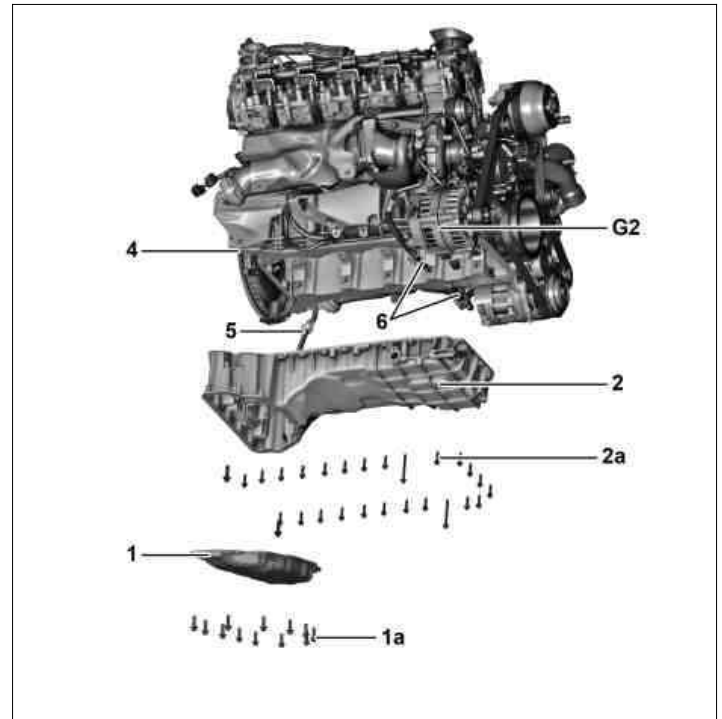


Engine 157, 278 in model 212, 218

Engine 278 in model 207









Shown on engine 278.932














- 1 Oil pan bottom section
- 1a Screws/bolts
- 2 Oil pan
- 2a Screws/bolts
- 4 Crankcase
- 5 Oil-dipstick guide tube
- 6 Oil lines
- G2 Alternator



P01.45-2365-12

Warning	Risk of injury. Skin or eye injuries may result when handling hot or glowing objects.	Wear protective gloves, protective clothing and safety glasses, if necessary.	AS00.00-Z-0002-01A
	Risk of death caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between vehicle lift columns and position the four support plates at the vehicle lift support points specified by the vehicle manufacturer.	AS00.00-Z-0010-01A
Caution	Risk of injury caused by scraping or cutting body parts on sharp vehicle parts	Always wear protective gloves when working on or near sharp and non-deburred vehicle parts. Deburr repair panels.	AS00.00-Z-0017-01A
Caution	Risk of injury to skin and eyes due to handling of engine oil. Risk of poisoning caused by swallowing engine oil	Wear protective gloves, protective clothing and safety glasses. Do not fill engine oil into beverage containers.	AS18.00-Z-0001-01A
	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
	Notes on AIRmatic	Engine 157, 278 in model 212, 218 with code 488 (Steel/air suspension) Engine 157, 278 in model 212, 218 with code 489 (AIRMATIC)	AH32.22-P-1000-02EW
	Notes on avoiding damage through contamination and foreign objects		AH00.00-P-5000-01A
	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
	Notes on bolted connections with self tapping screws		AH00.00-P-0007-01SF
	Notes on threaded connections with aluminum screws/bolts		AH00.00-P-0006-01RM
	Remove/install		
1 	Relieve all pressure in front suspension struts with diagnostic system	Engine 157, 278 in model 212, 218 with code 489 (AIRMATIC)	AD00.00-P-2000-04A

2	Deactivate easy entry/exit feature	Engine 157, 278 in model 212, 218 with code 275 (Electrically adjustable driver seat, steering column and outside mirrors with memory) Engine 278 in model 207 with code P64 (Memory package)	
3	Turn front wheels to straight-ahead position and fix steering wheel in place with holding device	 Do not turn steering wheel on disassembly of steering coupling. Clock spring contact is otherwise destroyed.  Retainer device	*129589012100
4	Disconnect ground cable at battery		AR54.10-P-0003EW
5	Attach engine hoist and raise engine somewhat	Engine 278 in model 207 Engine 157, 278 in model 212, 218  Only raise engine until engine mounts are not under tension.	AR33.10-P-0105CW AR33.10-P-0105EW
6	Secure vehicle on the vehicle lift	Engine 278 in model 207 Engine 157, 278 in model 212, 218	AR00.60-P-0100CW AR00.60-P-0100EWS
7	Remove engine compartment paneling	 Installation: Only install lower engine compartment paneling after leak test.	AR61.20-P-1105EW
8	Drain engine oil and catch in a suitable container	Engine 157 in model 212, 218 Engine 278 in model 207, 212, 218	AP18.00-P-0101EWG AP18.00-P-0101EW
9	Remove alternator (G2)		AR15.40-P-5032ELB
10	Remove oil line for oil cooling system	Transmission 722.9 (except 722.96/97/995) in model 212 with engine 157 Transmission 722.9 (except 722.96/97/995) in model 212 with engine 278 Transmission 722.9 (except 722.96/97/995) in model 218 with engine 157 Transmission 722.9 (except 722.96/97/995) in model 218 with engine 278 Transmission 722.9 (except 722.96/995) in model 207 with engine 278 Transmission 722.96 in model 212, 218 with engine 278 Transmission 722.97 in model 212, 218 with engine 157	AR27.55-P-0600EV AR27.55-P-0600CWX
11	Remove oil dipstick tube (5) from oil pan (2) and cylinder head cover, and set aside in engine compartment	 Installation: Replace screws/bolts.  Installation: Check sealing ring of the oil dipstick tube (5) in the oil pan (2) and replace if necessary.  Screw/bolt, guide tube to oil pan  Screw/bolt, guide tube to cylinder head/cylinder head cover/front cover	*BA01.45-P-1004-01E *BA01.45-P-1005-01E
12	Remove steering coupling	Engine 278 in model 207 Engine 157, 278 in model 212, 218	AR46.10-P-8000CW AR46.10-P-8000EW
13	Remove oil lines (6) for turbochargers at oil pan (2), and set aside		AR18.30-P-6850ELB
14.1	Release and disconnect electrical connection on fill level sensor	Engine 157 in model 212, 218	AR18.40-P-5111ELB
14.2	Release and disconnect electrical connection on oil level check switch	Engine 278 in model 207, engine 207M278 in model 212, 218 Engine 278 in model 207 Engine 278 in model 212, 218	AR18.40-P-5113FH AR18.40-P-5113EL
15	Remove brackets of level sensors from spring control arm		
16.1	Loosen and lower front axle carrier somewhat	Engine 157, 278 in model 212, 218 except code M005 (4MATIC) Engine 278 in model 207 Engine 157, 278 in model 212, 218 except code M005 (4MATIC) Engine 278 in model 207	AR33.10-P-0001EW AR33.10-P-0001CW
16.2	Remove front axle transmission	Engine 157, 278 in model 212, 218 with code M005 (4MATIC)	

		Model 212, 218 with engine 157 with transmission 722.97 with code M005 (4MATIC) Model 212, 218 with engine 278 with transmission 722.96 with code M005 (4MATIC) Model 218 with engine 278 with transmission 725.0 with code M005 (4MATIC)	AR33.30-P-0525CWX
17	Remove support brace from front axle transmission	Engine 157, 278 in model 212, 218 with code M005 (4MATIC)  Screw/bolt, front axle gear support brace to oil pan	*BA01.45-P-1008-01E
18	Remove screw plugs from oil pan (2)	Engine 157, 278 in model 212, 218 with code M005 (4MATIC)  Screw plug to oil pan	*BA01.45-P-1006-01E
19	Remove screws/bolts (1a), and remove oil pan bottom section (1)	 Bolt, oil pan bottom section to oil pan Sealant, Loctite 5970, 50 ml	AR01.45-P-7500-04MM *BA01.45-P-1003-01E *BR00.45-Z-1013-01A
20	Remove screws/bolts from transmission at engine	Transmission 722.96 in model 212, 218 with engine 278 Transmission 722.97 in model 212, 218 with engine 157 Transmission 722.9 (except 722.96/97) in model 212, 218 with engine 157 Transmission 722.9 (except 722.96/97) in model 212, 218 with engine 278 Transmission 722.9 (except 722.96) in model 207 with engine 278	AR27.10-P-0500CWX AR27.10-P-0500EV AR27.10-P-0500CV
21	Remove screws/bolts (2a) from oil pan (2)	 Installation: Pay attention to different lengths of screws/bolts.  Screw/bolt, oil pan to crankcase/ timing case cover/rear end cover  Bolt, oil pan to crankcase	*BA01.45-P-1001-01E *BA01.45-P-1002-01E
22	Release oil pan (2) from crankcase (4), and remove downwards Notes on sealant path for oil pan	 Installation: Apply sealing compound onto sealing surface of oil pan (2). Sealant, Loctite 5970, 50 ml	AR01.45-P-7500-04MM AH01.45-P-0001-01MMA *BR00.45-Z-1013-01A
23	Remove oil level check switch	Engine 278 in model 207, 212, 218 When installing a new oil pan (2). Engine 278 in model 207 Engine 278 in model 212, 218	AR18.40-P-5113FH AR18.40-P-5113EL
	Clean		
24	Clean sealing surfaces on oil pan (2) and crankcase (4)	 Do not use any sharp-edged tools or abrasive paper. In order to prevent damage. Loctite 7200 Loctite 7063 cleaning spray (150 ml)	AR01.00-P-0050-01A *BR00.45-Z-1038-04A *BR00.45-Z-1046-04A
25	Install in the reverse order		
	Check		
26  	Check engine oil level; correct if necessary	Engine 157 in model 212, 218 Engine 278 in model 207, 212, 218	AP18.00-P-0101EWG AP18.00-P-0101EW
 Warning	Risk of accident from vehicle starting off by itself when engine running. Risk of injury (bruises and burns) resulting from working on the engine while it is being started or when it is running.	Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A
27	Carry out engine test run, checking the engine for leaktightness and proper operation		

Number	Designation			Engine 157	Engine 278
BA01.45-P-1001-01E	Screw/bolt, oil pan to crankcase/ timing case cover/rear end cover	M6	Nm	9	9

Nm Oil pan

Number	Designation			Engine 157	Engine 278
BA01.45-P-1002-01E	Bolt, oil pan to crankcase	M8	Nm	20	20

Nm Oil pan

Number	Designation			Engine 157	Engine 278
BA01.45-P-1003-01E	Bolt, oil pan bottom section to oil pan		Nm	14	14

Nm Oil pan

Number	Designation			Engine 157	Engine 278
BA01.45-P-1004-01E	Screw/bolt, guide tube to oil pan		Nm	5	5

Nm Oil pan

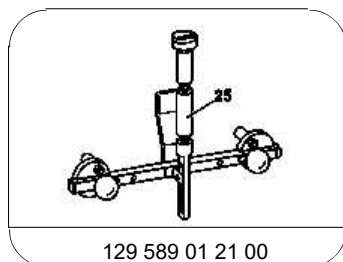
Number	Designation			Engine 157	Engine 278
BA01.45-P-1005-01E	Screw/bolt, guide tube to cylinder head/cylinder head cover/front cover		Nm	5	5

Nm Oil pan

Number	Designation			Engine 157	Engine 278
BA01.45-P-1006-01E	Screw plug to oil pan	M26	Nm	20	20

Nm Oil pan

Number	Designation			Engine 157	Engine 278
BA01.45-P-1008-01E	Screw/bolt, front axle gear support brace to oil pan	M12	Nm	60	60



Retainer device

Repair materials

Number	Designation	Order number
BR00.45-Z-1013-01A	Sealant, Loctite 5970, 50 ml	A 003 989 98 20 10

BR00.45-Z-1038-04A	Loctite 7200	Henkel AG & Co. KGaA http://www.loctite.de
BR00.45-Z-1046-04A	Loctite 7063 cleaning spray (150 ml)	A 001 986 71 71 10