



## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 General repair instructions</b>	<b>1</b>
1.1 Tools	1
1.2 Gearbox	1
1.3 Overview	1
1.4 Seals	2
1.5 DSG® oil	3
1.6 Oil filter change - »Yes or no?«	3
1.7 Oil drain and inspection plug A	3
1.8 Nuts and bolts	4
1.9 Electrical components	4
<b>2 Fault finding</b>	<b>5</b>
2.1 General notes on fault finding	5
2.2 Useful information about the "behaviour of the control unit in the event of a gearbox fault"	5
2.3 Special notes on fault finding	6
<b>3 Identification of gearbox</b>	<b>8</b>
3.1 Reading gearbox code letters	8
<b>4 Code - engine allocation</b>	<b>10</b>
4.1 Golf Plus 2009 ▶	10
4.2 Golf Plus 2005 ▶	10
4.3 Golf 2009 ▶	11
4.4 Scirocco 2009 ▶	11
4.5 Golf 2004 ▶	11
4.6 Touran 2003 ▶	12
4.7 Passat 2006 ▶	13
4.8 Eos 2006 ▶	13
4.9 Passat CC 2009 ▶; CC 2010 ▶	14
4.10 Sharan 2011 ▶	14
<b>5 Capacity</b>	<b>15</b>
<b>30 - Clutch</b>	<b>16</b>
<b>1 Clutch</b>	<b>16</b>
1.1 Assembly overview - dual clutch	16
1.2 Removing and installing clutch end cover	18
1.3 Removing dual clutch	24
1.4 Installing dual clutch	25
<b>34 - Controls, housing</b>	<b>31</b>
<b>1 Electrical and electronic components and their locations DSG®</b>	<b>31</b>
1.1 Removing and installing mechatronic unit for dual clutch gearbox J743 (gearbox installed)	31
1.2 Removing and installing mechatronic unit for dual clutch gearbox J743 (gearbox removed)	40
1.3 Removing and installing gearbox input speed sender G182 and oil temperature sender in multi-plate clutch G509	47
<b>2 Removing and installing gear oil cooler</b>	<b>48</b>
<b>3 Removing and installing oil pump</b>	<b>51</b>
<b>4 Renewing selector shaft lever oil seal with gearbox removed</b>	<b>55</b>
<b>5 Emergency release of selector lever</b>	<b>57</b>
<b>6 Removing and installing selector lever handle</b>	<b>58</b>
6.1 Moving push-button in the handle to installation position	60



<b>7</b>	<b>Selector mechanism up to 02.2009</b>	<b>62</b>
7.1	Overview of selector mechanism up to 02.2009	62
7.2	Removing and installing selector lever cable up to 02.2009	63
7.3	Checking selector lever cable	70
7.4	Adjusting selector lever cable	70
<b>8</b>	<b>Checking selector mechanism</b>	<b>72</b>
8.1	Selector lever in "P" position and ignition switched on	72
8.2	Selector lever in "N" position and ignition switched on	72
8.3	Selector lever in position "Tiptronic"	72
8.4	Ignition and light switched on	72
8.5	Selector lever position indicator	72
<b>9</b>	<b>Selector mechanism from 03.2009 onwards</b>	<b>73</b>
9.1	Overview of selector mechanism in vehicles from 03.2009 onwards	73
9.2	Removing and installing selector mechanism, from 03.2009	74
<b>10</b>	<b>Removing and installing gearbox</b>	<b>78</b>
10.1	Removing gearbox, Passat CC 2009 ▶ , CC 2010 ▶ with 2.0 l petrol engine	78
10.2	Removing gearbox, Golf 2009 ▶ , Golf Plus 2009 ▶ with 2.0 l petrol engine	85
10.3	Removing gearbox, Golf Plus 2005 ▶ with 1.4 l petrol engine	94
10.4	Removing gearbox, Passat CC 2009 ▶ , CC 2010 ▶ diesel engine	101
10.5	Removing gearbox, Passat CC 2009 ▶ , CC 2010 ▶ with diesel engine, all-wheel drive	111
10.6	Removing gearbox, Golf Plus 2009 ▶ with 2.0 l diesel engine	120
10.7	Removing gearbox, Golf 2009 ▶ 2.0 l diesel engine	128
10.8	Removing gearbox, Passat CC 2009 ▶ , CC 2010 ▶ with 3.6 l - V6 engine (all-wheel drive)	135
10.9	Removing gearbox, Golf 2004 ▶ with 1.9 l and 2.0 l diesel engine	142
10.10	Removing gearbox, Golf 2004 ▶ with 125 kW - 2.0 l diesel engine	149
10.11	Removing gearbox, Eos 2006 ▶ , with 3.2 and 3.6 l - V6 engine	155
10.12	Removing gearbox, Golf 2004 ▶ with 1.4 l petrol engine	162
10.13	Removing gearbox, Golf 2004 ▶ with 2.0 l petrol engine	169
10.14	Removing gearbox, Golf 2004 ▶ , with 3.2 l - V6 engine (R32 all-wheel drive)	174
10.15	Removing gearbox, Golf Plus 2005 ▶ with 1.9 l and 2.0 l diesel engine, with 2.0 l petrol engine	183
10.16	Removing gearbox, Eos 2006 ▶ with 2.0 l petrol engine	190
10.17	Removing gearbox, Eos 2005 ▶ with 2.0 l diesel engine	197
10.18	Removing gearbox, Touran 2003 ▶	204
10.19	Removing gearbox, Passat 2006 ▶ with 2.0 l diesel engine	212
10.20	Removing gearbox, Passat 2006 ▶ with 2.0 l petrol engine	220
10.21	Removing gearbox, Passat 2006 ▶ with 3.6 l - V6 engine (all-wheel drive)	225
10.22	Removing gearbox, Scirocco 2009 ▶ with 2.0 l diesel engine	231
10.23	Removing gearbox, Scirocco 2009 ▶ with 2.0 l petrol engine	240
10.24	Removing gearbox, Sharan 2011 ▶ with 2.0 l diesel engine	249
10.25	Removing gearbox, Sharan 2011 ▶ with 1.8 l and 2.0 l petrol engine	257
10.26	Removing gearbox, Sharan 2011 ▶ with 1.4 l petrol engine	266
10.27	Install gearbox	273
<b>11</b>	<b>Torque settings »gearbox to engine«</b>	<b>275</b>
11.1	Torque settings (ELSA)	275
<b>12</b>	<b>Transporting gearbox and securing to assembly stand</b>	<b>283</b>
<b>13</b>	<b>Removing and installing bevel box, Golf 2004 ▶ and Passat 2006 ▶</b>	<b>284</b>
<b>14</b>	<b>Removing and installing bevel box, Passat CC 2009 ▶ , CC 2010 ▶ with diesel engine</b>	<b>289</b>
14.1	Specified torques	295
<b>15</b>	<b>Removing and installing bevel box, Passat CC 2009 ▶ , CC 2010 ▶ with 3.6 l V6 engine</b>	<b>297</b>
<b>16</b>	<b>Oil and oil filter</b>	<b>301</b>
16.1	Oil filter: renewing	301
16.2	Checking oil level and topping up	302



16.3	Draining and filling oil	305
<b>35</b>	<b>- Gears, shafts</b>	<b>309</b>
1	Currently, no repairs can be made to gears and shafts	309
<b>39</b>	<b>- Final drive - differential</b>	<b>310</b>
1	<b>Overview - seals</b>	<b>310</b>
1.1	Renewing seals for right flange shaft or stub shaft - front-wheel drive	311
2	<b>Renewing oil seal for left flange shaft - front and all-wheel drive</b>	<b>313</b>
2.1	Renewing oil seal for right flange shaft - all-wheel drive	314
2.2	Dismantling and assembling flange shaft	316
3	<b>Renewing oil seal for propshaft drive flange at bevel box</b>	<b>318</b>
4	<b>Assembly overview - Flange shafts and seals on bevel box</b>	<b>324</b>
4.1	Renewing seal on gearbox between bevel box and gearbox	325
4.2	Removing and installing right flange shaft	326
4.3	Renewing seal for right flange shaft on outside of bevel box	328
4.4	Renewing needle bearing (polygon bearing) for right output shaft drive flange	329
4.5	Renewing seal on bevel box between gearbox and bevel box	331
5	<b>Checking and topping up gear oil in bevel box</b>	<b>333</b>
5.1	Checking gear oil in bevel box	333
5.2	Topping up gear oil in bevel box	334