

Contents

00 - Technical data	1
1 Safety information	1
1.1 Safety precautions when working on the high-voltage system	1
1.2 Safety precautions when working in the vicinity of high-voltage components	2
1.3 Safety precautions when using testers and measuring instruments during a road test	2
1.4 Safety precautions when working on the cooling system	3
2 Repair instructions	4
2.1 Routing and attachment of pipes, hoses and wiring	4
2.2 Contact corrosion	4
2.3 Bonding surfaces for self-adhesive components	4
2.4 Secure threaded connections	5
2.5 Identification plates	5
2.6 Impact wrenches	5
50 - Body - front	7
1 Safety information	7
2 Lock carrier	8
2.1 Assembly overview - lock carrier	8
2.2 Removing and installing lock carrier	10
2.3 Removing and installing lower longitudinal member	13
2.4 Removing and installing bracket for lower longitudinal member	14
2.5 Removing and installing support for radiator blind	14
2.6 Removing and installing reinforcement	15
3 Wing	16
3.1 Assembly overview - wing	16
3.2 Removing and installing wing	19
3.3 Removing and installing sealing frame	20
3.4 Removing and installing wing panel brace (top)	20
3.5 Removing and installing wing panel brace (bottom)	21
3.6 Removing and installing wing bracket (front)	21
3.7 Removing and installing wing bracket (centre)	22
3.8 Removing and installing wing bracket (rear)	22
3.9 Removing and installing front cover for wing	22
3.10 Removing and installing rear cover for wing	23
3.11 Removing and installing closure plate	23
4 Bulkhead	25
4.1 Assembly overview - bulkhead	25
4.2 Assembly overview - plenum chamber cover	25
4.3 Removing and installing plenum chamber bulkhead	26
4.4 Removing and installing closure plate for plenum chamber cover	27
4.5 Removing and installing wiring guide for plenum chamber	29
4.6 Removing and installing reinforcement strut for plenum chamber	30
4.7 Removing and installing plenum chamber cover	33
55 - Bonnet, rear lid	35
1 Safety information	35
2 Bonnet	36
2.1 Assembly overview - bonnet	36
2.2 Assembly overview - Bowden cable	38
2.3 Removing and installing bonnet	40
2.4 Adjusting bonnet	40
2.5 Removing and installing hinge	46



2.6	Removing and installing striker	47
2.7	Removing and installing gas strut	48
2.8	Releasing gas from gas strut	48
2.9	Removing and installing impact guard	49
2.10	Removing and installing Bowden cable for operating lever for bonnet lock	49
2.11	Removing and installing coupling unit with Bowden cables for bonnet lock (both sides)	51
2.12	Removing and installing bonnet lock	51
2.13	Removing and installing operating lever for bonnet lock	52
2.14	Removing and installing operating lever for arrester	53
2.15	Removing and installing mounting bracket for operating lever for bonnet lock	53
2.16	Removing and installing mounting bracket with Bowden cable for operating lever for arrester	54
3	Rear lid	55
3.1	Assembly overview - rear lid	55
3.2	Assembly overview - rear lid power opening	57
3.3	Removing and installing rear lid	59
3.4	Adjusting rear lid	60
3.5	Removing and installing hinge	63
3.6	Removing and installing mounting for motor for rear lid	64
3.7	Removing and installing rear lid seal	64
3.8	Removing and installing adjusting buffer	65
3.9	Removing and installing stop for adjusting buffer	65
3.10	Removing and installing rear lid lock	65
3.11	Removing and installing striker	66
3.12	Removing and installing power latching motor for rear lid V382	67
3.13	Removing and installing Bowden cable for power latching system	67
3.14	Removing and installing rear lid drive unit VX69 / rear lid drive unit 2 VX77	68
3.15	Adapting rear lid drive unit VX69 / rear lid drive unit 2 VX77	69
3.16	Preparing rear lid drive unit VX69 / rear lid drive unit 2 VX77 for disposal	70
3.17	Removing and installing rear lid control unit J605	70
3.18	Removing and installing rear lid power opening control unit J938	71
3.19	Removing and installing rear lid power opening sender G750 / G760	71
4	Charging flap unit	73
4.1	Assembly overview - charging flap unit	73
4.2	Removing and installing charging flap unit	74
4.3	Removing and installing charging flap unit trim	76
4.4	Removing and installing manual release cable	77
4.5	Removing and installing module for battery charge selector buttons EX32 / EX40	77
4.6	Removing and installing LED module for charging socket L263 / L264	78
57	Front doors, door components, central locking	79
1	Safety information	79
2	Door	80
2.1	Assembly overview - door	80
2.2	Assembly overview - door seals	83
2.3	Removing and installing door	85
2.4	Adjusting door	85
2.5	Removing and installing door arrester	90
2.6	Removing and installing impact bar	91
2.7	Removing and installing inner door seal	92
2.8	Removing and installing outer door seal	93
3	Door components	96
3.1	Assembly overview - window regulator	96
3.2	Assembly overview - door handle and door lock	97
3.3	Assembly overview - window guides and window slot seals	99

3.4	Removing and installing window regulator	100
3.5	Removing and installing window regulator motor	102
3.6	Removing and installing door handle	102
3.7	Removing and installing door handle trim	104
3.8	Removing and installing door lock and mounting bracket	104
3.9	Removing and installing transmission module for door	109
3.10	Removing and installing lock cylinder	110
3.11	Removing and installing cap on door handle	111
3.12	Removing and installing striker	111
3.13	Removing and installing operating cable for interior door handle	111
3.14	Removing and installing inner door cover	112
3.15	Removing and installing power latching motor	113
3.16	Removing and installing window guide	114
3.17	Removing and installing inner window slot seal	115
3.18	Removing and installing outer window slot seal	115
4	Central locking system	117
4.1	Overview of fitting locations - central locking system	117
4.2	Removing and installing driver door control unit J386 and front passenger door control unit J387	119
4.3	Removing and installing rear left door control unit J388 and rear right door control unit J389	119
4.4	Removing and installing convenience system central control unit J393	120
58	Rear doors, door components	122
1	Safety information	122
2	Door	123
2.1	Assembly overview - door	123
2.2	Assembly overview - door seals	125
2.3	Removing and installing door	127
2.4	Adjusting door	127
2.5	Removing and installing door arrester	132
2.6	Removing and installing inner door seal	132
2.7	Removing and installing outer door seal	133
2.8	Removing and installing joint seal (front)	136
2.9	Removing and installing joint seal (rear)	136
2.10	Removing and installing side member seal	137
3	Door components	139
3.1	Assembly overview - window regulator	139
3.2	Assembly overview - door handle and door lock	140
3.3	Assembly overview - window guides and window slot seals	142
3.4	Removing and installing window regulator	143
3.5	Removing and installing window regulator motor	145
3.6	Removing and installing door handle	145
3.7	Removing and installing door handle trim	147
3.8	Removing and installing mounting bracket	147
3.9	Removing and installing operating cable for exterior door handle	149
3.10	Removing and installing housing	150
3.11	Removing and installing cap on door handle	150
3.12	Removing and installing door lock	151
3.13	Removing and installing striker	152
3.14	Removing and installing operating cable for interior door handle	152
3.15	Removing and installing inner door cover	153
3.16	Removing and installing power latching motor V329	154
3.17	Removing and installing window guide	155
3.18	Removing and installing inner window slot seal	156
3.19	Removing and installing outer window slot seal	156



60 - Sunroof	158
1 Safety information	158
2 Sliding sunroof	159
2.1 Assembly overview - sliding sunroof	159
2.2 Assembly overview - sunroof roller blind	161
2.3 Assembly overview - wind deflector	162
2.4 Removing and installing sliding sunroof frame	163
2.5 Removing and installing front glass panel	165
2.6 Removing and installing rear glass panel	166
2.7 Adjusting glass panel	168
2.8 Removing and installing sliding sunroof adjustment control unit J245	169
2.9 Adapting sliding sunroof adjustment control unit J245	170
2.10 Removing and installing sliding sunroof motor V1	170
2.11 Adapting sliding sunroof motor V1	171
2.12 Removing and installing sliding sunroof seals	171
2.13 Removing and installing sunroof roller blind	173
2.14 Removing and installing sunroof roller blind motor V260	176
2.15 Adapting sunroof roller blind motor V260	177
2.16 Removing and installing wind deflector	177
2.17 Manual actuation	178
3 Water drain hoses	179
3.1 Assembly overview - water drain hoses	179
3.2 Cleaning water drain hoses	180
3.3 Removing and installing front water drain hoses	181
3.4 Removing and installing rear water drain hoses	183
63 - Bumpers	184
1 Safety information	184
2 Front bumper	185
2.1 Assembly overview - bumper cover	185
2.2 Assembly overview - bumper carrier	194
2.3 Removing and installing bumper cover	195
2.4 Removing and installing bumper cover trim	197
2.5 Removing and installing side panel of bumper cover	197
2.6 Removing and installing connecting piece for side panel of bumper cover	198
2.7 Removing and installing closure plate for side panel of bumper cover	199
2.8 Adjusting bumper cover	199
2.9 Removing and installing bumper cover mounting	200
2.10 Removing and installing cover for headlight washer jet	200
2.11 Removing and installing centre air intake grille	200
2.12 Removing and installing trim for side air intake grille	202
2.13 Removing and installing air duct for centre intake grille	203
2.14 Removing and installing trim strips	203
2.15 Removing and installing front spoiler for bumper cover	206
2.16 Removing and installing front spoiler (side)	207
2.17 Removing and installing closure plate for bumper cover	207
2.18 Removing and installing upper closure plate for bumper cover	208
2.19 Removing and installing lower closure plate for bumper cover	208
2.20 Removing and installing side closure plate for bumper cover	209
2.21 Removing and installing underbody guard	212
2.22 Removing and installing lock carrier cover	212
2.23 Removing and installing bumper carrier (top)	213
2.24 Removing and installing bumper carrier (bottom)	215
3 Rear bumper	217

3.1	Assembly overview - bumper cover	217
3.2	Assembly overview - bumper carrier	224
3.3	Removing and installing bumper cover	226
3.4	Removing and installing upper section of bumper cover	229
3.5	Removing and installing side panel of bumper cover	229
3.6	Removing and installing lower section of bumper cover	230
3.7	Removing and installing base plate for bumper cover	230
3.8	Removing and installing closure plate for bumper cover	231
3.9	Removing and installing bumper cover mounting	232
3.10	Removing and installing bumper cover trim	233
3.11	Removing and installing bumper carrier	235
64	- Glazing	237
1	Safety information	237
2	Repair instructions	238
2.1	Minimum drying times for bonded windows	238
2.2	Repairing windows	238
2.3	Tools and materials required for installation and removal	239
2.4	Preparing undamaged windows for installation	242
2.5	Preparing new windows for installation	242
2.6	Preparing body flange for installation	243
2.7	Cleaning off adhesive sealant	244
3	Windscreen	245
3.1	Assembly overview - windscreen	245
3.2	Removing and installing windscreen	246
4	Rear window	251
4.1	Assembly overview - rear window	251
4.2	Removing and installing rear window	251
5	Side windows	260
5.1	Assembly overview - rear side window	260
5.2	Removing and installing rear side window	260
6	Door windows	265
6.1	Assembly overview - front door window	265
6.2	Assembly overview - rear door window	265
6.3	Removing and installing front door window	266
6.4	Removing and installing rear door window	267
66	- Exterior equipment	269
1	Safety information	269
2	Radiator grille/front trim	270
2.1	Assembly overview - radiator grille	270
2.2	Removing and installing radiator grille	274
2.3	Preparing new radiator grille for installation	274
2.4	Removing and installing mounting for overhead view camera	276
2.5	Removing and installing air duct for centre closure plate	277
2.6	Removing and installing centre closure plate	278
3	Spoilers	280
3.1	Assembly overview - spoilers	280
3.2	Removing and installing spoiler	282
3.3	Removing and installing spoiler (side)	285
4	Strips/trim panels/extensions	288
4.1	Assembly overview - trim strips	288
4.2	Assembly overview - covers	289
4.3	Assembly overview - sill panel trim	290



4.4	Assembly overview - water deflector strip	291
4.5	Assembly overview - trim panel for B-pillar	292
4.6	Assembly overview - trim panel for C-pillar	293
4.7	Assembly overview - wheel arch covers	294
4.8	Removing and installing cover	296
4.9	Removing and installing trim strip	298
4.10	Removing and installing sill panel trim	300
4.11	Removing and installing water deflector strip	302
4.12	Removing and installing trim panel for B-pillar on door	303
4.13	Removing and installing trim panel for C-pillar on door	304
4.14	Removing and installing wheel arch covers	305
5	Underbody cladding	310
5.1	Assembly overview - underbody cladding	310
5.2	Assembly overview - underbody struts	312
5.3	Removing and installing tunnel cross-piece	313
5.4	Removing and installing skid plate for high-voltage battery	314
6	Roof strips/roof rails	327
6.1	Assembly overview - roof rail	327
6.2	Removing and installing roof rail	329
6.3	Removing and installing compensation element	330
7	Exterior mirrors	332
7.1	Assembly overview - exterior mirror	332
7.2	Removing and installing exterior mirror	336
7.3	Removing and installing mirror glass	336
7.4	Removing and installing display unit for digital exterior mirror R283 / R284	338
7.5	Removing and installing mirror adjustment unit	338
7.6	Removing and installing mirror cover	338
7.7	Removing and installing mirror trim	339
8	Wheel housing liners	341
8.1	Assembly overview - front wheel housing liner	341
8.2	Assembly overview - rear wheel housing liner	341
9	Lettering and badges	343
9.1	General notes on renewing lettering and badges	343
9.2	Dimensions - lettering and badges at rear	343
9.3	Removing and installing lettering and badges for radiator grille	344
10	Towing bracket	347
10.1	Assembly overview - towing bracket	347
10.2	Removing and installing trailer detector control unit J345	347
10.3	Removing and installing lock for operating lever of ball coupling	348