

Contents

91 - Radio, telephone, navigation	1
1 Radio systems	1
1.1 General notes	1
1.2 Radio systems - overview	3
1.3 Connectors and pin assignment	9
1.4 Connectors for aerial amplifiers	21
1.5 Overview of fitting locations (Saloon)	27
1.6 Overview of fitting locations (Avant)	28
1.7 Removing and installing "chorus" and "concert" radios	29
1.8 Removing and installing "symphony" radio	30
1.9 Activating/deactivating transport mode of "symphony II+" radio unit	31
1.10 Removing and installing CD changer R41	31
1.11 Removing and installing iPod holder R192	33
1.12 Removing and installing loudspeakers in doors	34
1.13 Removing and installing internal loudspeaker R70	36
1.14 Removing and installing bass loudspeaker R100 (Saloon)	37
1.15 Removing and installing bass loudspeaker R100 (Avant)	37
1.16 Removing and installing amplifier R12 (Saloon)	38
1.17 Removing and installing amplifier R12 (Avant)	38
1.18 Removing and installing amplifier R12 BOSE (Saloon)	38
1.19 Removing and installing amplifier R12 BOSE (Avant)	39
1.20 Function test for internal microphone R74	39
1.21 Removing and installing internal microphone R74	40
1.22 Removing and installing aerial amplifier R24 / aerial selection control unit J515 (Saloon)	41
1.23 Removing and installing aerial module, left R108 (Avant)	41
2 Radio systems SDARS (USA)	44
2.1 General notes	44
2.2 Radio systems - overview	46
2.3 Layout of communication system with SDARS	48
2.4 Connectors and pin assignment	49
2.5 Connectors for aerial amplifiers	58
2.6 Overview of fitting locations (Saloon)	63
2.7 Overview of fitting locations (Avant)	65
2.8 Removing and installing satellite radio R146 , enabling the radio system	66
2.9 Removing and installing radio, telephone and navigation system aerial R52 (Saloon)	69
2.10 Removing and installing radio, telephone and navigation system aerial R52 (Avant)	70
3 Telephone system	72
3.1 General notes	72
3.2 Telephone systems - overview	72
3.3 Connectors and pin assignment	76
3.4 Overview of fitting locations (Saloon)	80
3.5 Overview of fitting locations (Avant)	82
3.6 Removing and installing telephone bracket R126	83
3.7 Removing and installing telephone transmitter and receiver unit R36	85
3.8 Removing and installing telephone transmitter and receiver unit R36 (fixed installation telephone)	86
3.9 Removing and installing aerial amplifier for mobile telephone R86 (Saloon)	87
3.10 Removing and installing aerial amplifier for mobile telephone R86 (Avant)	87
3.11 Removing and installing telephone microphone R38	87
3.12 Removing and installing telephone aerial R65 (Saloon)	88
3.13 Removing and installing telephone aerial R65 (Avant)	89
4 Telephone system (USA)	91

4.1	General notes	91
4.2	Phone pre-installation - overview	91
4.3	Connectors and pin assignment	92
4.4	Overview of fitting locations (Saloon)	94
4.5	Overview of fitting locations (Avant)	96
5	Navigation system IV (BNS 4.0)	97
5.1	General notes	97
5.2	Layout of navigation system BNS 4.0	97
5.3	Connectors on navigation system with CD drive control unit J401	98
5.4	Overview of fitting locations (Saloon)	99
5.5	Overview of fitting locations (Avant)	101
5.6	Removing and installing navigation system with CD drive control unit J401	101
5.7	Removing and installing function selection switch 2 E272	102
5.8	Removing and installing navigation aerial R50 (Saloon)	102
5.9	Removing and installing navigation aerial R50 (Avant)	103
6	Navigation system II-D (Navigation system plus)	105
6.1	General notes	105
6.2	On-screen fault messages	105
6.3	Navigation system II-D - overview	107
6.4	Connectors and pin assignment	111
6.5	Overview of fitting locations (Saloon)	116
6.6	Overview of fitting locations (Avant)	118
6.7	Removing and installing operating electronics control unit for navigation J402	119
6.8	Removing and installing navigation interface R94 (Saloon)	120
6.9	Removing and installing navigation interface R94 (Avant)	121
6.10	Removing and installing navigation/TV tuner J415	121
6.11	Removing and installing aerial module, right R109 (Avant)	122
7	Navigation system RNS-E	123
7.1	General notes	123
7.2	On-screen fault messages	123
7.3	Navigation system RNS-E - overview	124
7.4	Connectors on navigation system with CD drive control unit J401	129
7.5	Connectors on navigation system tuner for TV J415	131
7.6	Overview of fitting locations (Saloon)	131
7.7	Overview of fitting locations (Avant)	133
7.8	Removing and installing navigation system with CD drive control unit J401	134
8	Navigation system RNS-E USA	136
8.1	General notes	136
8.2	On-screen fault messages	136
8.3	Navigation system RNS-E - overview	137
8.4	Connectors on navigation system with CD drive control unit J401	142
8.5	Overview of fitting locations (Saloon)	144
8.6	Overview of fitting locations (Avant)	146
9	Navigation system RNS-JP3 Japan	148
9.1	General notes	148
9.2	Navigation system RNS-JP3 - overview	148
9.3	Connectors and pin assignment	153
9.4	Overview of fitting locations	155
9.5	Removing and installing operating electronics control unit for navigation J402	158
9.6	Removing and installing aerial selection control unit J515 (Saloon)	159
9.7	Removing and installing aerial selection control unit J515 (Avant)	160
10	Navigation system RNS-JP4 Japan	161
10.1	General notes	161
10.2	RNS-JP4 - overview	161
10.3	Connectors and pin assignment	164

10.4	Overview of fitting locations (Saloon)	165
10.5	Overview of fitting locations (Avant)	166
11	Navigation system RNS-Low	168
11.1	General notes	168
11.2	Navigation system RNS-Low - overview	168
11.3	Connectors for control unit with display for radio and navigation J503	173
11.4	Overview of fitting locations (Saloon)	174
11.5	Overview of fitting locations (Avant)	176
11.6	Removing and installing control unit with display for radio and navigation J503	177
12	Telematics system	179
12.1	General notes	179
12.2	Telematics system - overview	179
12.3	Connectors on telephone/telematics control unit J526	181
12.4	Overview of fitting locations (Saloon)	183
12.5	Overview of fitting locations (Avant)	185
12.6	Activating/deactivating service mode	186
12.7	Removing and installing telephone and telematics control unit J526	187
12.8	Renewing telematics SIM card	188
12.9	Initialising telephone/telematics control unit J526	189
12.10	Removing and installing emergency battery for telematics A16	190
12.11	Removing and installing emergency call button E276 and breakdown help button E275	191
12.12	Removing and installing additional loudspeaker for telematics R91	192
12.13	Removing and installing additional aerial for telematics R90	192
12.14	Removing and installing aerial filter (GPS) R110 (Avant)	193
12.15	Removing and installing connector for fax/laptop	193
13	Voice control system	195
13.1	General notes	195
13.2	Voice control system - overview	195
13.3	Connectors on language input control unit J507	197
13.4	Overview of fitting locations	197
13.5	Removing and installing language input control unit J507	199
14	Multi-function steering wheel	200
14.1	General notes	200
14.2	Multi-function steering wheel - overview	200
14.3	Removing and installing multi-function buttons	201
14.4	Removing and installing tiptronic buttons	203
15	Steering column electronics control unit J527	206
15.1	General notes	206
15.2	Pin assignment on steering column electronics control unit J527	206
16	Electronic logbook	209
16.1	General notes	209
16.2	Electronic log book - overview	209
16.3	Fault message	209
16.4	Removing and installing chip card reader unit R99	210