

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 working on vehicles with start/stop system	2
1.4 Safety precautions when using testers and measuring instruments during a road test	3
2 Repair instructions	4
2.1 Rules for cleanliness	4
2.2 General notes	4
2.3 Contact corrosion	5
2.4 ESD (electrostatic discharge) workplace	5
2.5 Routing and attachment of pipes, hoses and wiring	5
2.6 Identification plates	5
2.7 Use of impact wrenches	6
91 - Communication	7
1 Safety information	7
2 Infotainment system	8
2.1 Layout - infotainment system	8
2.2 Overview of fitting locations - infotainment system	18
2.3 Removing and installing infotainment system display	20
2.4 Service position for infotainment system display	23
2.5 Removing and installing control unit 1 for information electronics J794	24
2.6 Removing and installing multimedia system operating unit E380	27
2.7 Removing and installing driver side volume regulator E67	29
3 Sound system	32
3.1 Layout - sound system	32
3.2 Overview of fitting locations - sound system	49
3.3 Removing and installing digital sound package control unit/amplifier	64
3.4 Removing and installing rear treble loudspeakers R14 / R16	81
3.5 Removing and installing rear treble loudspeakers 2 R217 / R218	82
3.6 Removing and installing front treble loudspeakers R20 / R22	83
3.7 Removing and installing front treble loudspeakers 2 R220 / R221	85
3.8 Removing and installing front loudspeakers R2 / R3	86
3.9 Removing and installing rear mid-range loudspeakers R105 / R106	87
3.10 Removing and installing front mid-range loudspeakers R103 / R104	87
3.11 Removing and installing front mid-range loudspeakers 2 R276 / R277	87
3.12 Removing and installing rear bass loudspeakers R15 / R17	88
3.13 Removing and installing front bass loudspeakers R21 / R23	90
3.14 Removing and installing subwoofer R211	92
3.15 Removing and installing effect loudspeakers	95
3.16 Removing and installing centre loudspeaker R208	96
3.17 Removing and installing centre loudspeaker 2 R219	97
3.18 Removing and installing internal microphone R74	97
4 Aerial systems	98
4.1 Layout - aerial systems	98
4.2 Overview of fitting locations - aerial systems	103
4.3 Removing and installing aerial amplifier	111
4.4 Removing and installing window aerial suppression filter	112
4.5 Removing and installing roof aerial	113
4.6 Removing and installing GPS aerial	114
4.7 Removing and installing GSM aerial	115

4.8	Removing and installing LTE aerials	116
4.9	Removing and installing satellite tuner aerial R172	118
4.10	Removing and installing digital radio aerial	118
4.11	Removing and installing emergency call module aerials	119
4.12	Removing and installing bumper aerials	122
4.13	Removing and installing traffic data aerial	123
4.14	Removing and installing dedicated short-range communication aerial	124
4.15	Removing and installing internal vehicle communication aerial R364	125
4.16	Removing and installing wireless data transfer aerial R336	125
4.17	Removing and installing wireless data transfer aerial 2 R366	126
4.18	Removing and installing near field communication aerial R350	126
4.19	Removing and installing near field communication aerial 2 R351	126
4.20	Removing and installing near field communication control unit 2 J1170	127
4.21	Removing and installing roof aerial control unit JX3	127
5	Radio	128
5.1	Layout - radio	128
5.2	Overview of fitting locations - radio	128
5.3	Removing and installing radio	129
5.4	Removing and installing digital radio/satellite radio	129
5.5	Removing and installing driver side volume regulator E67	130
6	DVD/CD changer	131
6.1	Removing and installing DVD changer	131
6.2	Removing and installing DVD player R7	132
7	Telephone system	134
7.1	Layout - telephone	134
7.2	Overview of fitting locations - telephone system	153
7.3	Assembly overview - microphone unit	157
7.4	Removing and installing front microphone R140 / R141	159
7.5	Removing and installing aerial amplifier for mobile telephone R86	160
7.6	Removing and installing telephone bracket	161
8	Navigation system	164
8.1	Layout - navigation system	164
8.2	Overview of fitting locations - navigation system	164
8.3	Removing and installing control unit for navigation system	164
8.4	Removing and installing chip card reader control unit	164
9	TV system	166
9.1	Layout - TV system	166
9.2	Overview of fitting locations - TV system	171
9.3	Removing and installing TV tuner	172
9.4	Removing and installing TV card reader	173
10	Reversing camera system	175
11	Multifunction steering wheel	176
11.1	Layout - multifunction steering wheel	176
11.2	Assembly overview - multi-function steering wheel	176
11.3	Removing and installing multifunction buttons in steering wheel E441 / E440	178
11.4	Removing and installing tiptronic switches in steering wheel E480 / E479	179
12	Voice control system	181
12.1	Layout - voice control system	181
12.2	Removing and installing voice control system	181
13	Connection for external multimedia devices	183
13.1	Layout - external multimedia devices	183
13.2	Removing and installing connection for external audio sources R199	185
13.3	Removing and installing connection for external multimedia devices	186
13.4	Removing and installing USB connection 1 U41	187

13.5	Removing and installing control unit with Android operating system J1243	187
14	Rear Seat Entertainment system (RSE)	189
14.1	Layout - Rear Seat Entertainment system	189
14.2	Overview of fitting locations - Rear Seat Entertainment system	189
14.3	Removing and installing multimedia system display unit Y31 / Y32	190
14.4	Removing and installing holder for multimedia system display unit R315 / R316	191
14.5	Removing and installing rear information display and operating unit control unit J648 / J649	191
15	Night vision system	193
16	Overhead view camera	194
17	Online services	195
17.1	Layout - online services	195
17.2	Overview of fitting locations - mobile online services	201
17.3	Removing and installing emergency call module control unit and communication unit J949	209
17.4	Removing and installing emergency battery, telematics A16	209
17.5	Removing and installing loudspeaker for emergency call module R335	211
17.6	Removing and installing interface control unit for telematics J1221	211
17.7	Removing and installing telephone and telematics control unit J526	212
17.8	Removing and installing data transmission aerials	213