



Contents

00 - Technical data	1
1 Repair instructions	1
1.1 General repair instructions	1
1.2 Notes on repair of CAN bus wiring	1
91 - Communication	2
1 Infotainment system	2
1.1 Overview of fitting locations - Infotainment system	2
1.2 Removing and installing magnetic field sender for compass	2
2 Sound system	4
2.1 Components of sound system	4
2.2 Overview of fitting locations - sound system	10
2.3 Removing and installing amplifier R12 for digital sound package	10
2.4 Removing and installing rear treble loudspeakers R14 / R16	12
2.5 Removing and installing front treble loudspeakers R20 / R22	13
2.6 Removing and installing rear bass loudspeakers R15 / R17	13
2.7 Removing and installing front bass loudspeakers R21 / R23	14
2.8 Removing and installing subwoofer R211	15
2.9 Pin assignments	15
2.10 Renewing rotary knobs of display unit for front information display and operating unit control unit J685	19
3 Aerial systems	20
3.1 Components of aerial systems	20
3.2 Overview of fitting locations - aerial systems	20
3.3 Removing and installing frequency modulation (FM) frequency filter R178 / R179	21
3.4 Removing and installing aerial amplifier R24 / aerial amplifier 2 R111	22
3.5 Removing and installing roof aerial	23
3.6 Removing and installing vehicle location system aerial 1 R259 and vehicle location system aerial 2 R260	24
4 Radio	26
4.1 Components of radio system	26
4.2 Overview of fitting locations - radio	48
4.3 Assembly overview - radio	50
4.4 Removing and installing radio	50
4.5 Pin assignments	54
5 Telephone system	81
5.1 Components of telephone system	81
5.2 Overview of fitting locations - telephone system	87
5.3 Removing and installing telephone microphone R38	90
5.4 Removing and installing telephone bracket R126	90
5.5 Removing and installing telephone transmitter and receiver unit	91
5.6 Removing and installing mobile telephone operating electronics control unit J412 , UMI ..	93
5.7 Removing and installing operating unit for preparation for mobile phone	94
5.8 Pin assignments	95
6 Navigation system	100
6.1 Components of navigation system	100
6.2 Overview of fitting locations - navigation system	107
6.3 Pin assignments	109
6.4 Removing and installing control unit for navigation system	116
6.5 Removing and installing control unit for vehicle location system	118
7 Reversing camera	120
7.1 Components of reversing camera system	120



7.2	Overview of fitting locations - reversing camera system	120
7.3	Removing and installing reversing camera R189	121
8	Multifunction steering wheel	123
8.1	Components of multifunction steering wheel	123
8.2	Assembly overview - multifunction steering wheel	123
8.3	Removing and installing steering wheel multifunction buttons E441 / E440	124
8.4	Removing and installing Tiptronic switch in steering wheel E439 / E438	125
9	Connection for external multimedia devices	127
9.1	Components of connection for external multimedia units	127
9.2	Connectors, connection for external multimedia devices	133
9.3	Removing and installing connection for external multimedia devices	139
10	Car-Net	145
10.1	Components of Car-Net	145
10.2	Overview of fitting locations - Car-Net services	148
10.3	Removing and installing emergency call module control unit and communication unit J949	149
10.4	Removing and installing emergency button E276	150
10.5	Removing and installing loudspeaker for emergency call module R335	150
10.6	Removing and installing suppression filter C10	151
10.7	Connectors of emergency call module control unit and communication unit J949	152