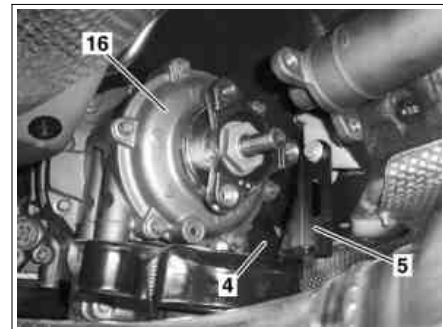


P28.10-2204-09

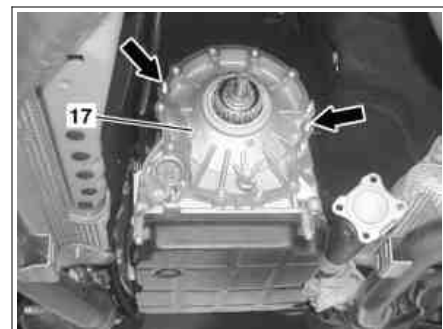
**Shown on engine 272**

- 6 Exhaust shielding plate
- 10 Crossmember
- 16 Transfer case
- 42 Rear engine crossmember
- 44 Three way catalytic converter bracket
- 44a Threaded plates
- 45 Vibration damper/flexible coupling
- 5 Reinforcement behind engine crossmember
- 50 Shift rod
- 50a Fuse
- 70 Front axle transmission propeller shaft

17 Automatic transmission



P22.10-2192-01



















P27.00-2255-01

**Modification notes**

31.1.06	Transmission oil, Specifications for Operating Fluids	
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☒	<b>Removing</b>	
ⓘ	Notes on self-locking nuts and bolts	AH00.00-N-0001-01A

	Before starting work the area around the separation points on the automatic transmission (17) and transfer case (16) must be cleaned thoroughly. Even the smallest dirt particles in the hydraulic components can lead to malfunctions and a total failure of the automatic transmission (17) and transfer case (16)		
1	Remove engine trim panel	Engine 642	AR01.10-P-2405TI
2	Remove hot film mass air flow sensor	Engine 113	AR07.07-P-1454SV
3.1	Remove rear section of lower engine compartment paneling	Vehicles with gasoline engine	AR61.20-P-1105T
3.2	Remove rear part section of bottom section of soundproofing	Vehicles with diesel engine	AR94.30-P-5300T
4	Detach exhaust shielding plate (6) for propeller shaft behind transfer case (16)		
5	Detach three way catalytic converter bracket (44)		
6	Detach propeller shaft of front axle gear (70) from flange of transfer case (16)	 Tie back the propeller shaft otherwise the O2 sensor may be damaged.	AR41.10-P-0070P
7	Detach rear propeller shaft from flexible coupling	 Mark position of propeller shaft relative to flexible coupling.	AR41.10-P-0050-02T
8	Loosen fitted sleeves of flexible coupling and push back propeller shaft		AR41.10-P-0050-09DA
9	Support automatic transmission (17) with transmission jack and transmission platform	Transmission plate for passenger cars and commercial vehicles <a href="#">gotis://A_25/35/49_02.0</a> Transmission jack 2.0-7.0 t <a href="#">gotis://H_00.10_01.0</a>	
10	Remove rear engine crossmember (42)	All except model 211.084 /089 /284 /289 Model 211.084 /089 /284 /289	AR22.10-P-1160TW AR22.10-P-1160TI
11	Remove flexible coupling from flange on rear axle gear	 When the transfer case (16) is being replaced.	
12	Unhook shift rod (50) at automatic transmission (17)	 To unhook, push the retainer (50a) upwards until the pin of the shift rod (50) can be removed.	
13	Remove crossmember (10)		
14	Unhook rear exhaust system from the exhaust rubber mounts, lower slightly and tie securely	 Lower the exhaust system carefully so that the rear bumper is not damaged by the rear muffler.	
15	Remove banjo bolt from left and right oil line at automatic transmission (17)		
16	Slightly lower automatic transmission (17)	 Engine 642: Lower until the engine makes contact just in front of the steering line.	
17	Remove reinforcement of rear engine crossmember (5)		
18	Remove vibration damper/flexible coupling (4)	Engine 112, 272, 273, 642	
19	Detach transfer case (16) from automatic transmission (17) and remove		*001589011600
	<b>Install</b>		
20	Coat plug-type splines in transfer case (16) with grease	Klueber Microlube GNY 202	*BR00.45-Z-1071-06A
21	Mount transfer case (16) on automatic transmission (17)	 Both centering sleeves (arrows) must seat firmly in the automatic transmission (17), replace centering sleeves if necessary. <b>Nm</b>	*BA28.10-P-1001-01C
22	Install reinforcement of rear engine crossmember (5)	 Do not tighten the bolt yet.	
23	Attach flexible coupling to rear axle gear output flange	 When the transfer case (16) has been replaced. <b>Nm</b>	*BA41.10-P-1002-01A
24	Attach rear propeller shaft to flexible coupling	 Align the propeller shaft with the marking on the flexible coupling. <b>Nm</b>	*BA41.10-P-1002-01A
25	Install rear engine crossmember (42)	All except model 211.084 /089 /284 /289 Model 211.084 /089 /284 /289	AR22.10-P-1160TW AR22.10-P-1160TI
26	Tighten bolt for reinforcement of rear engine crossmember (5)		
27	Remove transmission jack and transmission platform	Transmission plate for passenger cars and commercial vehicles <a href="#">gotis://A_25/35/49_02.0</a>	

		Transmission jack 2.0-7.0 t <a href="#">gotis://H_00.10_01.0</a>	
28	Attach rear exhaust system to exhaust rubber mounts		
29	Check oil level in transfer case (16) and correct if necessary		AR28.10-P-1000-26P
30	Install vibration damper/flexible coupling (4)	Nm	*BA28.10-P-1008-01C
31	Install the cross member (10)	Nm	*BA62.30-P-1001-01A
32	Attach exhaust shielding plate (6) for propeller shaft behind transfer case (16)	Nm	*BA61.10-P-1005-01C
33	Install catalytic converter bracket (44)	 Check tapping plates (44a), replace if necessary. Engine 112, 113 Nm Nm Engine 272, 273 Nm Nm Engine 642 Nm Nm	*BA49.10-P-1011-01A *BA49.10-P-1012-01A *BA49.10-P-1006-01T *BA49.10-P-1007-01T *BA49.10-P-1002-01V *BA49.10-P-1001-01V
34	Screw banjo bolt of left and right oil line into automatic transmission (17)	Nm	*BA27.55-P-1002-01B
35	Attach propeller shaft of front axle gear (70) to flange of transfer case (16)	 Observe marking.	AR41.10-P-0070P
36	Attach shift rod (50) to automatic transmission (17) and mount retainer (50a)	 Replace retainer (50a) of shift rod (50) in order to avoid a malfunction due to a broken retainer (50a).	
37.1	Install rear part piece of engine compartment paneling	Vehicles with gasoline engine	AR61.20-P-1105T
37.2	Install rear part section of soundproofing bottom section	Vehicles with diesel engine	AR94.30-P-5300T
38	Install hot film mass air flow sensor	Engine 113	AR07.07-P-1454SV
39	Reinstall engine cover	Engine 642	AR01.10-P-2405TI
40	Lower vehicle with vehicle lift		AR00.60-P-1000T

#### Transmission oil cooling

Number	Designation	Transmission 722.6 in model 211		
BA27.55-P-1002-01B	Banjo bolt or union nut, oil cooler line to torque converter and transmission housing	Stage 1	Nm	5
		Stage 2	△°	90
		Hexalobular bolt	Nm	-

#### Propeller shaft

Number	Designation	Model 211		
BA41.10-P-1002-01A	Self-locking nut, flexible coupling to rear propeller shaft or rear axle differential.	M10	Nm	40
		M12	Nm	60

#### Exhaust system

Number	Designation	Engine 112, 113 in model 211
BA49.10-P-1011-01A	Bolt of three way catalytic converter bracket to transmission housing	Nm 20
BA49.10-P-1012-01A	Self-locking nut of catalytic converter bracket to three way catalytic converter	Nm 20

#### **Nm Exhaust system**

Number	Designation	Engine 272, 273 in model 211
BA49.10-P-1006-01T	Bolt, catalytic converter bracket to transmission	Nm 20
BA49.10-P-1007-01T	Nut connecting catalytic converter bracket to catalytic converter	Nm 20

#### **Nm Frame floor assembly**

Number	Designation	Model 211
BA61.10-P-1005-01C	Self-tapping screw connecting front cross strut to frame floor	Nm 23

#### **Nm Exhaust system**

Number	Designation	Engine 642 in model 211, 219
BA49.10-P-1001-01V	Nut connecting front exhaust system to bracket	Nm 20
BA49.10-P-1002-01V	Bolt connecting bracket for front exhaust system to transmission	Nm 20

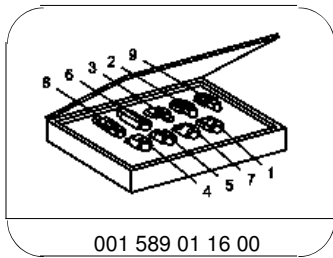
#### **Nm Crossmember and front reinforcement**

Number	Designation	Model 211
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BA62.30-P-1001-01A	Bolt, crossmember to body	Nm	25
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**Nm** Transfer case complete

Number	Designation		Model 211.08/09/ 28/29 except model 211.083/283	Model 211.083/283
BA28.10-P-1001-01C	Nut and bolt, transfer case to automatic transmission	Nm	25	25
BA28.10-P-1008-01C	Bolt, vibration damper to transfer case	Nm	20	-



Set of engine bearing wrenches

**Repair materials**

Number	Designation	Order number
BR00.45-Z-1071-06A	Klueber Microlube GNY 202	A 001 989 44 51 10