



## Contents

<b>91 - Communication</b>	<b>1</b>
<b>1 Communication systems</b>	<b>1</b>
1.1 Fault finding	1
<b>2 Self-diagnosis for the communication systems</b>	<b>2</b>
2.1 General instructions for self-diagnosis of the communication systems	2
2.2 Self-diagnosis for radio systems "BETA" and "GAMMA" ▶ 05.00	4
2.3 Self-diagnosis for radio/navigation system with multi-function display (MFD) ▶ 05.00	16
2.4 Self-diagnosis for radio/navigation system with monochrome display ▶ 05.00	44
<b>3 Radio preparations</b>	<b>69</b>
3.1 Radio preparation ▶ 05.00	69
3.2 Radio preparation ▶ 04.96	69
3.3 Radio preparation 05.96 ▶	70
3.4 Radio preparation 06.00 ▶	70
<b>4 "Sound 1" and "Sound 2" radios</b>	<b>72</b>
4.1 General notes	72
4.2 "Sound 1" radio system	72
4.3 "Sound 2" radio system	73
4.4 Removing and installing "Sound 1" and "Sound 2" radio units	76
<b>5 "Beta" radio system</b>	<b>78</b>
5.1 General notes	78
5.2 Removing and installing radio	78
5.3 Overview of radio connectors	80
5.4 Electronic anti-theft system	81
5.5 Adapting radio components	83
<b>6 Radio "GAMMA"</b>	<b>85</b>
6.1 General notes	85
6.2 Removing and installing radio	85
6.3 Overview of radio connectors	87
6.4 Electronic anti-theft system	88
6.5 Adapting radio components	90
<b>7 Radio "DELTA"</b>	<b>92</b>
7.1 General notes	92
7.2 Removing and installing radio	92
7.3 Overview of radio connectors	94
7.4 Adapting radio components	95
<b>8</b>	<b>96</b>
8.1 General notes	96
8.2 Adapter cable set for radio "Volkswagen Individual"	97
8.3 Removing and installing radio "Volkswagen Individual"	97
8.4 Electronic anti-theft system	99
8.5 Overview of connections for radio "Volkswagen Individual"	100
<b>9 Radio/navigation system (RNS) with multi-function display</b>	<b>102</b>
9.1 General notes	102
9.2 Removing and installing radio/navigation system	103
9.3 Overview - radio/navigation system connections	105
9.4 Electronic anti-theft system	108
9.5 Removing and installing traffic information control unit	110
9.6 Adapting navigation system components	110
9.7 Adapting radio components	111
<b>10 Radio/navigation system (RNS) with monochrome display</b>	<b>113</b>
10.1 General notes	113



10.2	Removing and installing radio/navigation system	114
10.3	Overview - radio/navigation system connections	116
10.4	Electronic anti-theft system	118
10.5	Adapting navigation system components	120
10.6	Adapting radio components	120
<b>11</b>	<b>CD changer/CD player</b>	<b>122</b>
11.1	General notes	122
11.2	Removing and installing CD changer	123
11.3	Removing and installing CD player	123
<b>12</b>	<b>Multi-media system RSE (Rear Seat Entertainment)</b>	<b>125</b>
12.1	General description	125
12.2	Overview of the multi-media system with video recorder	126
12.3	Removing and installing multi-media display units	127
12.4	Removing and installing the multi-media control unit (system with video recorder)	127
12.5	Removing and installing the video recorder for the multi-media system	129
12.6	Connections at the video recorder for the multi-media system	130
12.7	Removing and installing the control unit for the multi-media system (system with video recorder)	131
12.8	Overview of the multi-media system with DVD player	132
12.9	Removing and installing DVD player	133
12.10	Removing and installing the multi-media control unit (system with DVD player)	136
<b>13</b>	<b>Loudspeaker systems</b>	<b>138</b>
13.1	Loudspeaker system overview	138
13.2	Removing and installing front treble loudspeakers	139
13.3	Removing and installing front bass loudspeakers	139
13.4	Removing and installing rear treble loudspeakers	140
13.5	Removing and installing rear bass loudspeakers	140
13.6	Removing and installing the wideband loudspeakers	141
13.7	Overview, loudspeaker system 06.00 ►	142
13.8	Removing and installing the front treble loudspeakers 06.00 ►	144
13.9	Removing and installing the front bass loudspeakers 06.00 ►	144
13.10	Removing and installing the rear treble loudspeakers 06.00 ►	145
13.11	Removing and installing the rear bass loudspeakers 06.00 ►	145
13.12	Removing and installing the wideband loudspeakers 06.00 ►	146
<b>14</b>	<b>Telephone system</b>	<b>148</b>
14.1	General notes	148
14.2	Telephone preparation for vehicles ► 05.00	148
14.3	Telephone preparation for vehicles 06.00 ►	150
14.4	Telephone mounting for vehicles 06.00 ►	150
14.5	Mobile telephone operating electronics control unit 06.00 ►	152
14.6	Microphone for telephone 06.00 ►	152
14.7	Microphone for telephone 11.02 ►	153
<b>15</b>	<b>Aerial systems</b>	<b>155</b>
15.1	General notes	155
15.2	Window aerial for the radio	155
15.3	Aerial amplifier for the window aerial	155
15.4	Roof aerial for telephone operation	155
15.5	Roof aerial for navigation system and telephone	156
15.6	Removing and installing roof aerial	157
15.7	Renewal of aerial cable	158
<b>16</b>	<b>Multi-function steering wheel</b>	<b>159</b>
16.1	General notes	159
16.2	Overview of multi-function steering wheel	159
16.3	Removing and installing steering wheel operating unit	160
16.4	Removing and installing multi-function steering wheel control unit	161



---

16.5	Overview of connectors on multi-function steering wheel control unit	162
16.6	Adapting multi-function steering wheel	163
<b>17</b>	<b>Notes on operating mobile telephones and two-way radios</b>	<b>164</b>
17.1	General notes	164
17.2	Note on performing repair work	165
17.3	Overview - battery, transmitter/receiver unit, fuse and cable harness	166
17.4	Transmitting power and aerial fitting locations	167
<b>18</b>	<b>Suppression</b>	<b>169</b>
18.1	Suppression measures	169