

Contents

27 - Starter, current supply, CCS	1
1 Contact corrosion	1
2 Battery	2
2.1 Battery - general notes	2
2.2 Maintenance-free batteries	2
2.3 Disconnecting and connecting battery in engine compartment	2
2.4 Disconnecting and connecting battery in luggage compartment	4
2.5 Removing and installing battery in engine compartment	4
2.6 Removing and installing battery in luggage compartment	7
2.7 Checking battery	9
2.8 Charging battery	10
2.9 Preparations before charging battery	10
2.10 Preparations for back-up power supply of battery	11
3 Removing and installing alternator	13
3.1 1.8 litre engine (110 ... 140 kW)	13
3.2 1.8 litre engine (165/176 kW)	16
3.3 3.2 litre engine	20
4 Checking and servicing alternator	25
4.1 Checking alternator	25
4.2 Servicing alternator	25
5 Removing and installing starter	26
5.1 1.8 ltr. engine with manual gearbox	26
5.2 1.8 ltr. engine with automatic gearbox	30
5.3 3.2 litre engine	32
6 Cruise control system (CCS)	35
90 - Gauges, instruments	36
1 Instrument cluster up to vehicle ID No. 8N_Y_050 000	36
1.1 Removing and installing instrument cluster	36
1.2 Multi-pin connectors on instrument cluster	37
1.3 Pin assignment at multi-pin connectors on instrument cluster	38
1.4 Pin assignment at fuel gauge sender G	41
1.5 Pin assignment at coolant temperature sender G2 / G62	42
1.6 Removing and installing radio controlled clock receiver J489	42
2 Instrument cluster from vehicle ID No. 8N_Y_050 001	44
2.1 Removing and installing instrument cluster	44
2.2 Multi-pin connectors on instrument cluster	45
2.3 Pin assignment at multi-pin connectors on instrument cluster	46
2.4 Pin assignment at fuel gauge sender G	49
2.5 Pin assignment at coolant temperature display sender G2 / G62	50
2.6 Removing and installing radio controlled clock receiver J489	50
2.7 Removing and installing garage door operation control unit J530	51
3 Horns	52
3.1 Removing and installing treble horn H2 and bass horn H7	52
92 - Windscreen wash/wipe system	53
1 Windscreen wiper system	53
1.1 Renewing wiper blade	53
1.2 Removing and installing wiper arms	53
1.3 Adjusting wiper arms	53
1.4 Eliminating wiper blade judder	54
1.5 Removing and installing wiper motor	55



2	Windscreen washer system	58
2.1	Removing and installing washer fluid reservoir	58
2.2	Removing and installing washer jets	59
2.3	Adjusting washer jets	59
3	Headlight washer system	61
3.1	Removing and installing headlight washer jets	61
3.2	Adjusting washer jets	61
3.3	Removing and installing washer fluid reservoir	61
94	- Lights, bulbs, switches - exterior	62
1	Halogen headlights - rest-of-the-world vehicles	62
1.1	Halogen headlights - exploded view	62
1.2	Removing and installing headlights	62
1.3	Adjusting headlights	63
1.4	Renewing dipped beam bulb	64
1.5	Renewing main beam bulb	64
1.6	Renewing side light bulb	66
1.7	Renewing turn signal bulb	67
1.8	Removing and installing headlight range control motor	68
1.9	Installing repair kit for headlight housing	68
1.10	Converting headlights for driving on the left or right side of the road	68
2	Halogen headlights - USA vehicles	70
2.1	Halogen headlights - exploded view	70
2.2	Removing and installing headlights	70
2.3	Adjusting headlights	71
2.4	Renewing dipped beam bulb	72
2.5	Renewing main beam bulb	73
2.6	Renewing parking light bulb	75
2.7	Renewing turn signal bulb	76
2.8	Removing and installing headlight range control motor	78
2.9	Installing repair kit for headlight housing	78
3	Gas discharge headlights - rest-of-the-world vehicles	79
3.1	Safety precautions when handling gas discharge bulbs	79
3.2	Gas discharge headlights - exploded view	79
3.3	Removing and installing headlights	80
3.4	Adjusting headlights	81
3.5	Renewing gas discharge bulb for dipped beam headlights	81
3.6	Renewing main beam bulb	83
3.7	Renewing side light bulb	84
3.8	Renewing turn signal bulb	86
3.9	Removing and installing headlight range control motor	87
3.10	Removing and installing gas discharge bulb control unit J343 or J344 - vehicles up to 04.2000	88
3.11	Removing and installing gas discharge bulb control unit J343 or J344 - vehicles from 04.2000	88
3.12	Installing repair kit for headlight housing	89
3.13	Converting headlights for driving on the left or right side of the road	90
4	Gas discharge headlights - USA vehicles	92
4.1	Safety precautions when handling gas discharge bulbs	92
4.2	Gas discharge headlights - exploded view	92
4.3	Removing and installing headlights	93
4.4	Adjusting headlights	94
4.5	Renewing gas discharge bulb for dipped beam headlights	94
4.6	Renewing main beam bulb	96
4.7	Renewing parking light bulb	97

4.8	Renewing turn signal bulb	99
4.9	Removing and installing headlight range control motor	101
4.10	Removing and installing gas discharge bulb control unit J343 or J344 - vehicles up to 04.2000	102
4.11	Removing and installing gas discharge bulb control unit J343 or J344 - vehicles from 04.2000	103
4.12	Installing repair kit for headlight housing	103
5	Fog lights	105
5.1	Removing and installing fog lights	105
5.2	Renewing fog light bulb	105
5.3	Adjusting fog lights	107
6	Turn signal repeaters	108
6.1	Removing and installing turn signal repeaters	108
7	Rear lights - rest-of-the-world vehicles	109
7.1	Rear lights - exploded view	109
7.2	Removing and installing rear light and bulb carrier	110
7.3	Aligning rear light to body contour	110
8	Rear lights - USA vehicles	112
8.1	Rear lights - exploded view	112
8.2	Removing and installing rear light and bulb carrier	113
8.3	Aligning rear light to body contour	113
9	High-level brake light	115
9.1	Removing and installing high-level brake light - Coupé	115
9.2	Removing and installing high-level brake light - Roadster	115
10	Number plate light	117
10.1	Removing and installing number plate light	117
11	Steering column switch	118
11.1	Steering column switch - exploded view	118
11.2	Removing and installing steering column switch	118
11.3	Removing and installing return ring with slip ring and steering angle sender G85	121
11.4	Removing and installing lever switches for windscreen wiper/washer, driver information system (DIS), turn signals, dipped/main beam headlights and cruise control system (CCS)	122
11.5	Pin assignment at steering column switch	122
12	Lock cylinder and ignition/starter switch	125
12.1	Removing and installing lock cylinder	125
12.2	Removing and installing ignition/starter switch	127
12.3	Pin assignment on ignition/starter switch	127
13	Automatic headlight range control	128
13.1	Automatic headlight range control - exploded view	128
13.2	Removing and installing headlight range control unit J431 - Coupé	129
13.3	Removing and installing headlight range control unit J431 - Roadster	129
96	Lights, bulbs, switches - interior	130
1	Switches	130
1.1	Removing and installing switches in dash panel	130
1.2	Removing and installing light switch E1	130
1.3	Removing and installing headlight range control regulator E102	131
1.4	Removing and installing glove compartment light switch E26	131
1.5	Removing and installing switches in front centre console	132
1.6	Removing and installing switch mounting in centre console (rear)	132
1.7	Removing and installing driver side interior locking switch E150	132
1.8	Removing and installing function selection switch 2 E272	133
1.9	Removing and installing cabrio windbreak switch E278	133
1.10	Removing and installing convertible roof actuation button E137	133



1.11	Removing and installing mirror adjustment switch E43	134
1.12	Removing and installing window regulator switches E40 , E41 and E107	135
1.13	Removing and installing door contact switch	136
1.14	Removing and installing garage door operating unit E284	136
1.15	Removing and installing rear lid contact switch	136
2	Immobilizer	137
3	Interior lights	138
3.1	Removing and installing vanity mirror light W14 or W20 - Coupé	138
3.2	Removing and installing front interior light W1 , front passenger reading light W13 and driver side reading light W19 - Coupé	138
3.3	Renewing bulbs for front interior light W1 , front passenger reading light W13 and driver side reading light W19 - Coupé	139
3.4	Removing and installing front interior light W1 , front passenger reading light W13 and driver side reading light W19 - Roadster	139
3.5	Renewing bulbs for front interior light W1 , front passenger reading light W13 and driver side reading light W19 - Roadster	140
3.6	Removing and installing front passenger side airbag deactivated warning lamp K145	141
3.7	Removing and installing glove compartment light W6	141
3.8	Removing and installing luggage compartment light W3 and luggage compartment light on left W18 - Coupé	142
3.9	Removing and installing luggage compartment light W3 - Roadster	142
97 - Wiring		144
1	Relay carriers, fuse holders	144
1.1	Removing and installing main fuse holder	144
1.2	Removing and installing fuse holder	145
1.3	Removing and installing micro central electrics and 13-position relay carrier	146
1.4	Left connector point	146
1.5	Right connector point	147
1.6	Removing and installing relay carrier on bulkhead (left-side)	148
1.7	Removing and installing main fuse holder - vehicles with battery in luggage compartment	148
2	Repairing wiring harnesses and electrical connectors	149
3	Repairing connector housings and electrical connectors	150
4	Releasing and dismantling connector housings	151
5	Repairing aerial wires	152
6	Vehicle diagnostic, testing and information systems	153