



Contents

27 - Starter, current supply, CCS	1
1 Battery	1
1.1 Fundamentals for batteries	1
1.2 Battery load test	1
1.3 Warning notices and safety regulations	3
1.4 Battery load test	5
2 Checking battery	7
2.1 Checking the various types of batteries	7
2.2 Visual inspection	8
2.3 Information about battery replacement and battery gas venting	9
2.4 Checking colour indicator in battery cover	10
2.5 Battery tester with printer VAS 6161	12
2.6 Midtronics MCR340V battery tester only for USA/Canada vehicles	17
2.7 Current draw test	21
3 Charging the battery	23
3.1 Battery charger VAS 5095 A	23
3.2 Battery charger VAS 5900	30
3.3 Battery charger VAS 5900 A	42
3.4 Battery charger VAS 5903	51
3.5 Battery charger VAS 5906	63
3.6 Battery charger VAS 5908	66
3.7 Midtronics INC 940 battery charger only for USA/Canada	75
3.8 Solar charger module VAS 6102B	79
3.9 Totally discharged batteries	80
4 Cruise control system (CCS)	82
4.1 Activating and deactivating cruise control system (CCS)	82
90 - Gauges, instruments	83
92 - Windscreen wash/wipe system	84
1 Washer fluid line hose couplings	84
1.1 Windscreen and rear window washer system	84
1.2 Headlight washer system	85
2 Hose repair	86
2.1 General description	86
2.2 Repairing smooth pipe	86
2.3 Repairing corrugated pipe	86
3 Distinguishing features of jointless wiper blades	89
94 - Lights, bulbs, switches - exterior	90
1 Operation and safety notes for gas discharge lamps	90
96 - Lights, bulbs, switches - interior	93
1 12 V socket	93
1.1 Removing and installing 12 V socket	93
1.2 Removing and installing socket illumination bulb L42	93
2 Cigarette lighter U1	94
2.1 General description	94
2.2 Assembly overview	95
2.3 Removing and installing cigarette lighter socket	96
2.4 Removing and installing cigarette lighter illumination bulb L28	99



97 - Wiring	101
1 Vehicle diagnosis, testing and information systems	101
1.1 Connecting vehicle diagnostic tester	101
1.2 Connecting vehicle diagnostic tester Golf Model Year 1998 - 2003	103
2 Repairs to wiring harnesses and connectors	104
2.1 General notes concerning repairs to vehicle electrical system	104
2.2 Wiring harness repair set	106
2.3 Tool descriptions	108
2.4 Repairing wiring harnesses	113
2.5 Repairing fibre optic cables	143
2.6 Repair of aerial wires	152
2.7 Repairs to contact housings and connectors	164
2.8 Releasing and dismantling contact housings	170
3 Contact surface cleaning set VAS 6410	178
3.1 Using contact surface cleaning set VAS 6410	178
4 Renewing lambda probe	186
4.1 Renewing LSF Lambda probe (4-pin)	186
4.2 Renewing LSU Lambda probe (6-pin)	187
4.3 Types of protective tube on universal lambda probes	188
5 Exhaust gas temperature sensor	190