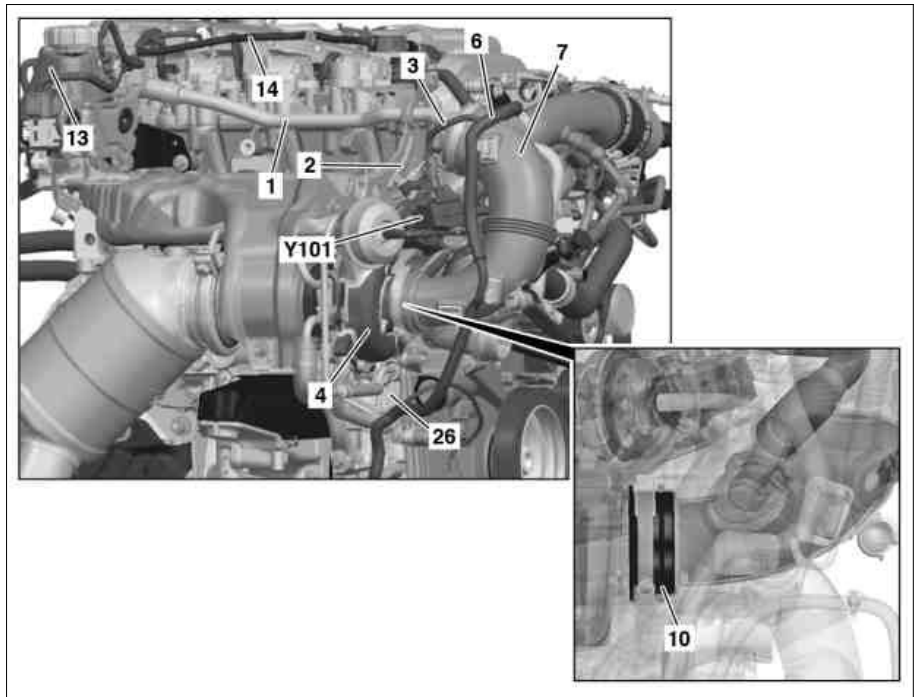


Engine 274.9 in model 205, 213, 253
with code 494 (US version)

Engine 274.9 in model 205, 213, 253
with code 945 (China Stage 6 exhaust treatment)

Shown on ENGINE 274.9 in MODEL 205.048

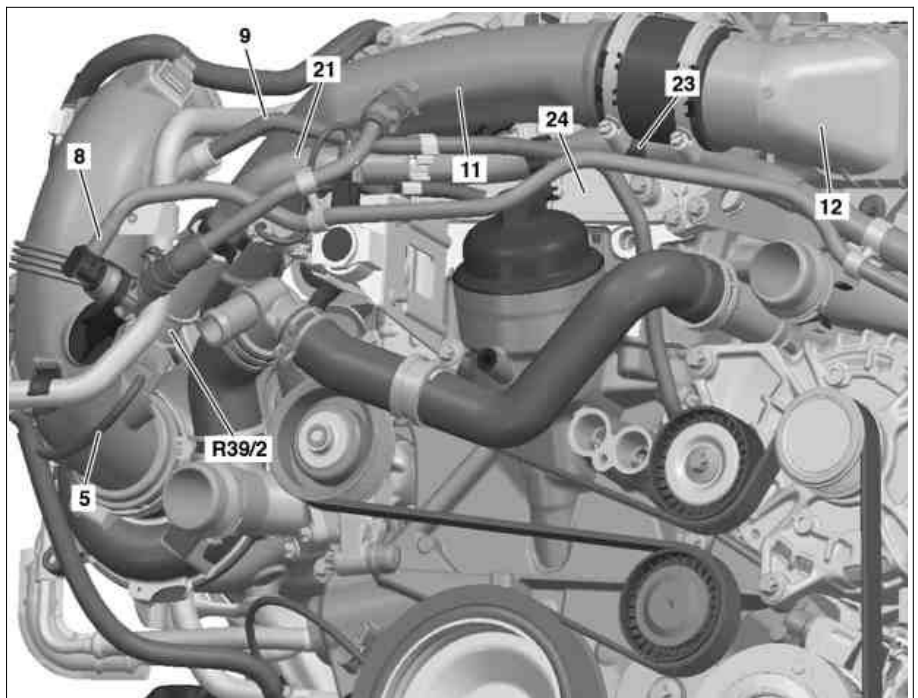
- 1 Coolant line
- 2 Bracket
- 3 Electrical line
- 4 Turbocharger
- 6 Engine wiring harness
- 7 Charge air intake manifold
- 13 Expansion reservoir
- 14 Coolant line
- 26 Crankcase
- Y101 Divert air switchover valve



P01.20-2368-06

Shown on ENGINE 274.9 in MODEL 205.048

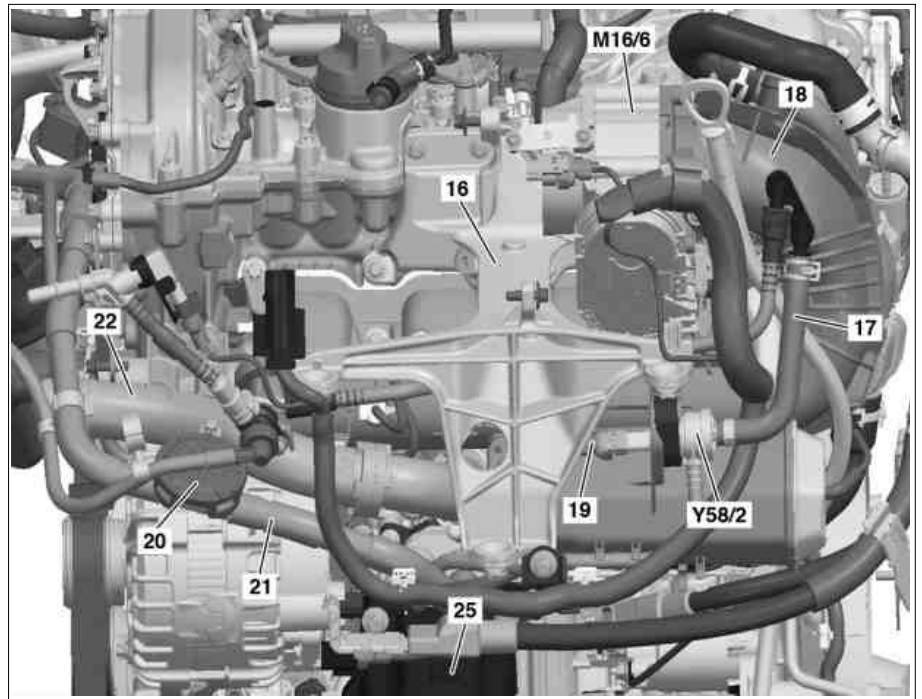
- 5 Electrical line
- 8 Purge line
- 9 Vent line
- 11 Charge air line
- 12 Charge air cooler
- 21 Wide open throttle air extraction duct
- 23 Bracket
- 24 Front cover
- R39/2 Full-load operation vent line heater element



P01.20-2369-06

Shown on ENGINE 274.9 in MODEL 205.048

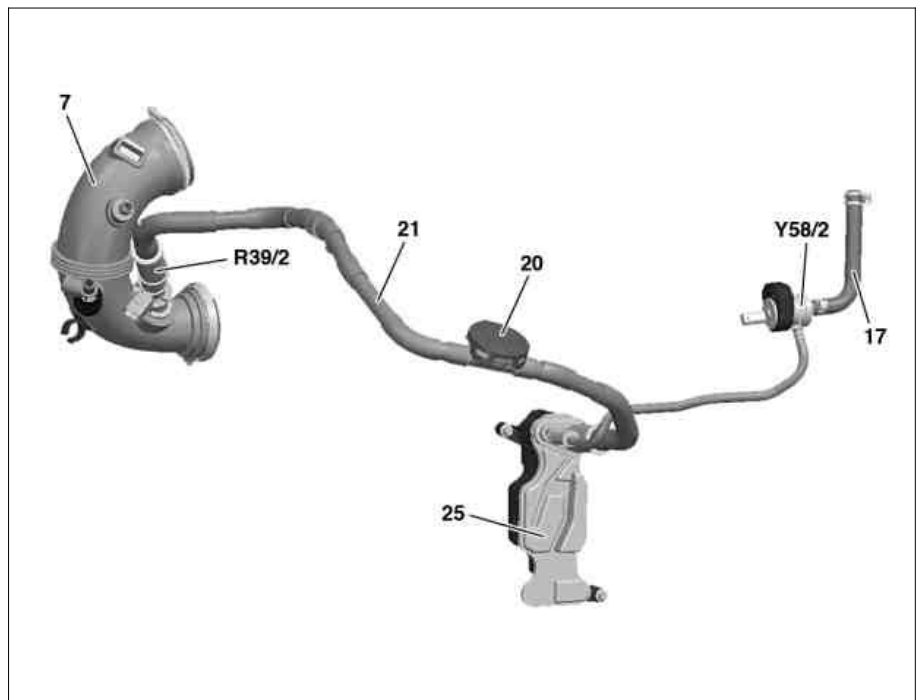
- 16 Bracket
- 17 Partial load throttle bleed line
- 18 Charge air distributor
- 19 Electrical connector
- 20 Vent valve
- 21 Wide open throttle air extraction duct
- 22 Coolant thermostat
- 25 Oil separator
- Y58/2 Partial load operation crankcase ventilation valve



P01.20-2370-06








Shown on ENGINE 274.9 in MODEL 205.048

- 7 Charge air intake manifold
- 17 Partial load throttle bleed line
- 20 Vent valve
- 21 Wide open throttle air extraction duct
- 25 Oil separator
- R39/2 Full-load operation vent line heater element
- Y58/2 Partial load operation crankcase ventilation valve



P01.20-2371-06

⚠ 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
⚠ Warning	Risk of injury to skin and eyes suffering scalding from contact with hot coolantspray. Risk of poisoning from swallowing coolant.	Do not open cooling system unless coolant temperature is below 90 °C. Open cap slowly and release the pressure. Do not pour coolant into beverage containers. Wear protective gloves, protective clothing and safety glasses.	AS20.00-Z-0001-01A
⚠ 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 avoiding damage through contamination and foreign objects		AH00.00-P-5000-01A
☒ ☒	Remove/install		
1	Remove upper engine cover	i Installation: Only install top engine cover after the leak test.	

2	Disconnect ground line from battery		AR54.10-P-0003LW
3	Remove center and rear lower engine compartment paneling	Engine 274.9 in model 213 with code 494 (US version) Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version) i Installation: Only install center and rear lower rear engine compartment paneling again after a leak check.	AR61.20-P-1105LWE AR61.20-P-1105LW
4	Remove air intake hose upstream of air filter housing		
5	Remove air filter housing	Engine 274.9 in model 213 with code 494 (US version) Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	AR09.10-P-1150MRD AR09.10-P-1150MRA
6	Unclip coolant line (1) from bracket (2) and place to one side	Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	
7	Release and disconnect electrical connector at overrun mode bypass air switchover valve (Y101), place electric line (3) to one side		
8	Release and disconnect electrical connector at wide-open-throttle operation bleed line heater element (R39/2), place electric line (5) to one side		
9	Unclip engine wiring harness (6) from charge air intake manifold (7) and place to one side		
10	Release and disconnect purge line (8) on charge air cooler (7)		
11	Remove vent line (9) from charge air intake manifold (7)	 Pliers for click clamps	*171589003700
12	Remove vent line between charge air intake manifold (7) and charge air line (11) from charge air intake manifold (7)	 Hose clamp pliers	*003589033700
13	Remove charge air intake manifold (7) from exhaust gas turbocharger (4)	Engine 274.9 in model 213 with code 494 (US version) Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	AR09.10-P-8131MRD AR09.10-P-8131MRA
14	Remove charge air line (11) from exhaust gas turbocharger (4) and charge air cooler (12)		
15	Remove engine management control unit (MCM) together with bracket	Engine 274.9 in model 213 with code 494 (US version) Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	AR07.08-P-7013MRD AR07.08-P-7008MRA
16	Unscrew cap from expansion reservoir (13) and relieve pressure in low-temperature circuit	Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	
17	Unscrew cap from engine cooling system expansion reservoir and relieve pressure in engine cooling system	Engine 274.9 in model 213 with code 494 (US version)	
18	Close off coolant line (14) with a clamping device	 Clamp	*000589403700
19	Remove coolant line (14) from charge air cooler (12) and catch escaping coolant in a suitable container	 Hose clamp pliers	*003589033700
20	Remove charge air cooler (12) and place to one side with attached coolant lines	Engine 274.9 in model 213 with code 494 (US version) Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	AR09.41-P-0105MRD AR09.41-P-6819MRA
21	Remove bracket (16)	 M8 × 1.25  M6 × 1	*BA00.10-P-1005-04A *BA00.10-P-1002-04A
22	Remove partial load throttle bleed line (17) from charge-air distributor (18)	 Hose clamp pliers	*003589033700
23	Release and disconnect electrical connection (19)		

24	Unclip partial-load operation crankcase ventilation valve (Y58/2) from charge-air distributor (18) and place to one side		
25	Remove bleed valve (20) from coolant thermostat (22)	M6 × 1	*BA00.10-P-1002-04A
26	Remove holder (23) from front cover (24)	M6 × 1	*BA00.10-P-1002-04A
27	Remove left engine support	Engine 274.9 in model 213 with code 494 (US version) Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	AR22.10-P-4325MRD AR22.10-P-4325LWA
28	Remove electrical line of circuit 30 from alternator and place to one side	Nut, circuit B+ to alternator	*BA15.40-P-1002-01F
29	Remove the oil separator (25) from crankcase (26) and place to one side	Installation: Replace seal. Bolt, oil separator to crankcase	*BA01.20-P-1002-01R
30	Unclip the oil separator (25) together with the charge air intake manifold (7), partial load vent line (17) and wide open throttle vent line (21) and remove upwards		
31	Check the oil separator (25), charge air intake manifold (7), partial load vent line (17) and wide open throttle vent line (21) for damage	Do not disconnect oil separator (25), charge air intake manifold (7), partial load throttle bleed line (17) and wide open throttle bleed line (21). Leaks can occur otherwise. If damage is present ↓ Replace assembly parts.	
32	Install in the reverse order		
	Check		
33	Check low-temperature circuit for leaktightness	Engine 274.9 in model 205 with code 494 (US version) Engine 274.9 in model 253 with code 494 (US version)	AR09.41-P-1010LW
34	Check engine cooling system for leaktightness	Engine 274.9 in model 213 with code 494 (US version)	AR20.00-P-1011OLC
35	Read out and erase fault memory		AD00.00-P-2000-04B AS49.00-Z-0001-01A
Warning	Risk of burn injuries , suffocation and poisoning when working on the exhaust system and the components connected to it. Risk of suffocation and risk of poisoning caused by inhalation of gaseous and solid components of the exhaust. Risk of poisoning caused by skin contact with solid components of the exhaust.	Wear protective clothing, safety glasses and respiratory protection. Use the extraction system. Move people out of the hazard area.	
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
36	Perform an engine test run and check engine for proper operation and leaktightness		

Metric screws/bolts and nuts as per MBN 10 105, 10 143

Number	Designation	8.8	10.9
BA00.10-P-1002-04A	M6 × 1 Nm	9	13

Metric screws/bolts and nuts as per MBN 10 105, 10 143

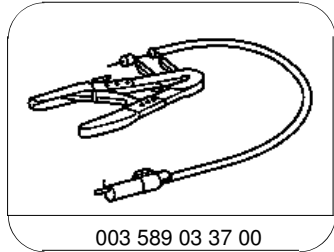
Number	Designation	8.8	10.9
BA00.10-P-1005-04A	M8 × 1.25 Nm	22	32

Crankcase ventilation system, cylinder head cover, camshaft housing

Number	Designation		Engine 274
BA01.20-P-1002-01R	Bolt, oil separator to crankcase	Nm	9

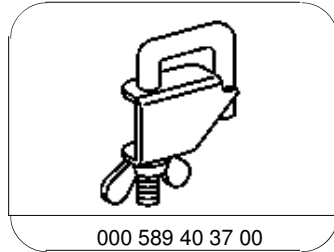
Nm Alternator

Number	Designation		Engine 274
BA15.40-P-1002-01F	Nut, circuit B+ to alternator	Nm	15



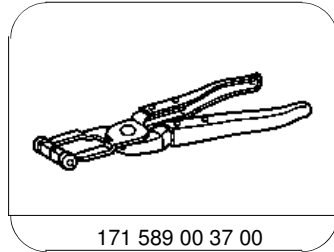
003 589 03 37 00

Hose clamp pliers



000 589 40 37 00

Clamp



171 589 00 37 00

Pliers for click clamps