

P01.45-2277-09

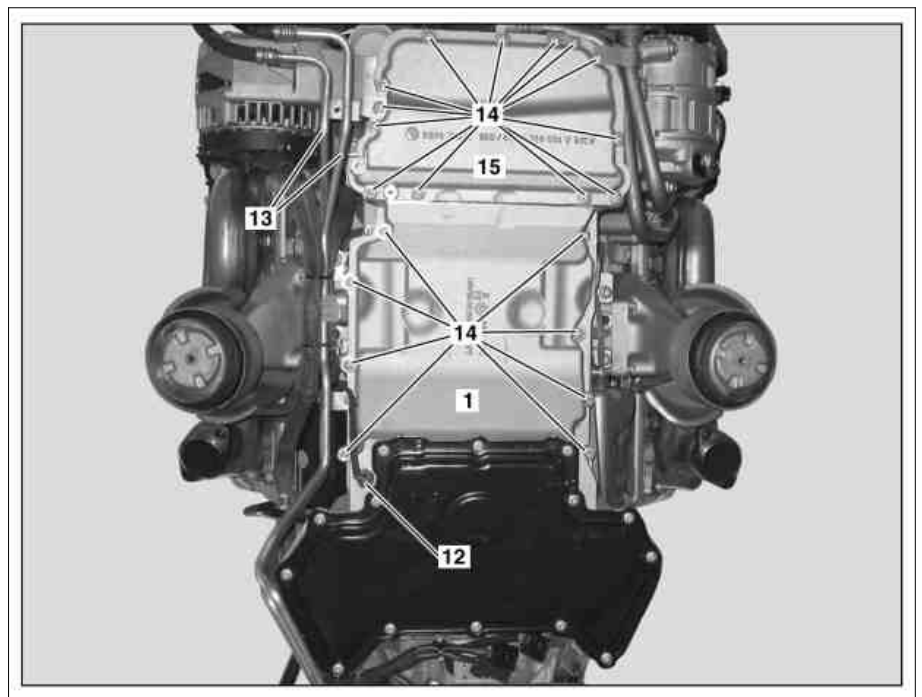
- 1 Oil pan
- 2 Oil pan bottom section
- 3 Engine oil lines
- 4 Connecting flange

- 7 Support
- 8 Bolts
- 9 Oil dipstick guide tube
- 10 Cylinder head

- 11 Cylinder crankcase
- 13 Automatic transmission oil lines
- 14 Bolts
- 16 Bolts

A9 AC compressor

- 1 Oil pan
- 12 Oil level check switch electrical connector
- 13 Automatic transmission oil lines
- 14 Bolts
- 15 Cover



P01.45-2278-06

Modification notes

12.11.08	Value changed: Bolt for attaching diagonal strut to front axle carrier/longitudinal member		*BA61.10-P-1004-01H
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 	Remove/install		
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	Risk of death caused by vehicle slipping or toppling off 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
	Risk of injury caused by fingers being pinched or crushed when removing, installing or aligning hoods, doors, trunk lids, liftgates or sliding roof	Keep body parts and limbs well clear of moving parts.	AS00.00-Z-0011-01A
	Risk of injury to skin or eyes caused by hydraulic fluid spraying out under high pressure. Risk of poisoning 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
1	Switch off ignition		
2	Deactivate easy entry/exit function for driver seat and steering wheel	Vehicles with code 275, Memory package (driver seat, steering column, mirrors)	
3	Detach ground line from battery	Model 204 Model 212	AR54.10-P-0003CW AR54.10-P-0003EW AH54.10-P-0001-01A
ⓘ	Notes on battery		
4	Turn front wheels to straight-ahead position and secure steering wheel with holding device	ⓘ The steering wheel must not be turned when the steering coupling is detached, otherwise the clock spring contact will be destroyed. ⓘ	*129589012100
5	Remove air filter housing		AR09.10-P-1150CMG
6	Extract oil from power steering expansion reservoir	ⓘ	*210589007100
7	Remove poly-V belt	ⓘ Only remove poly-V belt from the belt pulley of A/C compressor (A9).	AR13.20-P-0001CMG
8	Remove bolts (8) on the oil dipstick guide tube (9) bracket	ⓘ Installation: Replace sealing ring. Ensure the correct seating of the seal ring in the oil pan (1).	AR18.40-P-3510CMG
9	Attach engine hoist and raise engine	Model 204 Model 212	AR33.10-P-0105CW AR33.10-P-0105EW
10	Remove cold air intake		
11	Secure radiator package with cable ties to prevent it from falling down		
12	Detach oil lines of automatic transmission (13) at oil pan (1)	ⓘ Loosen double hose clamp and rotate top section by 90°. Nm	*BA27.55-P-1003-01D
13	Remove oil pan bottom section (2)		AR01.45-P-7555CMG
14	Loosen engine mounts on front axle carrier		AR22.10-P-1260CMG
15	Detach steering coupling from steering shaft		AR46.10-P-8000CW
16	Disconnect electrical connector at the speed-sensitive power steering solenoid valve of the rack-and-pinion steering (23) and unclip at front axle carrier		
17	Disconnect electrical connector (12) at oil level check switch (S43)		AR18.40-P-5113CMG
18	Detach bracket of the connecting linkage of the headlamp range adjustment/level sensor at the stabilizer bar		
19	Disconnect and seal power steering hydraulic line at the separation point at the front axle carrier	ⓘ	*129589009100
20	Loosen nut of wheel arch oil cooler bracket at front axle carrier	Model 204 Model 212	AR18.30-P-1000CMR AR18.30-P-1000EMG
21	Disconnect lower engine oil line on connecting flange	Model 204 Model 212	AR18.30-P-1000CMR AR18.30-P-1000EMG
22	Detach diagonal strut at front axle carrier and underfloor	ⓘ Installation: The bolts of the diagonal struts must not be tightened until the vehicle is standing with its wheels on the ground. Nm	*BA61.10-P-1004-01H
23	Detach support strut at underfloor and front axle carrier	Nm	*BA33.10-P-1002-01M
24	Loosen and lower front axle carrier	ⓘ Secure front axle carrier with tensioning strap to prevent it from falling down. Model 204 Model 212	AR33.10-P-0001CW AR33.10-P-0001EW
25	Separate electrical connector of the A/C compressor (A9) at separation point		AR83.55-P-5300CMG

26	Detach A/C compressor (A9) from cylinder crankcase (11)	Move with connected lines until the bolts of the support (7) are accessible and secure to prevent from falling down.	
27	Remove support (7) for power steering pump	Model 204 Model 204 Model 212	*BA46.30-P-1007-01R *BA46.30-P-1008-01R *BA46.30-P-1008-01T
28	Disconnect and seal engine oil lines (3) at connecting flange (4)	Installation: Replace sealing rings. 	*129589009100
29	Unscrew bolts (16), remove engine oil lines (3) from cylinder crankcase (11) and seal connection openings	Installation: Replace sealing rings. 	*BA03.20-P-1006-01J *BA01.45-P-1005-01R *129589009100
30	Detach front cover (15) from oil pan (1)	To do this, insert a bolt and use an assembly wedge to loosen and then pry off from the oil pan (1). 5 bolts of the oil pan (1) are located under the front cover (15). 	*110589035900
31	Remove bolts (14) on oil pan (1)	 	*BA01.45-P-1002-01R *BA01.45-P-1006-01R *BA01.45-P-1007-01R
32	Pry off oil pan (1) from crankcase (11) and remove Notes on sealant path for oil pan	Pry off oil pan (1) by turning a bolt on the crankcase (11) and loosen with an assembly wedge. Do not manage the sealing surfaces of the oil pan (1) and crankcase (11). If oil pan (1) cannot be detached from the crankcase (11), heat up the sealing surfaces of the oil pan (1) using a hot air gun. Loctite sealant 5970	*110589035900 AH01.45-P-0001-01CMG *112589002500 *BR00.45-Z-1013-01A
	Clean		
33	Clean sealing surfaces on oil pan (1) and cylinder crankcase (11)	Do not use any sharp-edged tools or abrasive paper as this will damage the sealing surfaces. Loctite 7200 Cleaning spray, Loctite 7063 (150ml)	*BR00.45-Z-1038-04A *BR00.45-Z-1046-04A
34	Install in the reverse order		
35	Fill power steering pump and bleed		AR46.30-P-0010CW

Oil pan

Number	Designation	Engine 156		
BA01.45-P-1002-01R	Oil pan top section on crankcase	M6	Nm	8.4
BA01.45-P-1005-01R	Bracket, oil lines to oil pan	M6	Nm	5
BA01.45-P-1006-01R	Oil line return to oil pan	M6	Nm	8.4
BA01.45-P-1007-01R	Oil line feed line to oil pan	M6	Nm	8.4

Power steering pump

Number	Designation	Model 212

BA46.30-P-1008-01T	Bolt, support to cylinder crankcase/power steering pump	Nm	20
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Nm Power steering pump

Number	Designation		Model 204 without engine 651
BA46.30-P-1007-01R	Bolt, support holder to cylinder crankcase	Nm	20
BA46.30-P-1008-01R	Bolt, support holder to power steering pump	Nm	20

Nm Frame floor assembly

Number	Designation		Model 204	Model 212
BA61.10-P-1004-01H	Bolt, diagonal strut mount on front axle carrier/longitudinal member	Nm	50	60

Nm Crankshaft bearing cap

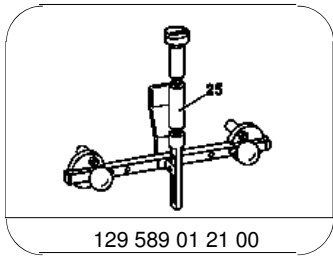
Number	Designation		Engine 156
BA03.20-P-1006-01J	Oil line (oil radiator) with bracket	M8 Nm	20

Nm Front axle carrier

Number	Designation		Model 204	Model 212
BA33.10-P-1002-01M	Fixing of support (strut)	Nm	110	110

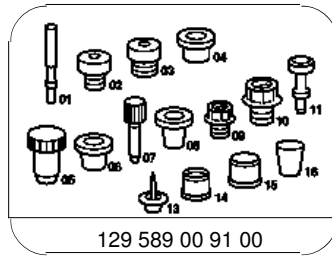
Nm Transmission oil cooling system

Number	Designation		Transmission 722.9
BA27.55-P-1003-01D	Bolt, oil cooler line to engine oil pan	Nm	12



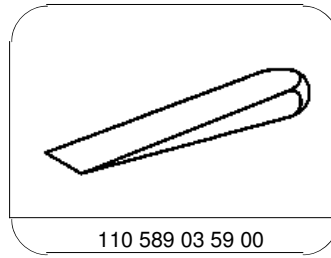
129 589 01 21 00

Holding device



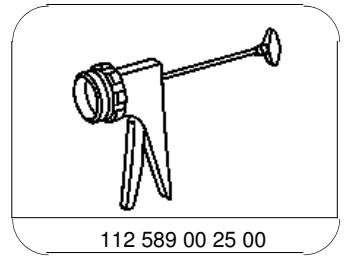
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Set of stop plugs



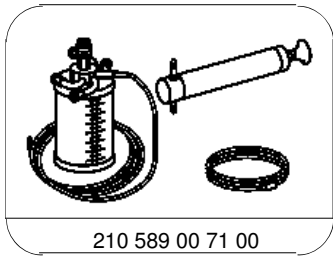
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Mounting wedge



112 589 00 25 00

Squeeze gun



210 589 00 71 00

Hand pump

Repair materials

Number	Designation	Order number
BR00.45-Z-1013-01A	Loctite sealant 5970	A 003 989 98 20
BR00.45-Z-1038-04A	Loctite 7200	Henkel Loctite Deutschland GmbH Arabellastrasse 17 81925 München Germany Tel. +49 899268-0 Fax + 49 899101978 www.Loctite.de
BR00.45-Z-1046-04A	Cleaning spray, Loctite 7063 (150ml)	A 001 986 71 71 10