



Contents

00 - Technical data	1
1 — Change history —	1
2 Safety instructions	2
2.1 Safety measures for work on vehicles with Start-Stop system	2
2.2 Safety precautions during a test drive with measuring and testing equipment	2
3 Repair instructions	3
3.1 Cleanliness rules	3
3.2 General Notes	3
3.3 Contact corrosion	3
3.4 Cable routing	3
4 Battery	5
4.1 Battery - general guidelines	5
4.2 Battery Types	5
27 - Starter, current supply, CCS	6
1 Battery	6
1.1 Battery A - installation overview	6
1.2 Battery A - remove and install	7
1.3 Battery A - disconnect and connect	10
1.4 Battery Console A - remove and install	13
1.5 Battery - check	14
1.6 Battery - charging	15
1.7 Earth cable with Battery control unit J367 - remove and install	15
1.8 Adapt the Battery control unit J367	16
2 Alternator	17
2.1 Generator (Alternator c) - assembly overview	17
2.2 Generator (Alternator c) - remove and install	18
2.3 Alternator - check	24
2.4 Poly-V belt pulley - remove and install	24
2.5 Voltage regulator - remove and install	34
3 Starter	37
3.1 Starter - assembly overview	37
3.2 Starter - remove and install	38
3.3 Starter - check	42
4 Start-Stop system	43
4.1 Start-Stop system, general description	43
90 - Gauges, instruments	44
1 Instrument cluster	44
1.1 Instrument cluster KX2 - assembly overview	44
1.2 Instrument cluster KX2 - remove and install	44
2 Horn	49
2.1 Horn - assembly overview	49
2.2 Treble tone horn H2 and Bass tone horn H7 - remove and install	49
92 - Windscreen wash/wipe system	51
1 Wiper system	51
1.1 Wiper system - assembly overview	51
1.2 Place the wiper system in service position	53
1.3 Window wiper blade - remove and install	53
1.4 Wiper arm - remove and install	54
1.5 Wiper arms - adjust resting position	56



1.6	Wiper motor V - remove and install	58
1.7	Wiper motor APS function - disable	60
1.8	Rain and light sensor G397 - remove and install	61
1.9	Rain and light sensor G397 - repair	64
2	Windscreen washer system	66
2.1	Windscreen washer system - assembly overview	66
2.2	Washer water reservoir filler neck - remove and install	67
2.3	Washer water reservoir - remove and install	67
2.4	Windscreen and rear window washer pump V59- remove and install	69
2.5	Spray jets - remove and install	70
2.6	Spray nozzles - adjust	71
3	Rear window wiper system	73
3.1	Rear window wiper system - assembly overview	73
3.2	Rear wiper blade - remove and install	74
3.3	Rear window wiper arm - remove and install	74
3.4	Rear window wiper arm - adjust	76
3.5	Rear window wiper motor V12- remove and install	76
4	Rear window washer system	79
4.1	Rear window washer system - assembly overview	79
4.2	Washer jet - remove and install	79
5	Washer water lines	81
5.1	Repair the washer water lines	81
94	Lights, bulbs, switches - exterior	82
1	Headlights	82
1.1	Headlights - assembly overview	82
1.2	Headlight - remove and install	86
1.3	Headlights - adjust	89
1.4	Headlights - correct the alignment position	89
1.5	Side light bulb M1/M3 - remove and install	90
1.6	Front turn signal bulb M5/M7 - remove and install	91
1.7	Headlight housing repair set - install	92
1.8	Headlight beam range control motor V48/V49 - remove and install	93
1.9	Dipped beam headlight bulb M29/M31 - remove and install	95
1.10	Main beam headlight bulb M30/M32- remove and install	96
1.11	Daytime running light - remove and Install	97
1.12	Static cornering light bulb L148/L149 - remove and install	98
1.13	LED Headlight output module 1 A27 / A31 - remove and install	98
2	Fog lights	101
2.1	Fog lights - assembly overview	101
2.2	Fog lights - remove and install	101
2.3	Fog light bulb L22/L23 - remove and install	102
2.4	Fog lights - adjust	103
3	Turn signal in the exterior mirror housing	104
3.1	Turn signal in the exterior mirror housing - general assembly overview	104
3.2	Turn signal in the exterior mirror - remove and install	106
4	Tail light clusters (Polo)	107
4.1	Tail light cluster (Polo) - assembly overview	107
4.2	Tail light bulb support (Polo) - remove and install	109
4.3	Tail light (Polo) - remove and install	110
4.4	Tail light cluster - installation position - correct	111
4.5	Tail light bulb M2/M4 (Polo) - remove and install	112
4.6	Rear brake light bulb - remove and install	113
4.7	Reverse gear light bulb M16/M17 - remove and install	114
4.8	Rear turn signal bulb M6/M8 - remove and install	115



5	Tail light clusters (Virtus)	117
5.1	Tail light cluster (Virtus) - assembly overview	117
5.2	Tail light bulb support (Virtus) - remove and install	118
5.3	Tail light cluster (Virtus) - remove and install	118
5.4	Centre tail light "rear lid" (Virtus) - remove and install	119
5.5	Tail light bulb M2/M4 (Virtus) - remove and install	120
5.6	Rear brake light bulb M9/M10 (Virtus) - remove and install	121
5.7	Reverse gear light bulb M16/M17 (Virtus) - remove and install	121
5.8	Rear turn signal bulb M6/M8 (Virtus) - remove and install	122
6	Additional brake light (Polo)	124
6.1	Additional brake light (Polo) - assembly overview	124
6.2	Additional brake light (Polo) - remove and install	124
7	Additional brake light (Virtus)	127
7.1	Additional brake light (Virtus) - assembly overview	127
7.2	Auxiliary brake light (Virtus) - remove and install	127
8	License plate bulb	129
8.1	Number plate light - remove and install	129
8.2	Number plate light X4/X5 - remove and install	130
9	Access and departure authorization	131
9.1	Access and departure authorization system - overview of fitting locations	131
9.2	Keyless access authorization system (Kessy) - overview of fitting locations	132
9.3	Interface for entry and start system J965 - remove and install	133
9.4	Front door handle contact sensor G605 / G606 - remove and install	135
9.5	Interior aerial 1 for entry and start system R138 - remove and install	135
9.6	Interior aerial 2 for entry and start system R139 - remove and install	136
9.7	Aerial for authorization for access and starting switch, left hand side R200- remove and install	137
9.8	Aerial for authorization for access and starting switch, right hand side R201- remove and install	137
9.9	Rear bumper aerial for entry and start system R136 - remove and install	137
10	Steering column switch module	139
10.1	Steering column switch module - assembly overview	139
10.2	Lock cylinder - remove and install	141
10.3	Ignition key withdrawal lock solenoid N376 - remove and install	144
10.4	Ignition/starter switch - remove and install	144
10.5	Steering column switch module (Kostal) - remove and install	146
10.6	Steering column electronics control unit J527 - remove and install	148
10.7	Turn signal switch E2 (Kostal) - remove and install	150
10.8	Cruise control system switch E45 - remove and install	152
10.9	Window wiper timer switch E22 - remove and install	152
10.10	Steering lock set - remove and install	152
11	Auxiliary parking system	156
11.1	Auxiliary parking system - assembly general view	156
11.2	Parking aid control unit J446 - remove and install	157
11.3	Warning buzzer for front parking aid H22- remove and install	158
11.4	Warning buzzer for rear parking aid H15- remove and install	159
11.5	Front parking aid sensor - remove and install	159
11.6	Rear parking aid sensor - remove and install	160
12	Automatic headlight range control	162
12.1	Automatic headlight range control - assembly overview	162
96	Lights, bulbs, switches - interior	163
1	Lights	163
1.1	Centre console lights - assembly overview	163
1.2	Luggage compartment lights - overview of fitting locations	164



1.3	Headliner lights - overview of fitting locations	166
1.4	“SAFE” central locking system indicator lamp K133 - remove and install	168
1.5	Selector lever position display Y26 - remove and install	169
1.6	Boot light W3 - remove and install	169
1.7	Bulb of the Luggage compartment light W3 - remove and install	170
1.8	Passenger illuminated vanity mirror W49/W50 - remove and install	171
1.9	Front interior light WX1- replace bulb	172
1.10	Internal rear light WX2- replace bulb	175
1.11	Rear reading light bulb W11/W12 - remove and install	176
2	Control elements	177
2.1	Dash panel control elements - assembly overview	177
2.2	Front door control elements - assembly overview	178
2.3	Rear door control elements - assembly overview	179
2.4	Centre console switch module - assembly overview	180
2.5	Boot lid contact switch - assembly overview	181
2.6	Control elements in the headliner - assembly overview	182
2.7	Light switch EX1 - remove and install	183
2.8	ASR and Electronic Stabilisation Programme (ESP) switch E256 - remove and install	184
2.9	Parking aid button E266 - remove and install	184
2.10	Driving profile selection button E735 - remove and install	185
2.11	Rear cap unlocking switch E165- remove and install	185
2.12	Passenger airbag off control light K145 - remove and install	185
2.13	Centre console switch module - remove and install	186
2.14	Warning light switch EX3 - removal and install	187
2.15	Exterior mirror adjustment EX11 - remove and install	187
2.16	Driver door window control unit EX36 - remove and install	188
2.17	Front window control switch, passenger side EX27 - remove and install	189
2.18	Driver side interior locking button for central locking system E308 - remove and install	189
2.19	Door contact switch F2/F3 - remove and install	190
2.20	Rear door power window control switch EX28/EX29 - remove and install	190
2.21	Rear door contact switch F10 / F11- remove and install	191
2.22	Starter button E378 - remove and install	191
2.23	Boot lid contact switch - remove and install	192
2.24	Vanity mirror contact switch F298/F299 - remove and Install	192
2.25	Front interior light WX1- remove and install	192
2.26	Internal rear light WX2- remove and install	195
3	Anti-theft alarm system	198
3.1	Interior monitoring - assembly overview	198
3.2	Alarm system horn H8 - remove and install	198
3.3	Anti-theft alarm sensor G578 - remove and install	199
4	Immobilizer	201
4.1	Immobilizer control unit - remove and install	201
4.2	Immobilizer reading coil - remove and install	201
5	Lighter, socket	203
5.1	Lighter U1 - remove and install	203
5.2	Electric socket U - remove and install	203
5.3	Rear cigarette lighter illumination bulb L32- remove and install	203
97 - Wiring		204
1	Relay carrier, fuse holder, electronic boxes	204
1.1	Relay carrier, fuse carrier, electronic boxes - overview of fitting locations	204
1.2	Fuse holder A SA - assembly overview	206
1.3	E-Box - remove and install	207
1.4	E-Box relay carrier and fuse carrier - remove and install	209
1.5	Relay carrier and fuse carrier behind the driver side dash panel - remove and install	211



1.6	Fuse carrier A SA - remove and install	214
2	Control units	217
2.1	Control units - assembly overview	217
2.2	Control unit for the on-board electrical system J519 - remove and install	217
2.3	Support of the On-board supply control unit J519 - remove and install	219
2.4	Support of the Parking aid control unit J446 - remove and install	219