



## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 General repair notes</b>	<b>1</b>
1.1 Gearbox	1
1.2 Torque converter	1
1.3 ATF	1
1.4 Automatic gearbox control unit J217 with fuzzy logic	1
1.5 Control units in vehicle	1
1.6 Information on "09G gearbox"	1
1.7 Tools	2
1.8 Gearbox	2
1.9 Gaskets, seals and oil	3
1.10 Nuts and bolts	3
1.11 Electrical components	4
1.12 Guided fault finding, vehicle self-diagnosis and test instruments	4
<b>2 Capacities</b>	<b>5</b>
2.1 Planetary gearbox and final drive	5
<b>3 Code - engine allocation</b>	<b>6</b>
3.1 Gearbox codes	6
<b>4 Golf 2004 ▶</b>	<b>7</b>
<b>5 Golf Plus 2005 ▶</b>	<b>8</b>
<b>6 Golf 2009 ▶</b>	<b>9</b>
<b>7 Touran 2003 ▶</b>	<b>10</b>
<b>8 Passat 2006 ▶</b>	<b>11</b>
<b>9 Passat CC 2009 ▶, CC 2010 ▶</b>	<b>12</b>
<b>32 - Torque converter</b>	<b>13</b>
<b>1 Proper handling and installation of torque converter</b>	<b>13</b>
1.1 Identification of torque converter	13
1.2 Draining torque converter	13
1.3 Removing and installing torque converter oil seal	14
1.4 Installing torque converter	15
<b>37 - Controls, housing</b>	<b>16</b>
<b>1 Connecting »tester«</b>	<b>16</b>
1.1 Connecting vehicle diagnosis, testing and information system VAS 5051	16
<b>2 Electrical and electronic components and their locations</b>	<b>18</b>
<b>3 Multifunction switch F125</b>	<b>23</b>
3.1 Removing multifunction switch F125	23
3.2 Installing multifunction switch F125	24
3.3 Adjusting multifunction switch F125	25
<b>4 Emergency release of selector lever</b>	<b>27</b>
<b>5 Removing and installing selector lever handle</b>	<b>28</b>
5.1 Moving pushbutton to installation position in the handle	30
<b>6 Selector mechanism up to 02.2009</b>	<b>33</b>
6.1 Overview of selector mechanism up to 02.2009	33
6.2 Removing and installing selector mechanism with selector lever	34
6.3 Removing and installing selector lever cable	34
6.4 Checking selector lever cable	42
6.5 Adjusting selector lever cable	43
<b>7 Selector mechanism from 03.2009 onwards</b>	<b>45</b>



7.1	Overview - selector mechanism	45
7.2	Removing and installing selector mechanism with selector housing	46
7.3	Removing and installing selector mechanism without selector housing	48
<b>8</b>	<b>Checking selector mechanism</b>	<b>50</b>
8.1	Selector lever in "P" position and ignition switched on	50
8.2	Selector lever in "N" position and ignition switched on	50
8.3	Selector lever in position "Tiptronic"	50
8.4	Ignition and light switched on	50
8.5	Selector lever position display	50
<b>9</b>	<b>Removing and installing gearbox, Golf 2004 ►</b>	<b>51</b>
9.1	Removing gearbox, Golf 2004 with 1.6 l - 75 kW, 1.6 l - 85 kW (FSI) and 2.0 l - 110 kW (FSI) engines	51
9.2	Installing gearbox, Golf 2004 with 1.6 l - 75 kW, 1.6 l - 85 kW (FSI) and 2.0 l - 110 kW (FSI) engines	57
9.3	Removing gearbox, Golf 2004 with 2.5 l - 110 kW and 125 kW engines	57
9.4	Installing gearbox, Golf 2004 with 2.5 l - 110 kW and 125 kW engines	65
9.5	Torque settings, gearbox to engine	66
<b>10</b>	<b>Removing and installing gearbox, Golf Plus 2005 ►</b>	<b>70</b>
10.1	Removing gearbox, Golf Plus 2005	70
10.2	Installing gearbox, Golf Plus 2005	76
10.3	Torque settings, gearbox to engine	77
<b>11</b>	<b>Removing and installing gearbox, Touran 2003 ►</b>	<b>81</b>
11.1	Removing gearbox, Touran 2003	81
11.2	Installing gearbox, Touran 2003	85
11.3	Torque settings, gearbox to engine	86
<b>12</b>	<b>Removing and installing gearbox, Passat 2003 ►</b>	<b>89</b>
12.1	Removing gearbox, Passat with 1.6 l - 85 kW and 2.0 l - 110 kW engines	89
12.2	Installing gearbox, Passat with 1.6 l - 85 kW and 2.0 l - 110 kW engines	95
12.3	Torque settings, gearbox to engine	96
12.4	Removing gearbox, Passat with 1.8 l - 118 kW and 2.0 l - 147 kW engines	97
12.5	Installing gearbox, Passat with 1.8 l - 118 kW and 2.0 l - 147 kW engines	103
12.6	Torque settings, gearbox to engine	104
<b>13</b>	<b>Removing and installing gearbox, Passat CC 2009 ►, CC 2010 ►</b>	<b>106</b>
13.1	Removing gearbox, Passat CC 2009, CC 2010 with 2.0 l 147 kW TFSI engine	106
13.2	Installing gearbox, Passat CC 2009, CC 2010 with 2.0 l 147 kW TFSI engine	114
13.3	Torque settings, gearbox to engine	115
<b>14</b>	<b>Removing and installing gearbox, Golf 2009 ►</b>	<b>117</b>
14.1	Removing gearbox, Golf 2009 with 2.5 l - 125 kW engine	117
14.2	Installing gearbox, Golf 2009 with 2.5 l - 125 kW engine	125
14.3	Torque settings, Golf 2009 with 2.5 l - 125 kW engine	126
<b>15</b>	<b>Transporting gearbox</b>	<b>128</b>
<b>16</b>	<b>ATF cooler for 1.6 l - 85 kW and 2.0 l - 110 kW engines</b>	<b>129</b>
16.1	Assembly overview - ATF cooler	129
<b>17</b>	<b>ATF lines, ATF water cooler and additional ATF cooler, Passat with 2.0 l TFSI engine</b>	<b>130</b>
17.1	Overview	130
<b>18</b>	<b>Checking ATF level and topping up</b>	<b>135</b>
18.1	Checking ATF level	137
18.2	Topping up ATF	138
18.3	Draining and filling ATF	139
<b>38 - Gears, control</b>		<b>141</b>
<b>1</b>	<b>Renewing oil seal for selector shaft</b>	<b>141</b>
<b>2</b>	<b>Removing and installing ATF pan</b>	<b>142</b>
2.1	Removing	142



2.2	Installing .....	143
<b>3</b>	<b>Removing and installing ATF strainer .....</b>	<b>145</b>
3.1	Removing .....	145
3.2	Installing .....	145
<b>4</b>	<b>Removing and installing valve body .....</b>	<b>146</b>
4.1	Overview - valve chest .....	146
4.2	Removing valve body .....	148
4.3	Installing valve body .....	151
4.4	Specified torques .....	155
<b>5</b>	<b>Removing and installing wiring harness for solenoid valves and senders .....</b>	<b>156</b>
5.1	Removing .....	156
5.2	Installing .....	156
<b>6</b>	<b>Removing and installing gearbox input speed sender G182 .....</b>	<b>157</b>
6.1	Removing .....	157
6.2	Installing .....	157
<b>7</b>	<b>Removing and installing gearbox output speed sender G195 .....</b>	<b>158</b>
7.1	Removing .....	158
7.2	Installing .....	158
<b>39</b>	<b>- Final drive - differential .....</b>	<b>159</b>
<b>1</b>	<b>Renewing oil seals for flange shafts .....</b>	<b>159</b>
1.1	Renewing oil seal for left flange shaft .....	159
1.2	Renewing seal for right flange shaft .....	160