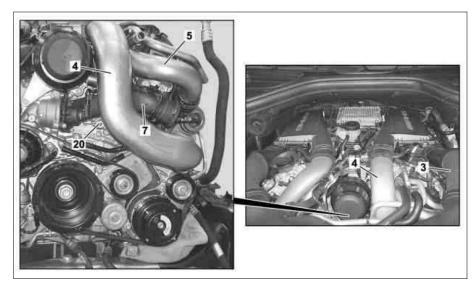
Engine 157, 278 in model 166 Engine 157, 278 in model 292

#### Shown on engine 157

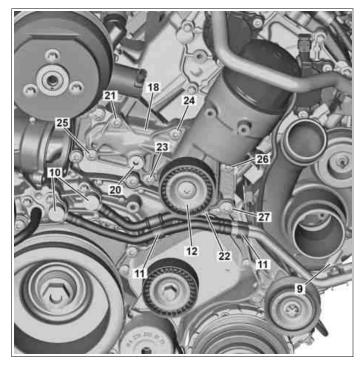
- 3 Left engine air intake duct
- 4 Engine charge air duct upstream of ATL
- 5 Engine charge air duct downstream of ΔΤΙ
- 7 Thermostat housing
- 20 Screw plug



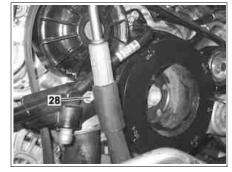
P18.20-2114-05

#### Shown on engine 157

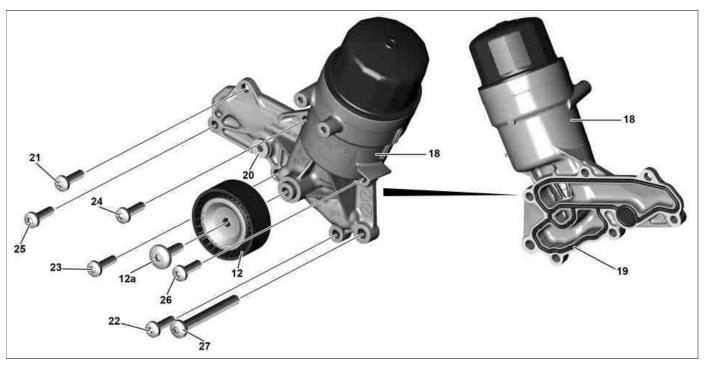
9	Bracket
10	Coolant lines
11	Retaining clips
12	Guide pulley
18	Oil filter housing
20	Screw plug
21 bis 27	Screw/bolts



P18.20-2115-12



P18.20-2112-01



P18.20-2103-09

12	Guide pulley	18	Oil filter housing	20	Screw plug
12a	Screw/bolt	19	Seal	21 bis 27	Screw/bolts

$\mathbf{x}$	Remove/install		
1	Remove central engine cover (1)		
2	Remove left engine air intake duct (3) upstream of the left air filter housing		
3	Detach oil lines for oil cooling from the oil filter housing (18) and timing case cover and set aside	i Seal openings with I stop plugs.	*129589009100
4	Demove left hand air filter haveing	Record plug	129309009100
5	Remove left-hand air filter housing  Remove engine charge air duct upstream of ATL (4), engine charge air duct downstream of ATL (5)		AR09.41-P-8620MLJ
6	Drain coolant at radiator		AR20.00-P-1142GQ
<b>(</b> )	Notes on coolant		AH20.00-N-2080-01A
7	Remove poly-V belt		AR13.22-P-1202MLJ
8	Remove thermostat housing (7)		AR20.10-P-2460MLJ
9	Detach feed line and return flow coolant line bracket from oil filter housing (18)		AR20.20-P-7440MLJ
10	Detach bracket for coolant line from water pump housing		AR20.20-P-7440MLJ
11	Release bracket (9) for the feed line and return flow coolant lines (10) on ATL and remove coolant lines (10) from bracket (9)		AR20.20-P-7440MLJ
12	Remove retaining clamps (11) from coolant lines (10)		
13	Detach guide pulley (12) for poly-V belt from oil filter housing (18); to do this remove screw/bolt (12a)	i Installation: Check guide pulley (12) for damage and replace if necessary.	AR13.20-P-0016MLJ
14	Detach ATL coolant lines (10) from coolant pump		AR20.20-P-7440MLJ
15	Loosen screw/bolt (28) on coolant line bracket		
16	Remove screw/bolts (21 to 27) for the oil filter housing (18) and oil filter housing (18) from the timing case cover		AR18.20-P-3471-01MMB

		(3) Installation:	
		Always observe tightening sequence for oil	
		filter housing (18).	
		Damage can occur on oil filter housing (18)	
		and timing case cover otherwise.	
		i Installation: Replace seal (19) for the oil filter housing (18).	
		Engine 157 in model 166, 292Screw plug to oil filter housing	*BA18.20-P-1002-01Z
		Engine 157 in model 166, 292Bolt, oil filter housing to timing case cover	*BA18.20-P-1003-01Z
		Engine 278 in model 166, 292Screw plug to oil filter housing	*BA18.20-P-1005-01Y
		Nm Engine 278 in model 166, 292Bolt, oil filter	*BA18.20-P-1006-01Y
		housing to timing case cover	
17	Install in the reverse order		
4	Check		
18	Check engine oil level using oil dipstick approx. 5 min after switching off engine when it has reached operating temperature; correct if necessary		
<b>⊯</b> AP		Engine 157 in model 166, 292	AP18.00-P-0101EWG
₽Ã₽		Engine 278 in model 166, 292	AP18.00-P-0101EL
		Vehicle must be horizontal and standing on its wheels.  Measurement errors can occur otherwise.	
	Diek of easident from vohiolo starting off his		A C O O O O O O O O O O O O O O O O O O
	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.	AS00.00-2-0005-01A
19	Carry out an engine test run, checking the engine for proper operation and leaktightness		

# Nm Oil filter

Number	Designation			Engine 157
BA18.20-P-1002-01Z	Screw plug to oil filter housing	M12	Nm	20

## Nm Oil filter

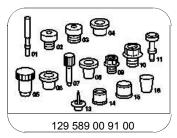
Number	Designation				Engine 157
BA18.20-P-1003-01Z	Bolt, oil filter housing to timing case cover	M7	Stage 1	Nm	5
			Stage 2	Nm	14
		M8	Stage 1	Nm	5
			Stage 2	Nm	20

## Nm Oil filter

Number	Designation			Engine 278
BA18.20-P-1005-01Y	Screw plug to oil filter housing	M12	Nm	20

### Nm Oil filter

Number	Designation				Engine 278
BA18.20-P-1006-01Y	Bolt, oil filter housing to timing case cover	M7	Stage 1	Nm	5
			Stage 2	Nm	14
		M8	Stage 1	Nm	5
			Stage 2	Nm	20



Record plug