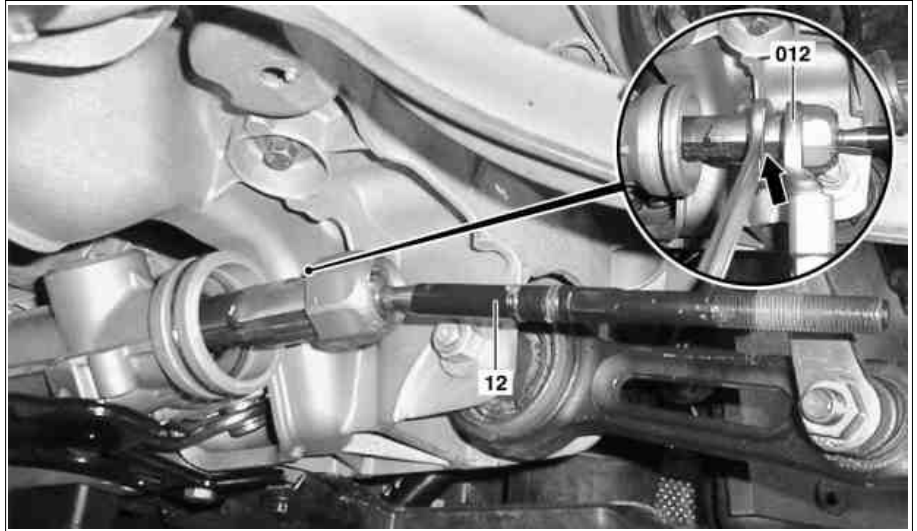


**MODEL** 203, 209, 215.375 /376 /378, 220.026 /028 /063 /065 /070 /075 /125 /128 /165 /170 /175 /176 /178, 230 (except 203.08 /09 /28 /29)

Shown on model 220



P46.40-2005-05

☒ ☒	<b>Remove/install</b>		
⚠ <b>Danger!</b>	<b>Risk of death</b> caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between the columns of the lifting platform and position the four support plates at the lifting platform support points specified by the vehicle manufacturer.	AS00.00-Z-0010-01A
1 👉 <b>AP</b>	Remove front wheel Remove/install wheels, rotate if necessary		AP40.10-P-4050Z
2	Remove tie rod		AR46.40-P-0200I
3	Remove bellows		AR46.40-P-0400I
4	Counter gear rack (arrow)	<b>i</b> Use open end wrench (width across flats 27 mm).	
5	Remove inner track rod with axial joint (12)	<b>i</b> Do not use force (hammer blows, severe leverage), use open wrench (012). <b>Nm</b> <b>🔧</b> Open-end wrench	*BA46.40-P-1003-01E *201589000100
6	Install in the reverse order		

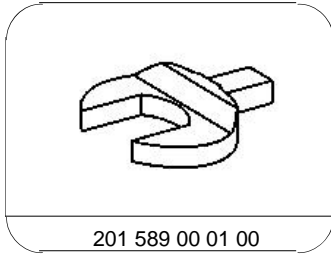
**Nm** Tie rod

Number	Designation		Model 203 except model 203.081/084/ 087/092/281/ 284/287/292	Model 209	Model 215	Model 220 except model 220.083/ 084/087/ 183/184/ 187
BA46.40-P-1003-01E	Inner track rod with axial joint to rack-and-pinion joint	Nm	110	110	110	110

**Nm** Tie rod

Number	Designation	Model 230

BA46.40-P-1003-01E	Inner track rod with axial joint to rack-and-pinion joint	Nm 110
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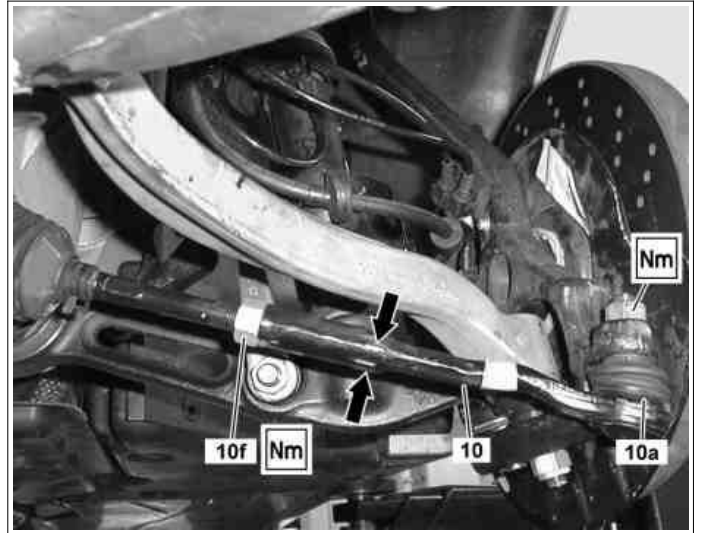


Open end wrench

**MODEL 203** (except 203.081 /084 /087 /092 /281 /284 /287 /292)  
**MODEL 209**  
**MODEL 215**  
**MODEL 220** (except 220.083 /084 /087 /183 /184 /187)  
**MODEL 230**

Shown on model 220

10 Tie rod  
 10a Tie rod joint  
 10f Locknut



P46.40-2004-11

**Modification notes**

10.9.03	Reference to adjusting toe on front axle replaced by reference to chassis alignment check	Step 5	
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☒ ☒	<b>Remove/install</b>		
⚠ <b>Danger!</b>	<b>Risk of death</b> caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between the columns of the lifting platform and position the four support plates at the lifting platform support points specified by the vehicle manufacturer.	AS00.00-Z-0010-01A
ⓘ	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
1 ☞ <b>AP</b>	Remove front wheel Remove/install wheels, rotate if necessary		AP40.10-P-4050Z
2  ☞ <b>BT</b>	Pry off tie rod joint (10a) from steering knuckle assembly.  Dimensions of tie rod ball joints have been modified	<b>i</b> <b>Installation:</b> Replace self-locking nut. Thrust piece Puller Nm Model 220	AR46.40-P-0200-02I  *140589006300 *124589033300 *BA46.40-P-1001-01E BT46.40-P-0002-01A
3	Release locknut (10f) and unscrew track rod (10)	<b>i</b> Counterhold tie rod (10) for loosening the jam nut (10f) (arrow). Nm	*BA46.40-P-1002-01E
4	Install in the reverse order		
5	Perform chassis alignment	Model 203, 209 Model 215, 220 except 220.175/178/875/878 Model 220.175/178 Model 220.875/878 Model 230	AR40.20-P-0200P AR40.20-P-0200I AR40.20-P-0200MB AR40.20-P-0200MP AR40.20-P-0200R

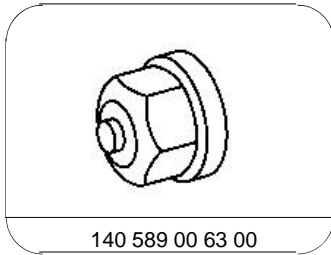
**Tie rod**

Number	Designation	Model 203 except models 203.081/084/ 087/092/281/ 284/287/292	Model 209	Model 215	Model 220 except models 220.083/ 084/087/ 183/184/ 187

BA46.40-P-1001-01E	Self-locking nut, tie rod to steering knuckle	1st stage	Nm	50	50	50	50
		Stage 2	⚡°	60	60	60	60
BA46.40-P-1002-01E	Lock nut, tie rod to inner tie rod		Nm	60	60	60	60

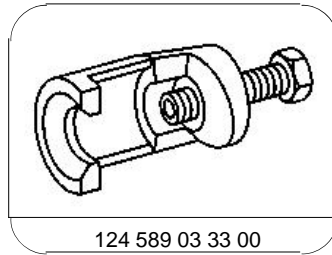
**Nm Tie rod**

Number	Designation	Model 230
BA46.40-P-1001-01E	Self-locking nut, tie rod to steering knuckle	1st stage Nm 50
		Stage 2 ⚡° 60
BA46.40-P-1002-01E	Lock nut, tie rod to inner tie rod	Nm 60



140 589 00 63 00

Thrust piece



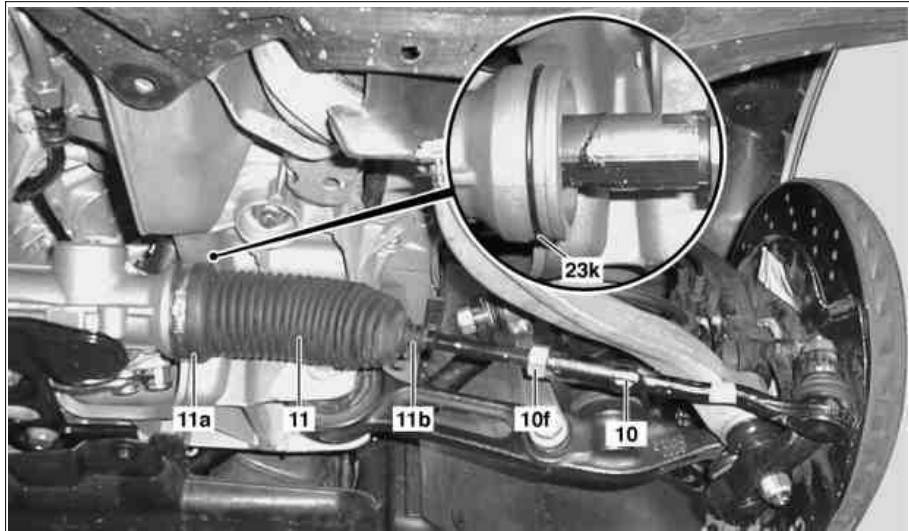
124 589 03 33 00

Puller

**MODEL 203** (except 203.081 /084 /087 /092 /281 /284 /287 /292)  
**MODEL 209**  
**MODEL 215**  
**MODEL 220.025 /026 /028 /063 /065 /070 /073 /074 /075 /125 /126 /128 /165 /170 /173 /174 /175 /176 /178 /179 /875 /878**  
**MODEL 230**

Shown on model 220

- 10 Tie rod
- 10f Jam nut
- 11 Bellows
- 11a Inner clamp
- 11b Outer clamp
- 23k O-ring



P46.40-2006-05

☐	<b>Checking</b>		
⚠ <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
1	Check left and right boot (11)	<p>⚠ Never check bellows (11) by pressing in or around the plastic bead. This results in damage to the bellows (11) and causes leaks.</p> <p>⚠ Perfect sealing of the bellows is absolutely vital for correct functioning of the rack-and-pinion steering, so perform the visual inspection as follows:</p> <ul style="list-style-type: none"> <li>● Raise vehicle at front axle.</li> <li>● Stretch the bellows (11) by turning the steering through left and right lock and in the process check for damage (cracks, chafing marks and intrusions) and replace if necessary.</li> </ul>	
🔧 🛠	<b>Remove/install</b>		
2.1	Detach lower engine compartment paneling	Vehicles with gasoline engine Model 203, 209 Model 215, 220 Model 230	AR61.20-P-1105P AR61.20-P-1105M AR61.20-P-1105R
2.2	Remove bottom section of soundproofing	Vehicles with diesel engines Model 203, 209 Model 220	AR94.30-P-5300P AR94.30-P-5300M
3	Remove track rod (10)		AR46.40-P-0200I
4	Unscrew lock nut (10f)		
5	Detach outer clamp (11b)		
6	Detach inner clamp (11a)		AR46.40-P-0400-01GH
7	Pull off bellows (11)	<p><b>i</b> <b>Installation:</b> Replace O-ring (23k).</p> <p><b>i</b> <b>Installation of model 203, 209 with boot with diaphragm valve:</b> Position the boot for the steering gear housing.</p>	AR46.40-P-0400-02CW
8	Check steering rack and inner tie rod thrust joint for corrosion and play	<p>⚠ If the steering is leaking and the steering rack is already corroded, the rack-and-pinion steering must be replaced complete, in order to guarantee a satisfactory function: ↓            Remove/install rack-and-pinion steering:            Model 203, 209            Model 215, model 220 except 220.176/ 179            Model 220.176/ 179</p>	AR46.20-P-0600P AR46.20-P-0600I AR46.20-P-0600M

