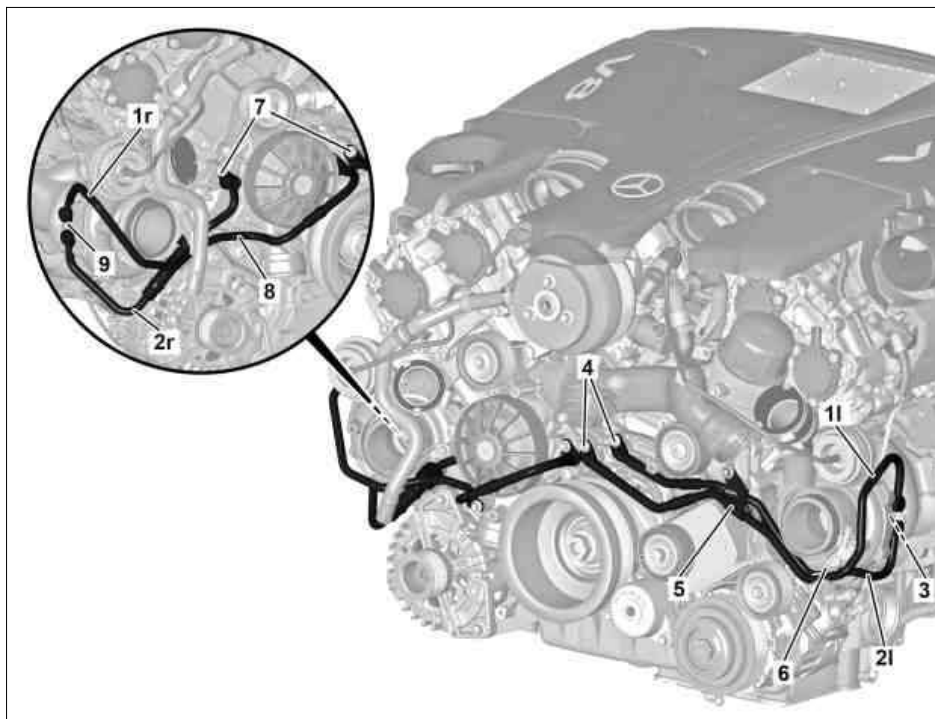


- Engine 157, 278 in model 212, 218
except code 139 (M157/M278 engine cooling measures)
- Engine 278 in model 207
except code 139 (M157/M278 engine cooling measures)

- 1l Upper coolant line on the left
1r Upper coolant line on the right
2l Lower coolant line on the left
2r Lower coolant line on the right
3 Screw
4 Screw
5 Bracket
6 Double clamp
7 Screw
8 Bracket
9 Screw



P20.00-2402-06

	Remove/install		
	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
	Risk of injury caused by fingers being jammed or pinched when removing, installing or aligning hoods, doors, trunk lid/rear-end door or sliding roof.	No parts of the body or limbs should be within the operating area when the components are moving.	AS00.00-Z-0011-01A
	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
1 	Drain off coolant Notes on coolant	MODEL 207 MODEL 212, 218	AR20.00-P-1142FH AH20.00-N-2080-01A AR20.00-P-1142EL
2	Remove charge air ducts from air filter to turbocharger		AR09.41-P-8620ELB
3	Remove poly-V belt		AR13.20-P-0001ELB
	Perform operation steps 4 to 8 just during removal of the left coolant lines (1l, 2l)		
4	Detach and remove double clamp (6) from turbocharger and coolant lines on the left (1l, 2l)	Bolt, coolant line bracket to water pump/turbocharger Bolt, coolant line clamp to bracket	*BA09.40-P-1006-01R *BA09.40-P-1009-01R
5	Detach and remove bracket (5) for the upper coolant line (1l) from coolant pump	Installation: Ensure correct assembly of the bracket (5) and correct routing of the coolant lines on the left (1l, 2l). Damage will occur on the coolant circuit of the turbocharger otherwise.	

		Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	*BA09.40-P-1005-01R
6	Remove screw/bolts (4) from coolant pump	Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	*BA09.40-P-1005-01R
7	Remove screw/bolt (3) for coolant lines on the left (1l, 2l) to turbocharger	Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	*BA09.40-P-1005-01R
8	Remove coolant lines on the left (1l, 2l) from coolant pump and turbocharger and take out upwards	Installation: Observe assembly sequence for the coolant lines. The lower coolant line on the left (2l) must always be removed first and then the upper coolant line on the left (1l) on the turbocharger. Installation: Replace sealing ring.	
	Perform operation steps 9 to 14 just during removal of the coolant lines on the right (1r, 2r)		
9	Detach bracket (8) for the upper coolant line on the right (1r) at the coolant pump	Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	*BA09.40-P-1005-01R
10	Remove screw/bolt (7) for upper coolant line on the right (1r) at the coolant pump	Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	*BA09.40-P-1005-01R
11	Remove screw/bolt (9) for coolant lines on the right (1r, 2r) at turbocharger	Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	*BA09.40-P-1005-01R
12	Pull upper coolant line on the right (1r) out of the coolant pump and ATL and upwards	Replace sealing ring.	
13	Remove screw/bolt (7) for lower coolant line on the right (2r) to timing case cover	Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	*BA09.40-P-1005-01R
14	Remove lower coolant line on the right (2r) from timing case cover and ATL and take out upwards	Plug openings. Installation: Replace sealing ring. Record plug	*129589009100
15	Install in the reverse order	Installation: Observe assembly sequence for the coolant lines. The lower coolant line on the right (2r) must always be removed first and then the upper coolant line on the right (1r) on the turbocharger.	
16	Check cooling system for leaktightness	MODEL 207 MODEL 212, 218	AR20.00-P-1010FH AR20.00-P-1010EL
17	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. Carry out an engine test run, checking the engine for proper operation and leaktightness	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

Turbocharger

Number	Designation		Engine 157	Engine 278
BA09.40-P-1005-01R	Bolt, coolant line to turbocharger/oil filter/coolant pump/ timing case cover	Nm	9	9

Turbocharger

Number	Designation		Engine 157	Engine 278
BA09.40-P-1006-01R	Bolt, coolant line bracket to water pump/turbocharger	Nm	9	9

Turbocharger

Number	Designation		Engine 157	Engine 278
BA09.40-P-1009-01R	Bolt, coolant line clamp to bracket	Nm	9	9

