



Contents

00 - Technical data	1
1 General repair instructions	1
1.1 Suggestions and criticism of this workshop manual	1
1.2 Information about 6-speed automatic gearbox 09D, general repair notes	2
1.3 Brief overview - driveline guide	2
1.4 Tools	3
1.5 Gearbox	3
1.6 Gaskets and seals	4
1.7 Oil	4
1.8 Nuts and bolts	4
1.9 Electrical components	4
1.10 Guided fault-finding, vehicle self-diagnosis and test instruments	5
2 Identification of gearbox	6
3 Identification codes, engine allocation, Touareg 2003 ►	7
4 Capacity	8
32 - Torque converter	9
1 Proper handling and installation of torque converter	9
1.1 Checking torque converter	9
1.2 Removing and installing torque converter oil seal	9
1.3 Draining torque converter	10
1.4 Installing torque converter	11
37 - Controls, housing	13
1 Connecting »tester«	13
1.1 Connecting vehicle diagnosis, testing and information system VAS 5051	13
2 Repairing selector mechanism	15
2.1 Checking selector mechanism	15
2.2 Dismantling and assembling selector mechanism	16
2.3 Removing and installing selector lever handle	17
2.4 Checking and adjusting selector lever cable	20
2.5 Removing and installing gear selector cable	21
2.6 Removing and installing cover	23
2.7 Signal magnet for Tiptronic switch F189	24
2.8 Removing and installing cover	25
2.9 Releasing selector lever without electrical current (emergency release)	26
2.10 Removing and installing selector lever position P solenoid N380	27
2.11 Removing and installing selector lever lock solenoid N110	28
2.12 Removing and installing selector lever locked in position P switch F319	29
2.13 Removing and installing selector mechanism	30
3 Renewing needle bearing for starter	34
3.1 Renewing needle bearing for starter	35
4 Removing and installing gearbox	36
4.1 Removing and installing gearbox, vehicles with V10 TDI engine	36
4.2 Transporting gearbox	41
5 Checking and topping up ATF level	43
5.1 Brief description	44
5.2 Checking and topping up ATF level	44
6 ATF lines and ATF cooler	47
6.1 Assembly overview - ATF lines, vehicles with V10 TDI engine	47
6.2 Removing and installing ATF lines and ATF cooler	48
6.3 Cleaning ATF lines and ATF cooler	50



6.4	Bleeding ATF system	51
7	Automatic gearbox control unit J217	52
7.1	Removing and installing automatic gearbox control unit J217	52
8	Renew seals	55
8.1	Renewing output shaft seal	55
8.2	Renewing oil seals for selector shaft	56
38 - Gears, control		58
1	Removing and installing sump	58
1.1	Removing	58
1.2	Installing	58
1.3	Specified torques	59
2	Removing and installing ATF strainer	60
2.1	Removing	60
2.2	Installing	60
2.3	Specified torques	61
3	Overview - removing and installing valve body	62
3.1	Removing and installing valve body	62
3.2	Removing and installing gearbox output speed sender G195	64
4	Removing, installing and adjusting multifunction switch F125	65
4.1	Removing	65
4.2	Installing and adjusting	65