



Contents

27 - Starter, current supply, CCS	1
1 Battery	1
1.1 Fundamentals for batteries	1
1.2 Types of batteries	1
1.3 Warning notices and safety regulations	3
1.4 Battery terminal connection	5
2 Checking battery	6
2.1 Checking the various types of batteries	6
2.2 Visual check	7
2.3 Information about battery replacement and battery gas venting	8
2.4 Checking colour indicator in battery cover	9
2.5 Battery tester with printer VAS 6161	11
2.6 Midtronics MCR340V battery tester only for USA/Canada vehicles	16
2.7 Current draw test	20
3 Charging the battery	22
3.1 Battery charger VAS 5095 A	22
3.2 Battery charger VAS 5900	28
3.3 Battery charger VAS 5903	40
3.4 Battery charger VAS 5906	52
3.5 Battery charger VAS 5908	55
3.6 Midtronics INC 940 battery charger only for USA/Canada	64
3.7 Solar charger module VAS 6102B	68
3.8 Totally discharged batteries	69
4 Cruise control system (CCS)	71
4.1 Activating and deactivating cruise control system (CCS)	71
90 - Gauges, instruments	72
92 - Windscreen wash/wipe system	73
1 Washer fluid line hose couplings	73
1.1 Windscreen and rear window washer system	73
1.2 Headlight washer system	74
2 Hose repair	75
2.1 General description	75
2.2 Repairing smooth pipe	75
2.3 Repairing corrugated pipe	75
3 Distinguishing features of jointless wiper blades	77
94 - Lights, bulbs, switches - exterior	78
1 Operation and safety notes for gas discharge lamps	78
96 - Lights, bulbs, switches - interior	81
1 12 V socket	81
1.1 Removing and installing 12 V socket	81
1.2 Removing and installing socket illumination bulb L42	81
2 Cigarette lighter U1	82
2.1 General description	82
2.2 Assembly overview	83
2.3 Removing and installing cigarette lighter socket	84
2.4 Removing and installing cigarette lighter illumination bulb L28	86
97 - Wiring	88



1	Vehicle diagnosis, testing and information systems	88
1.1	Connecting vehicle diagnostic tester	88
1.2	Connecting vehicle diagnostic tester Golf Model Year 1998 - 2003	90
2	Repairs to wiring harnesses and connectors	91
2.1	General notes concerning repairs to vehicle electrical system	91
2.2	Wiring harness repair set	94
2.3	Tool descriptions	95
2.4	Repairs to wiring harnesses	98
2.5	Repairs to fibre optic cables	118
2.6	Repair of aerial wires	124
2.7	Repairs to contact housings and connectors	135
2.8	Releasing and dismantling contact housings	139
3	Contact surface cleaning set VAS 6410	145
3.1	Using contact surface cleaning set VAS 6410	145
4	Renewing Lambda probe	152
4.1	Renewing LSF Lambda probe (4-pin)	152
4.2	Renewing LSU Lambda probe (6-pin)	153
4.3	Types of protective tube on uniform Lambda probes	154