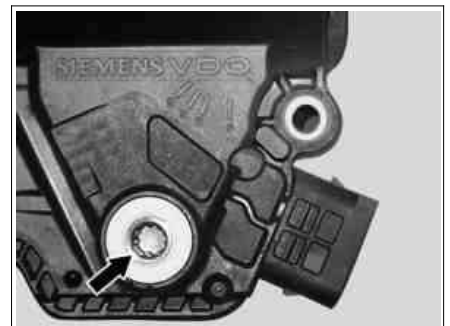


P27.19-2297-09

Shown on model 164.186

- |                         |                       |                                                                 |
|-------------------------|-----------------------|-----------------------------------------------------------------|
| 1 Bolts                 | 8 Venting hose        | 19 Rear engine mount                                            |
| 2 Struts                | 9 Protective cover    | A80 Intelligent servo module for DIRECT SELECT                  |
| 3 Range selector shaft  | 10 Special bolts      | X22/6 Automatic transmission/intelligent servo module connector |
| 5 Front propeller shaft | 16 Engine crossmember |                                                                 |
| 6 Cable tie             | 17 Bolts              |                                                                 |
| 7 Transfer case         | 18 Bolts              |                                                                 |

Arrow: Position "D"

































P27.19-2288-01

Modification notes

20.12.07	Notes on different work procedures between "Reusing" and "Replacing" the IMS added	Steps 11, 12, 13, 14	
----------	------------------------------------------------------------------------------------	----------------------	--

Icons	Remove/install		
⚠ Danger!	<b>Risk of death</b> caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between columns of vehicle lift and position four support plates at vehicle lift support points specified by vehicle manufacturer.	AS00.00-Z-0010-01A
⚠ Danger!	<b>Risk of death</b> when touching components on vehicles with high-voltage on-board electrical system	Do not touch components and open lines of the high-voltage on-board electrical system. Persons who are carriers of electronic implants (e.g. cardiac pacemakers), must <b>not</b> carry out any work on high-voltage on-board electrical systems.	AS54.00-Z-0001-01A
ⓘ	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
ⓘ	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A

1	Release parking brake		
2	Disconnect ground line from battery	 Insulate clamping device of the ground line in order to prevent inadvertent contact with the ground point of the battery.	AR54.10-P-0003GZ
	 Notes on battery		AH54.10-P-0001-01A
3	Remove bolts (1) and remove struts (2)	   	*BA62.30-P-1001-01E *BA62.30-P-1002-01E *BA62.30-P-1003-01E *BA62.30-P-1004-01E
4	Detach front propeller shaft (5) from transfer case (7).	 Mark front propeller shaft (5) relative to propeller shaft flange using colored pencil or chalk.  <b>Installation:</b> Observe tightening procedure for front propeller shaft (5).  	AR41.10-P-0070-03GZ *164589020700 *BA41.10-P-1003-01F
5	Remove cable ties (6) from bleed hose (8) at transmission housing	 <b>Installation:</b> replace cable ties (6). Special cable ties (6) must be used.	
6	Open clip of bleed hose (8) at transmission housing.	 Do not destroy the clip otherwise the correct control of the vent hose (8) is no longer guaranteed.	
7	Detach automatic transmission/intelligent servo module connector (X22/6) on intelligent servo module for DIRECT SELECT (A80)		
8	Support transmission		
9	Remove bolts (17, 18) and remove engine crossmember (16)	 The rear engine mount (19) remains on the transmission. Bolts (18) must be replaced. Vehicles with engine 113 Vehicles with engine 272, 273, 629, 642 Vehicles with engine 156	AR22.10-P-1170GZA AR22.10-P-1180GZD AR22.10-P-1170GZS
10	Remove bolts at protective cover (9) and take off protective cover (9).	 Only if the protective cover (9) is present.  <b>Installation:</b> Replace all bolts. Fit bolts at protective cover (9). First tighten special bolts (10) with attached centering sleeve.  	*BA27.40-P-1023-01A *BA27.40-P-1021-01A
11.1	Remove special bolts (10) at intelligent servo module for DIRECT SELECT (A80).	 Only if the protective cover (9) is present.  <b>Installation:</b> Replace special bolts (10). 	*BA27.40-P-1021-01A
11.2	Remove bolts from intelligent servo module for DIRECT SELECT (A80)		*BA27.40-P-1021-01A
12	Remove intelligent servo module for DIRECT SELECT (A80) with bleed hose (8).	 <b>Installation:</b> Positions of range selector shaft (3) and intelligent servo module (A80) must match.  When <b>reusing the removed</b> intelligent servo module (A80): do not detach vent hose (8) . Leaky separation points result in water entry.	
13	Twist range selector shaft (3) of transmission <b>clockwise</b> up to the end stop on position "P"	 When <b>reusing the removed</b> intelligent servo module (A80).  <b>The removed</b> intelligent servo module (A80) is on position "P". 	*722589030900
14	Twist the range selector shaft (3) of the transmission <b>counterclockwise</b> up to the end stop on position "D" (arrow)	 When <b>replacing</b> the intelligent servo module (A80).  <b>the new</b> intelligent servo module (A80) is on position "D" (arrow). (condition as supplied) 	*722589030900
15	Detach vent hose (8)	 When replacing the intelligent servo module (A80). Replace vent hose (8).	
16	Install in the reverse order		
17	Read out fault memory and erase if necessary	STAR DIAGNOSIS diagnosis system	
18	Using STAR DIAGNOSIS carry out initial startup of the intelligent servo module for DIRECT SELECT (A80)	After replacing the intelligent servo module (A80).	

**Nm** Crossmember and front reinforcement

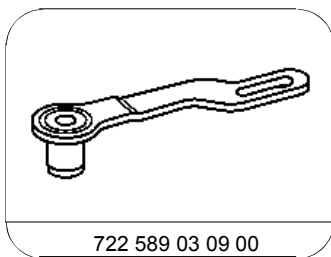
Number	Designation	Model 164		
BA62.30-P-1001-01E	Bolt, right bracket to engine crossmember	M10	Nm	45
BA62.30-P-1002-01E	Bolt, right bracket to transmission tunnel	M10	Nm	45
BA62.30-P-1003-01E	Bolt, left bracket to engine crossmember	M10	Nm	45
BA62.30-P-1004-01E	Bolt, left bracket to transmission tunnel	M10	Nm	45

**Nm** Housing

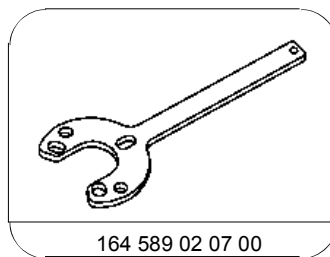
Number	Designation		Trans- mission 722.55	Trans- mission 722.9
BA27.40-P-1021-01A	Standard bolt/hexagon-spacer bolt, shift module (ISM) to transmission housing	Stage 1	Nm	4
		Stage 2	⊥°	90
BA27.40-P-1023-01A	Bolt, shield of shift module (ISM) to hexagon/special bolt		Nm	7

**Nm** Propeller shaft

Number	Designation	Model 164.1/8		
BA41.10-P-1003-01F	Self-locking bolt, propeller shaft to transfer case (to front axle)	Stage 1	Nm	40
		Stage 2	⊥°	90



Assembly tool



Retainer wrench