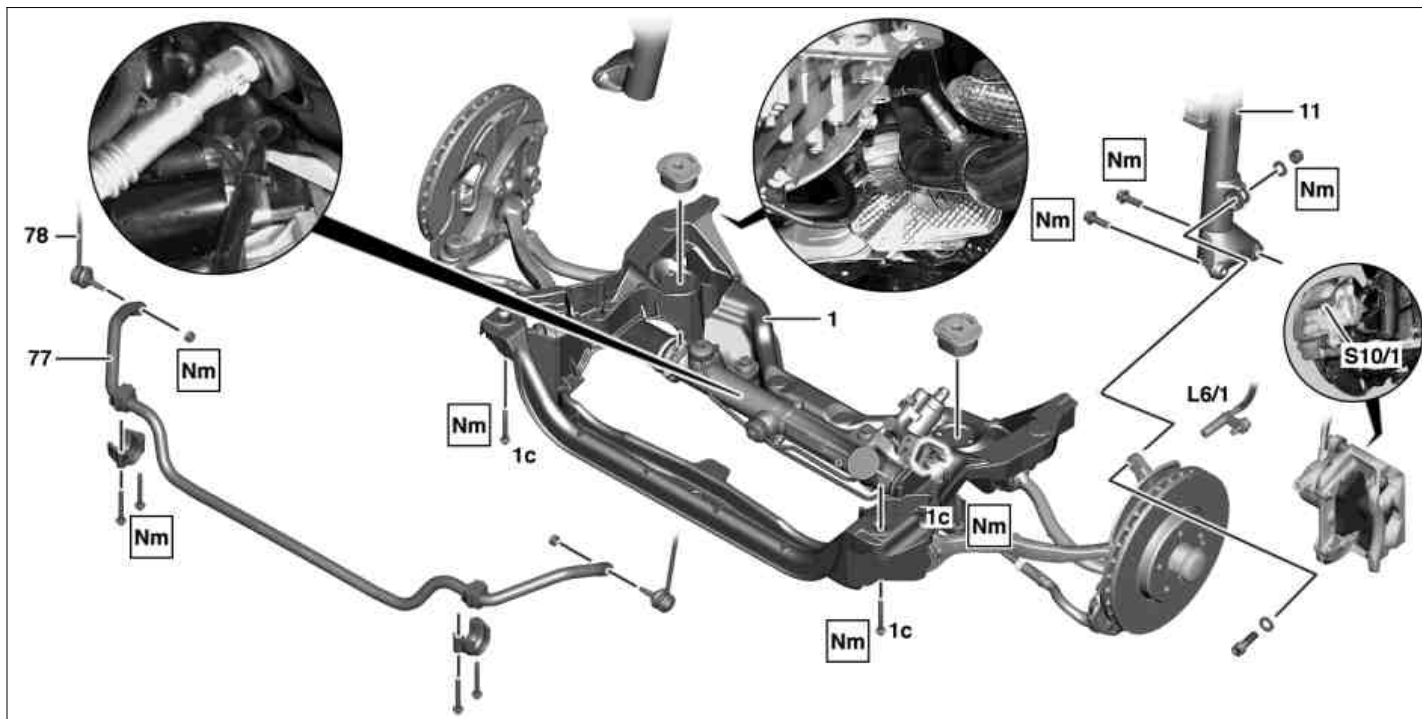














MODEL 203 (except 203.081 /084 /087 /092 /281 /284 /287 /292)























P33.10-2070-09


## Modification notes

29.11.07	Value changed: bolt, retaining plate of oil line to rack-and-pinion steering	*BA46.20-P-1001-01F
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 	Remove/install		
 <b>Danger!</b>	<b>Risk of death</b> caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between columns of vehicle lift and position four support plates at vehicle lift support points specified by vehicle manufacturer.	AS00.00-Z-0010-01A
 <b>Danger!</b>	<b>Risk of injury</b> to skin or eyes caused by hydraulic fluid spraying out under high pressure. <b>Risk of poisoning</b> caused by swallowing hydraulic fluid	Depressurize the hydraulic system completely before starting any work on the system. Wear protective clothing and safety glasses.	AS00.00-Z-0013-01A
	If there is visible damage, e.g. crack formation or deformation of the front axle carrier, these parts must be replaced		
	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
1.1	Deactivate easy entry/exit function	<p> Only vehicles with memory package (driver seat, steering column, mirrors) code 275.</p> <p> Otherwise the driver seat and steering wheel move into a different position if the driver door is opened or closed for example. Damage to the upper frame can occur when the  holding device is installed.</p> <p> It is switched off using the buttons on the steering wheel in the "Comfort" menu on the multifunction display, see vehicle owner's manual.</p>	
2	Extend the adjustable steering column fully or push out	 Necessary for separating steering coupling.	
3	Extract fluid out of the power steering pump's fluid reservoir	 Hand pump	*210589007100
4	Mount engine carrier bracket, raise engine	Engine carrier arm	AR33.10-P-0100-01P
5	Raise vehicle		AR00.60-P-1000P

6 	Remove the front wheels Remove/install wheels, rotate if necessary		AP40.10-P-4050Z
7	Remove rear bolts of supporting struts		
8	Remove engine mount bolts	<input type="checkbox"/> Nm Engine 111 <input type="checkbox"/> Nm Engine 112.912 /946/961 <input type="checkbox"/> Nm Engine 271 <input type="checkbox"/> Nm Engine 272 <input type="checkbox"/> Nm Engines 611, 612, 642, 646	*BA22.10-P-1008-01A *BA22.10-P-1001-01R *BA22.10-P-1006-01O *BA22.10-P-1001-01S *BA22.10-P-1001-01D
9	Detach heat shield from front axle carrier (1)		
10	Move front wheels to straight-ahead position and secure steering wheel.	<i>i</i> To do this, swivel the sun visor to one side and insert the  retainer.  The steering wheel must not be turned when the steering coupling is detached, otherwise the clock spring contact will be destroyed.  Holding device	*129589012100
11	Carefully pull steering coupling out of the control valve of the rack-and-pinion steering (predetermined fracture point on control valve)	 Do not use force (hammer, strong lever action) since the lower steering shaft is sensitive to lateral impacts. <i>i</i> <b>Installation:</b> ↓ Turn rack-and-pinion steering to center position and mount steering coupling <input type="checkbox"/> Nm	AR46.20-P-0600-01P *BA46.10-P-1001-01E
12	Detach retaining plate of oil lines on rack-and-pinion steering and pull out oil lines	<i>i</i>  Seal off line connections using plugs.  Set of stop plugs <i>i</i> <b>Installation:</b> replace O-rings. <input type="checkbox"/> Nm	*129589009100 *BA46.20-P-1001-01F
 <b>Danger!</b>  13   	<b>Risk of poisoning</b> caused by swallowing brake fluid. <b>Risk of injury</b> caused by brake fluid coming into contact with skin and eyes.  Unscrew brake lines on left and right of brake hose and seal openings  Brake fluid notes Notes on installing brake hoses	Only pour brake fluid into suitable and appropriately marked containers. Wear protective clothing and eye protection when handling brake fluid.  Seal off line terminals immediately with  stop plugs. The brake fluid reservoir must not run completely empty.   Box wrench bit  Set of stop plugs  <b>Installation:</b> The brake hoses must not be twisted after being tightened (danger of cracking). <input type="checkbox"/> Nm	AS42.50-Z-0001-01A  AH42.50-P-0001-01A AH42.10-P-9406-01A *000589750300 *129589009100 *BA42.10-P-1001-04A
14  	Detach left front brake pad contact sensor (S10/1) from connector for brake pad wear contact sensor Notes on installing brake pad wear sensor contact sensors		AH42.10-P-0003-01A
15	Detach contact sensor plug from brake caliper	<input type="checkbox"/> Nm	*BA42.10-P-1003-10C
16	Remove torsion bar (77)		AR32.20-P-0300P
17	Installing protective washers to protect brake disk dust shields	 Guard plate	AR42.00-P-0100-01A *220589013100
18	Support front subframe (1)	Passenger car transmission plate, refer to GOTIS <a href="http://gotis.aftersales.mercedes-benz.com">http://gotis.aftersales.mercedes-benz.com</a>	AR33.10-P-0100-03P
19	Detach suspension strut (11) on left and right of steering knuckle	<input type="checkbox"/> Nm <input type="checkbox"/> Nm <i>i</i> Remove suspension strut (11) if necessary	*BA32.25-P-1010-01B *BA32.25-P-1008-01B AR32.25-P-1017P
20	Separate the rpm sensor connectors on the left and right	<i>i</i> Rpm sensor connectors in wheel well behind the suspension strut.	

21	Remove bolts (1c) of front axle carrier (1)	 The bolts (1c) are self-tapping; pay attention to the following procedure: <ul style="list-style-type: none"> <li>● <b>Never</b> recut the thread in the longitudinal member</li> <li>● Replace bolts</li> <li>● Use only original bolts (4 x)</li> <li>● Do not attach bolts at an angle when screwing in</li> <li>● Do not use an impact bolt tightener</li> <li>● Observe tightening torque</li> </ul> 	*BA33.10-P-1003-01A
22	Lower front axle	 Secure front axle to prevent it falling.	
23.1	Measure front axle carrier (1)	If necessary	AR40.30-P-0450P
24	Install in the reverse order		
25	Bleed brake system		AR42.10-P-0010P
26	Fill power steering pump and bleed	Except model 203.2 with rear axle level control system code 480 Model 203.2 with rear axle level control system code 480	AR46.30-P-0010P
27	Perform a wheel alignment check		AR40.20-P-0200P

 **Front axle carrier**

Number	Designation		Model 203
BA33.10-P-1003-01A	Bolt, front axle carrier to front end	Nm	100

 **Engine suspension, engine mounts, engine supports**

Number	Designation		Engine 111 in model 203
BA22.10-P-1008-01A	Bolt, front engine mount to front axle carrier	Nm	35

 **Engine suspension, engine mounts, engine supports**

Number	Designation		Engine 611.962 in model 203	Engine 612.962 in model 203
BA22.10-P-1001-01D	Bolt, front engine mount to front axle carrier	Nm	35	35

 **Engine suspension, engine mounts, engine supports**

Number	Designation		Engine 612.990 in model 203	Engine 642 in model 203	Engine 646 in model 203

BA22.10-P-1001-01D	Bolt, front engine mount to front axle carrier	Nm	35	35	35
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**Nm** Engine mounts, engine supports

Number	Designation		Engine 112.912/946 in model 203	Engine 112.961 in model 203
BA22.10-P-1001-01R	Bolt, front engine mount to front axle carrier	Nm	35	35

**Nm** Engine suspension, engine mounts, engine supports

Number	Designation		Engine 271 in model 203
BA22.10-P-1006-01O	Bolt, front engine mount to front axle carrier	Nm	35

**Nm** Engine suspension, engine mounts, engine supports

Number	Designation		Engine 272 in model 203 except 4-MATIC
BA22.10-P-1001-01S	Bolt, front engine mount to front axle carrier	Nm	35

**Nm** Brake lines, brake hoses

Number	Designation		Model 203
BA42.10-P-1001-04A	Brake pipe to brake hose	Nm	14

**Nm** Front axle shock absorber

Number	Designation		Model 203 without 4MATIC
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BA32.25-P-1008-01B	Self-locking bolt, suspension strut to steering knuckle at bottom		Nm	110
BA32.25-P-1010-01B	Self-locking nut, suspension strut to steering knuckle at top	Stage 1	Nm	100
		Stage 2	∠°	90

### **Nm** Front axle brake caliper

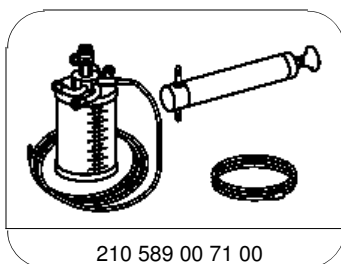
Number	Designation			Model 203
BA42.10-P-1003-10C	Self-locking bolt, brake pad contact sensor to brake caliper		Nm	8

### **Nm** Steering shaft

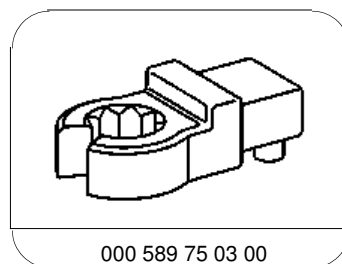
Number	Designation			Model 203 except 203.081/ 084/087/ 092/281/ 284/287/ 292
BA46.10-P-1001-01E	Bolt, steering coupling to steering shaft	Stage 1	Nm	30
		Stage 2	∠°	-

### **Nm** Steering gear

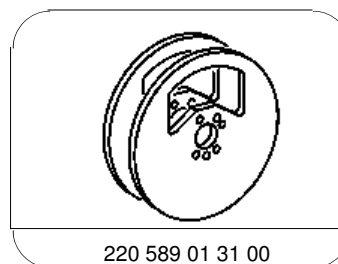
Number	Designation			Model 203
BA46.20-P-1001-01F	Bolt, oil line retaining plate to rack-and-pinion steering		Nm	18



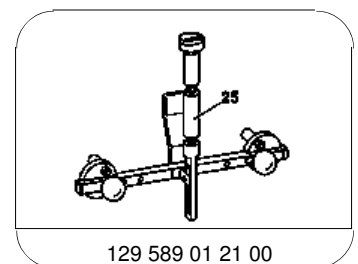
Hand pump



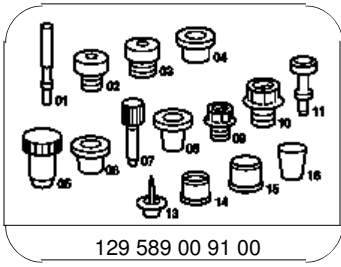
Box wrench bit



Guard plate



Holding device



Set of stop plugs