

## Contents

<b>00 - Technical data</b> .....	<b>1</b>
<b>1 Technical data</b> .....	<b>1</b>
1.1 Running gear .....	1
1.2 Steering .....	1
<b>2 General notes:</b> .....	<b>2</b>
<b>3 Securing subframe to body</b> .....	<b>3</b>
3.1 Repairing damaged threads .....	3
<b>4 Disposal of fluid-filled components to meet environmental requirements</b> .....	<b>4</b>
4.1 Releasing gas in front gas-filled shock absorbers .....	4
4.2 Releasing gas in rear gas-filled shock absorbers .....	5
4.3 Draining power steering box .....	6
<b>5 Checking shock absorbers</b> .....	<b>7</b>
5.1 Leaks at shock absorbers .....	7
5.2 Noises from shock absorbers .....	7
5.3 Checking shock absorbers when removed .....	7
5.4 Testing shock absorbers on shock tester .....	8
<b>40 - Front suspension</b> .....	<b>10</b>
<b>1 Subframe: exploded view</b> .....	<b>10</b>
1.1 Repairing threads in longitudinal member .....	10
1.2 Exploded view of components .....	10
1.3 Removing and installing anti-roll bar .....	15
1.4 Vehicle level sender in vehicles with automatic headlight range control .....	18
1.5 Checking swivel joint .....	21
1.6 Removing and installing swivel joint .....	21
1.7 Removing and installing wishbone .....	23
1.8 Renewing wishbone bushes .....	24
1.9 Removing and installing subframe .....	28
1.10 Renewing subframe bushes .....	30
<b>2 Wheel bearing: exploded view</b> .....	<b>34</b>
2.1 Drive shaft / wheel hub splines .....	34
2.2 Exploded view of components .....	36
2.3 Removing and installing front wheel bearing with wheel bearing housing installed .....	39
2.4 Removing and installing wheel bearing housing .....	44
2.5 Removing and installing front wheel bearing with wheel bearing housing removed .....	47
<b>3 Suspension strut: exploded view</b> .....	<b>52</b>
3.1 Removing and installing suspension strut/coil spring .....	54
<b>4 Drive shafts</b> .....	<b>59</b>
4.1 Removing and installing drive shaft (version with bolted flange on inner joint) .....	59
4.2 Removing and installing drive shaft (version with splines on inner joint) .....	60
4.3 Servicing drive shaft with constant velocity joint .....	61
4.4 Checking outer constant velocity joint .....	66
4.5 Checking inner constant velocity joint .....	67
4.6 Servicing drive shaft with triple roller inner joint .....	69
4.7 Servicing drive shaft with triple roller joint AAR 3300i (bolted flange / splines on inner joint) .....	77
<b>42 - Rear suspension</b> .....	<b>85</b>
<b>1 Servicing rear axle (front-wheel drive vehicles)</b> .....	<b>85</b>
1.1 Removing and installing rear axle .....	85
1.2 Rear axle beam: exploded view .....	87
1.3 Removing and installing bonded rubber bush .....	90



1.4	Removing and installing shock absorber/spring	92
1.5	Shock absorbers: exploded view (front-wheel drive vehicles)	94
1.6	Vehicle level sender in vehicles with automatic headlight range control	97
<b>2</b>	<b>Servicing wheel bearing</b>	<b>98</b>
2.1	Servicing wheel bearing, front-wheel drive vehicles	98
2.2	Removing and installing wheel bearing/wheel hub unit	99
<b>3</b>	<b>Servicing rear axle (four-wheel drive vehicles)</b>	<b>102</b>
3.1	Rear axle for four-wheel drive: exploded view	102
3.2	Removing and installing diagonal strut	103
3.3	Removing and installing spring	103
3.4	Removing and installing shock absorber	106
3.5	Removing and installing anti-roll bar	108
3.6	Checking exhaust system for leaks	110
3.7	Springs and shock absorbers: exploded view (four-wheel drive vehicles)	110
<b>4</b>	<b>Trailing arm and transverse links: exploded view</b>	<b>112</b>
4.1	Ball joint replaced by bonded rubber bush	114
4.2	Vehicle level sender in vehicles with automatic headlight range control	114
4.3	Removing and installing wheel bearings	114
4.4	Removing and installing trailing arm bush	118
4.5	Removing and installing ball joints	121
4.6	Removing and installing trailing arm	123
4.7	Removing and installing transverse links	126
<b>5</b>	<b>Subframe with final drive: exploded view</b>	<b>133</b>
5.1	Removing and installing subframe	133
5.2	Removing and installing subframe bushes	136
5.3	Removing and installing bonded rubber bushes for final drive	138
<b>6</b>	<b>Servicing drive shaft</b>	<b>141</b>
6.1	Removing and installing drive shafts	141
6.2	Servicing drive shaft with constant velocity joint	143
<b>44</b>	<b>- Wheels, tyres, vehicle geometry</b>	<b>149</b>
<b>1</b>	<b>Wheels and tyres</b>	<b>149</b>
1.1	General information	149
1.2	Light-alloy wheel (6-spoke design)	149
1.3	Light-alloy wheel (5-arm design)	151
1.4	Balancing wheels on vehicle	151
1.5	Instructions for changing/fitting wheels	152
<b>2</b>	<b>Wheel alignment</b>	<b>153</b>
2.1	General information	153
2.2	Wheel alignment specifications for vehicles with standard running gear (G17, G78, G79, G91, G97)	154
2.3	Wheel alignment specifications for vehicles with sports running gear (PQZ, G98)	155
2.4	Test requirements:	156
2.5	Measurement procedure	157
2.6	Checking camber at rear wheels (front-wheel drive vehicles)	158
2.7	Adjusting camber at rear wheels (four-wheel drive vehicles)	158
2.8	Centralising toe setting at rear wheels (front-wheel drive vehicles)	159
2.9	Adjusting toe setting at rear wheels (four-wheel drive vehicles)	159
2.10	Adjusting camber at front wheels	160
2.11	Adjusting toe setting at front wheels	160
<b>48</b>	<b>- Steering</b>	<b>161</b>
<b>1</b>	<b>Steering column and steering wheel with airbag</b>	<b>161</b>
1.1	Exploded view of components	161
1.2	Checking steering column for damage	162

1.3	Safety precautions when working on airbags .....	163
1.4	Removing and installing airbag module .....	163
1.5	Steps required after servicing .....	163
1.6	Removing and installing steering wheel with airbag .....	163
1.7	Removing and installing return spring with slip ring and steering angle sender G85 .....	164
1.8	Removing and installing steering column .....	166
1.9	Removing and installing ignition lock housing .....	170
<b>2</b>	<b>Power steering box: exploded view .....</b>	<b>171</b>
2.1	Vehicles with front-wheel drive/four-wheel drive .....	171
2.2	Removing and installing track rod ball joints .....	172
2.3	Removing and installing power steering box .....	173
2.4	Servicing power steering box (ZF) .....	178
2.5	Adjusting power steering box (ZF) .....	180
<b>3</b>	<b>Power steering pump: exploded view .....</b>	<b>182</b>
3.1	Bottom-mounted power steering pump: exploded view .....	182
3.2	Pressure switch for power steering .....	185
3.3	Checking pressure switch for power steering .....	186
3.4	Checking delivery pressure of power steering pump .....	187
3.5	Power steering fluid reservoir: exploded view .....	189
<b>4</b>	<b>Removing and installing power steering pump .....</b>	<b>191</b>
4.1	Vehicles with bottom-mounted pump .....	191