products

### Product Information

		M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SLK Class (170)	CLK-Class (209)	SL-Class (230)	CL-Class (215)
Differential Lock Mechanism	Product Name / Part Number									
<b>Brake Fluid</b> For differential lock mechanism	<b>MB Brake Fluid (DOT 4 Plus)</b> <b>MB Part No. 000 989 08 07 10</b> (0.75 l container) <b>MB Part No. 000 989 08 07 11</b> (5.00 l container)		•							
Engine										
<b>Supercharger Oil</b> - Engine M111EVO SLK230 only!	<b>MB Supercharger Oil</b> <b>MB Part No. 000 989 62 01</b>						•			
<b>Supercharger Oil</b> - Engine M271 C230 Sports Coupe, C230 Sedan only!	<b>MB Supercharger Oil</b> <b>MB Part No. 000 989 62 01</b>			•						
<b>Supercharger Oil</b> - Engine M112.96x C32 AMG, SLK32 AMG only!	<b>Mobil Jet Oil II</b>			•			•			
<b>Supercharger Oil</b> - Engine M113 E55 AMG, SL55 AMG, CL55 AMG, S55 AMG only!	<b>Mobil Jet Oil II</b>				•	•			•	•
<b>Approved Engine Oils</b> All models	see pages 2 and 3	•	•	•	•	•	•	•	•	•

## Service Products

### Product Information

Engine Cooling System	Product Name / Part Number	M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SILK Class (170)	CLK-Class (209)	SL-Class (230)	CL-Class (215)
<b>Anticorrosion/ Antifreeze fluid</b>	<b>MB Anticorrosion/ Antifreeze MB Part No. Q 1 03 0002 (Meets 325.0 specification)</b>	•	•	•	•	•	•	•	•	•

! The use of aluminum components in Mercedes-Benz engines requires that anticorrosive/ anti-freeze specifically formulated to protect aluminum parts be used. Failure to use MB 325.0 anticorrosion/ antifreeze may result in a significantly shortened service life. While there may be a number of products available which will provide the required protection, all such products have not been tested for Mercedes-Benz vehicles. The above product is suitable for Mercedes-Benz engines and can be mixed with the original anticorrosion/ antifreeze filled in at the factory.

! Cooling system design and anticorrosion/ antifreeze agent used stipulate the replacement interval for the coolant solution in your vehicle. Please observe the replacement intervals specified in the Service Booklet for your vehicle model. Failure to use MB 325.0 anticorrosion/ antifreeze and/ or adhere to the specified replacement interval may result in a significantly shortened service life.

## Service Products

### Product Information

Greasing Points	Product Name / Part Number	M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SLK-Class (170)	CLK-Class (209)	SL-Class (230)	CL-Class (215)
<b>Chassis Grease (NLGI Class 01)</b> For all greasing points except front wheel hubs	<b>Shell Retinax C</b>	•	•	•	•	•	•	•	•	•
<b>Multi-Purpose Grease (NLGI Class 2)</b> For all greasing points except front wheel	<b>3752 Almaguard Vari-Purpose Lubricant</b> <b>Castrol LM Grease</b> <b>Exxon Multi-Purpose Grease</b> <b>Renolit MP</b> <b>Unocal MP Automotive Grease</b>	•	•	•	•	•	•	•	•	•
<b>Long Term Lubricating Grease (NLGI Class 2)</b> For release bearing, release arm and splines for connecting linkage on level control valves	<b>Molykote Longterm 2 Plus</b> <b>MB Long Term Grease</b> <b>MB Part No. 000 989 63 51 11</b>	•	•	•	•	•	•	•	•	•
<b>MB Long Term Grease</b> For propeller shaft - universal joints	<b>MB Long Term Grease</b> <b>MB Part No. 000 989 63 51 11</b>		•							
<b>High Temperature Antifiction Grease (NLGI Class 2)</b> For joint housing	<b>MB High Temperature Antifiction Grease</b> <b>MB Part No. 001 989 23 51 10</b>		•							

## Service Products

### Product Information

		M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SILK Class (170)	CIK-Class (209)	SL-Class (230)	CL-Class (215)
<b>Greasing Points</b>	<b>Product Name / Part Number</b>									
<b>Complex Grease (NLGI Class 2)</b> For sliding blocks of sliding / pop-up roof	<b>MB Lubrication Paste</b> <b>MB Part No. 001 989 46 51</b>	•	•	•	•	•		•		•
<b>Lubricant</b> For lubricating outer guide rail of panorama roof	<b>MB Special Lubricant</b> <b>MB Part No. 001 989 50 51</b>			•	•					
<b>Lubricating paste</b> For cleaning outer/inner channel, shift gate, pivot arm of wind deflector of top sliding roof (panorama roof)	<b>MB Lubrication Paste</b> <b>MB Part No. 001 989 46 51</b>			•	•					
<b>Hydraulic Oil</b> For hydraulic soft top, retractable hardtop	<b>MB Hydraulic Oil</b> <b>MB Part No. 000 989 91 03 10</b>						•	•	•	
<b>High Temperature Roller Bearing Grease (NLGI Class 2)</b> For front wheel bearings	<b>MB High Temperature Antifriction Grease</b> <b>MB Part No. 001 989 23 51 10</b>	•	•	•	•	•	•	•	•	•

		M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SLK-Class (170)	CLK-Class (209)	SL-Class (230)	CL-Class (215)
<b>Greasing Points</b>	<b>Product Name / Part Number</b>									
<b>Fluid Grease (NLGI Class 00)</b> For door lock pin and striker eye	<b>Castrol CLS Grease</b>	•		•	•	•	•	•	•	•
<b>Liquid Grease (NLGI Class 00)</b> For door locks	<b>Exxon Mobil Chassis Grease LBZ</b> <b>Exxon Mobil Grease TCL 435</b> <b>MB Liquid Grease</b> <b>MB Part No. 001 989 08 51 10</b>		•							
<b>Active Body Control Fluid</b>	<b>MB ABC Fluid</b> <b>MB Part No. BQ 1320001</b>					•			•	•
<b>Power Steering</b>										
<b>Steering Gear Lubricant - Power Steering</b>	<b>MB Power Steering Fluid</b> <b>MB Part No. BQ 1320001</b> <b>Pentosin CHF 11S</b>			•	•	•		•	•	•
<b>Steering Gear Lubricant - Power Steering</b>	<b>MB Power Steering Fluid</b> <b>MB Part No. Q 1460001</b> <b>or an approved Dexron III ATF, see page 5</b>	•	•				•			

## Service Products

### Product Information

Transmission	Product Name / Part Number	M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SILK Class (170)	CLK Class (209)	SL-Class (230)	CL-Class (215)
<b>Automatic Transmission Fluid <sup>1)</sup></b> (for 722.6 transmissions)	<b>MB Automatic Transmission Fluid</b> <b>MB Part No. 001 989 21 03 10</b>  ! Do not use on the following MY 2004 models: E 500, S 430, S 500, CL 500, SL 500	•	•	•	•	•	•	•	•	•
<b>Automatic Transmission Fluid <sup>1)</sup></b> (for 722.9 and 722.6 transmissions)	<b>MB Automatic Transmission Fluid</b> <b>MB Part No. 001 989 45 03 10</b>  ! Can be used on all MY 2004 models. Must be used on the following MY 2004 models: E 500, S 430, S500, CL 500, SL 500	•	•	•	•	•	•	•	•	•
<b>Manual Transmission Fluid</b> For MB Manual Transmission - 5- and 6 speed	<b>MB Manual Transmission Fluid</b> <b>MB Part No. 001 989 26 03 10</b>			•			•			

<sup>1)</sup> Please see your Mercedes-Benz Center regarding applications. Earlier model series other than the ones listed here may require different automatic transmissions fluids. Always ensure correct transmission fluid is used. Contact an authorized Mercedes-Benz Center for proper service product selection for your vehicle model and model year.

Service Products

Product Information

		M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SLK-Class (170)	CLK-Class (209)	SL-Class (230)	CL-Class (215)
Transfer Case										
<b>4MATIC Transfer Case Lubricant</b>	<b>MB Transfer Case Fluid</b> <b>MB Part No. 001 989 23 03 10</b>			•	•	•				
<b>Transfer Case Lubricant</b>	<b>MB Transfer Case Fluid</b> <b>MB Part No. 001 989 28 03 10</b>		•							
<b>Transfer Case Lubricant</b>	<b>MB Transfer Case Fluid</b> <b>MB Part. No. Q 1460001</b> <b>or an approved Dexron III ATF, see page 5</b>	•								



## Service Products

### Product information

Windshield Washing System	Product Name / Part Number	M-Class (163)	G-Class (463)	C-Class (203)	E-Class (211)	S-Class (220)	SILK Class (170)	CIK-Class (209)	SL-Class (230)	CL-Class (215)
<b>Windshield Washer Concentrate</b>	<b>MB Summerwash Formula</b> <b>MB Part No. 001 986 80 71 10 (40 ml)</b> <b>Suggested Mixing Ratio (1:100)</b>	●	●	●	●	●	●	●	●	●

Ambient Temperature	MB Summerwash	Added to	Water	Solvent <sup>1)</sup>
Summer use (above 32° F)	40 ml	added to	1 Gallon	
Winter use (below 32° F)	40 ml	added to		1 Gallon

<sup>1)</sup> Pre-mixed windshield washer solvent (commercially available blue concentrate in 1 gallon container)

Distributor in the United States:  
**Mercedes-Benz USA, LLC**  
**One Mercedes Drive, P.O. Box 350**  
**Montvale, NJ 07645-0350**

**Order No. S-0473-04B (09/03)**

© 2003 Mercedes-Benz USA, LLC  
A DaimlerChrysler Company  
[www.MBUSA.com](http://www.MBUSA.com)  
Printed in U.S.A