



Contents

00 - Technical data	1
1 Assessment of crashed vehicles	1
2 General recommendations	3
3 Technical Data	4
3.1 Chassis	4
3.2 Steering	4
40 - Front suspension	5
1 Assessment of crashed vehicles	5
2 Front suspension - raise the front axle with vehicle unloaded	6
2.1 Raise the front axle with vehicle unloaded (empty)	6
3 Front suspension - repair	9
3.1 Front suspension - general assembly overview	9
4 I - Auxiliary frame (assembly mounting), anti-roll bar, wishbones - repair	11
4.1 Auxiliary frame (assembly mounting), anti-roll bar, wishbones - assembly overview	11
4.2 Thread in longitudinal member - repair	13
4.3 Swivel joint - check for clearance	14
4.4 Swivel guide - remove and install	14
4.5 Swivel guides - installation position	19
4.6 Wishbone (transversal) - remove and install	19
4.7 Wishbone - replace front metal-rubber bearing	21
4.8 Wishbone - replace the rear metal-rubber bearing	24
4.9 Auxiliary frame (assembly mounting) - remove and install	26
4.10 Auxiliary frame (assembly mounting) - position	30
4.11 Anti-roll bar - remove and install	32
5 II - Wheel roller bearings - repair	36
5.1 Wheel roller bearings - general overview of assembly	36
5.2 Hub and wheel bearing - remove and install	38
6 III - Front suspension column - repair	47
6.1 Front suspension column - general assembly overview	47
6.2 Suspension strut - remove and install	48
6.3 Front suspension spring - remove and install	52
7 Constant velocity joint drive shaft - remove and install	55
7.1 Fastening nut (dodecahedron) of the drive shaft - loosen and tighten	55
7.2 Constant velocity joint drive shaft - remove and install	57
8 IV - Drive shaft with constant velocity joint - repair	64
8.1 Drive shaft with constant velocity joint - assembly overview	64
8.2 Drive shaft with constant velocity joint - repair	66
42 - Rear suspension	70
1 Rear suspension - raise the rear axle with the vehicle unloaded	70
1.1 Lift the rear axle with the vehicle unloaded (empty)	70
2 Rear suspension (Gol and Voyage) - repair	73
2.1 Rear suspension (Gol and Voyage) - assembly overview	73
2.2 Shock absorber (Gol and Voyage) - remove and install	75
2.3 Rear wheel roller bearing (Gol and Voyage) - check and adjust clearance	77
2.4 Inner/outer rear wheel roller bearing (Gol and Voyage) - remove and install	81
2.5 Rear axle (Gol and Voyage) - remove and install	84
2.6 Rear wheel inner roller bearing sealant (Gol and Voyage) - remove and install	88
2.7 Coil spring (Gol and Voyage) - remove and install	89
2.8 Split metal/rubber bearing on the rear axle (Gol and Voyage) - remove and install	90



2.9	Shaft end - check	97
2.10	Rear suspension (Gol and Voyage) - remove and install	97
3	Rear suspension (Saveiro)- repair	103
3.1	Rear suspension (Saveiro) - assembly overview	103
3.2	Shock absorber (Saveiro) - assembly overview	106
3.3	Shock absorber (Saveiro) - remove and install	107
3.4	Wheel roller bearing (Saveiro) - assembly overview	108
3.5	Wheel roller bearing/hub unit (Saveiro) - remove and install	110
3.6	Rear axle (Saveiro) - remove and install	112
3.7	Coil spring (Saveiro) - remove and install	117
3.8	Metal-rubber bearing - remove and install	118
44	Wheels, tyres, vehicle geometry	124
1	Wheel bolts	124
1.1	Wheel bolts - tightening torque	124
2	Vehicle alignment	125
2.1	General	125
2.2	Checking conditions:	126
2.3	Preparation for measurement	126
2.4	Sequence for vehicle alignment	127
2.5	Nominal values for vehicle alignment	127
2.6	Vehicles in "zero" transverse tilting position	129
2.7	Camber on front axle - adjust	130
2.8	Camber on rear axle - adjust	130
2.9	Convergence on front axle - adjust	131
2.10	Convergence on rear axle - adjust	131
2.11	Left and right-hand steering - check	131
48	Steering	133
1	Steering wheel	133
1.1	Horn actuator H - remove and install	133
1.2	Steering wheel - assembly overview	134
1.3	Steering wheel - remove and install	135
2	Fixed steering column - repair	138
2.1	Fixed steering wheel support and column - assembly overview	138
2.2	Fixed steering column - remove and install	139
3	Adjustable steering column - repair	145
3.1	Adjustable steering support and column - assembly overview	145
3.2	Adjustable steering column - remove and install	145
4	Mechanical steering - repair	152
4.1	Mechanical steering wheel - assembly overview	152
4.2	Mechanical steering box - remove and install	153
4.3	Mechanical steering box - disassemble and assemble	156
5	Power steering box - repair	161
5.1	Power steering - assembly overview	161
5.2	Power steering box - remove and install	162
5.3	Power steering box - disassemble and assemble	167
6	Hydraulic pump, compensation reservoir, hydraulic pipes (power steering)	172
6.1	Hydraulic pump with hydraulic tubes - assembly overview	172
6.2	Hydraulic pump - assembly overview	175
6.3	Hydraulic pump - remove and install	175
6.4	Hydraulic pump operating pressure - check	179
6.5	Power steering system oil - replenish	184