



Contents

00 - Technical data	1
1 Repair notes	1
1.1 General repair instructions	1
1.2 Tools	1
1.3 Gearbox	1
1.4 ATF	2
1.5 Automatic gearbox control unit J217 with fuzzy logic	3
1.6 Control units in vehicle	3
1.7 Gaskets and seals	3
1.8 Nuts and bolts	4
1.9 Electrical components	4
2 Identification of gearbox	5
3 Bevel box identification	6
4 Identification codes, assembly allocation - Passat	7
4.1 Identification codes, assembly allocation - Cars with front-wheel drive	7
4.2 Identification codes, assembly allocation - Cars with all-wheel drive	7
5 Identification codes, assembly allocation - Passat CC and CC	8
5.1 Identification codes, assembly allocation - Cars with front-wheel drive	8
5.2 Identification codes, assembly allocation - Cars with all-wheel drive	8
6 Identification codes, assembly allocation - Tiguan	9
6.1 Identification codes, assembly allocation - Cars with front-wheel drive	9
6.2 Identification codes, assembly allocation - Cars with all-wheel drive	9
7 Capacities	10
7.1 6-speed automatic gearbox 09M, front-wheel drive	10
7.2 6-speed automatic gearbox 09M, all-wheel drive	10
7.3 Guided fault-finding, vehicle self-diagnosis and test instruments	10
32 - Torque converter	11
1 Torque converter	11
1.1 Identification of torque converter	11
1.2 Draining torque converter	11
1.3 Removing and installing torque converter oil seal	11
1.4 Installing torque converter	12
37 - Controls, housing	14
1 Connecting vehicle diagnostic tester and selecting functions	14
2 Electrical and electronic components and their locations, Passat, Passat CC and CC	15
3 Electrical and electronic components and their locations - Tiguan	19
4 Removing, installing and adjusting multifunction switch F125	23
4.1 Removing multifunction switch F125	23
4.2 Installing multifunction switch F125	24
4.3 Adjusting multifunction switch F125	25
5 Emergency release of selector lever	27
6 Removing and installing selector lever handle	28
6.1 Moving push button in the handle to installation position	30
7 Selector mechanism, Passat, Passat CC, CC and Tiguan to week 44/09	33
7.1 Overview - selector mechanism	33
7.2 Removing and installing selector mechanism with selector lever	34
7.3 Removing and installing gear selector cable	34
7.4 Checking selector lever cable	42
7.5 Adjusting selector lever cable	42



7.6	Checking selector mechanism	43
8	Selector mechanism for Tiguan from week 45/09	45
8.1	Overview - selector mechanism	45
8.2	Removing and installing selector mechanism with selector housing	46
8.3	Removing and installing selector mechanism without selector housing	48
9	Removing and installing gearbox - Passat	50
9.1	Removing and installing gearbox - vehicles with front-wheel drive	50
9.2	Removing gearbox - vehicles with 3.6 l - 206 kW engine	50
9.3	Installing gearbox - vehicles with 3.6 l - 206 kW engine	58
9.4	Removing and installing gearbox - vehicles with all-wheel drive	59
9.5	Removing gearbox - vehicles with 3.6 l - 206 kW engine	59
9.6	Installing gearbox - vehicles with 3.6 l - 206 kW engine	66
10	Removing and installing gearbox - Passat CC and CC	69
10.1	Removing and installing gearbox - vehicles with front-wheel drive	69
10.2	Removing gearbox - vehicles with 3.6 l - 206 kW engine	69
10.3	Installing gearbox - vehicles with 3.6 l - 206 kW engine	77
10.4	Removing and installing gearbox - vehicles with all-wheel drive	78
10.5	Removing gearbox - vehicles with 3.6 l - 206 kW engine	78
10.6	Installing gearbox - vehicles with 3.6 l - 206 kW engine	84
11	Removing and installing gearbox - Tiguan	87
11.1	Removing and installing gearbox - vehicles with front-wheel drive	87
11.2	Removing gearbox - vehicles with 2.0 l - 147 kW TSFI engine	87
11.3	Installing gearbox - vehicles with 2.0 l - 147 kW TSFI engine	94
11.4	Removing and installing gearbox - vehicles with all-wheel drive	96
11.5	Removing gearbox - vehicles with 2.0 l - 125/132/147 kW TSFI engine	105
11.6	Installing gearbox - vehicles with 2.0 l - 125/132/147 kW TSFI engine	112
12	Transporting gearbox	115
13	Assembly overview - ATF cooler - Passat	116
13.1	Assembly overview for vehicles with 3.6 l 206 kW engine	116
14	Assembly overview - ATF cooler - Tiguan	118
14.1	Removing and installing ATF cooler	119
14.2	Renew "seal set for quick-release connection"	122
15	Checking and topping up ATF level	125
15.1	Check ATF level	127
15.2	Topping up ATF	128
15.3	Draining and filling ATF	129
38 - Gears, control		131
1	Renewing oil seal for selector shaft	131
2	Removing and installing oil sump	132
2.1	Removing	132
2.2	Installing	133
3	Removing and installing ATF strainer	135
3.1	Removing	135
3.2	Installing	135
4	Removing and installing valve body	136
4.1	Overview - valve chest	136
4.2	Removing valve body	138
4.3	Installing valve body	141
4.4	Specified torques	145
5	Removing and installing wiring harness for solenoid valves and senders	146
5.1	Removing	146
5.2	Installing	146
5.3	Removing and installing gearbox input speed sender G182	146



5.4	Removing and installing gearbox output speed sender G195	147
39	Final drive - front differential	149
1	Renewing flange shaft oil seals	149
1.1	Renewing left oil seal - front and all-wheel drive vehicles	149
1.2	Renewing right oil seal - front-wheel drive vehicles	151
1.3	Renewing right oil seal - all-wheel drive vehicles	152
39	Final drive - differential	155
1	Removing and installing bevel box - Passat, Passat CC and CC	155
1.1	Removing and installing bevel box - vehicles with 3.6 l - 206 kW engine	155
2	Removing and installing bevel box - Tiguan	165
2.1	Removing and installing bevel box - vehicles with 2.0 l - 103 kW TDI engine	165
2.2	Removing and installing bevel box - vehicles with 2.0 l - 125/132/147 kW TSFI engine	175
3	Repairing bevel box	185
3.1	Bevel box - assembly overview	185
4	Renewing seals on bevel box	187
4.1	Renewing seals on left (between bevel box and gearbox)	188
4.2	Renewing right seal (drive shaft side)	190
4.3	Renewing output flange oil seal (bevel box removed)	192
4.4	Renewing needle bearing (polygon bearing) for stub shaft	197
5	Checking and topping up gear oil in bevel box	201
5.1	Checking gear oil in bevel box	202
5.2	Topping up gear oil in bevel box	202