



GROUP 21

FRONT SUSPENSION

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For all the parts not mentioned herein, see the corresponding Group of the manual "155 - INSTRUCTIONS FOR REPAIR" - PA465500000000 - (pages with publication no. PA4655C1000000)



TECHNICAL CHARACTERISTICS AND SPECIFICATIONS

TECHNICAL CHARACTERISTICS

COIL SPRINGS

SPECIFICATIONS		Version with heater	Version with air conditioner
Inside diameter	(mm)	150	150
Outside diameter	(mm)	177.4	177.6
Wire diameter	(mm)	13.7	13.8
Number of Coils		5.58	5.58
Direction		Right-handed	
Free length	(mm)	384	386.5

SHOCK ABSORBERS

Type: telescopic hydraulic pressurized lamellar		BOGE
Stroke	(mm)	167
Stem diameter	(mm)	22

ANTIROLL BAR

Bar diameter	(mm)	22
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GENERAL SPECIFICATIONS

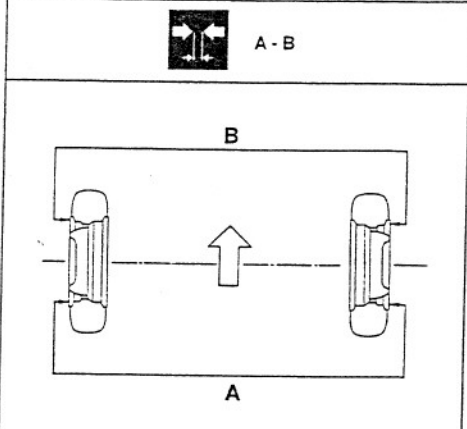



FLUIDS AND LUBRICANTS

APPLICATION	TYPE	NAME
Wishbone flexible supports	GREASE	GREASE MOLYKOTE 7544 PG 54 TUTELA MR3
Steering track rods	GREASE	MOLYGUARD SYL113



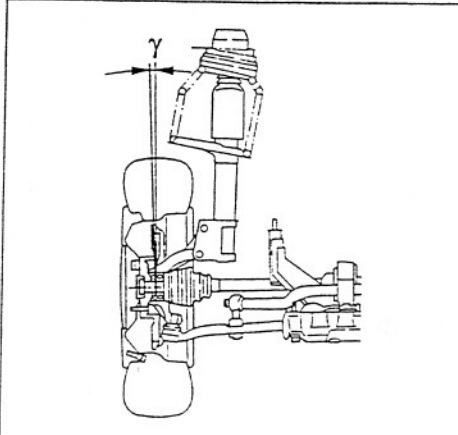



CHECKS AND ADJUSTMENTS

FRONT WHEEL TOE-IN

 A - B			
	$-1 \pm 1 \text{ mm}$		

N.B. Values measured with car unladen in running order (with specified fluids).

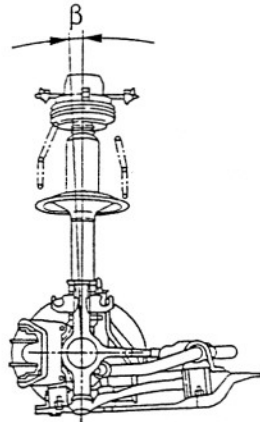
WHEEL CAMBER ANGLES

			
	$\gamma = -20' \pm 20'$		
	(unadjustable characteristic)		

N.B. Values measured with car unladen in running order (with specified fluids).


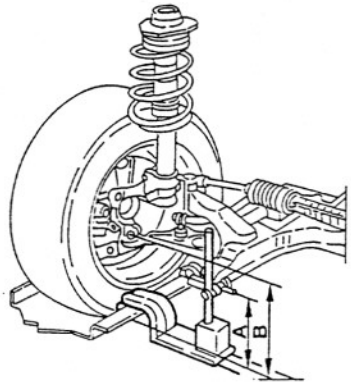


FRONT WHEEL CASTER ANGLES

	1598	1747	1970
	$\beta = 3^{\circ} 10' \pm 30'$ (unadjustable characteristic)		

N.B. Values measured with car unladen in running order (with specified fluids)

FRONT GEOMETRY


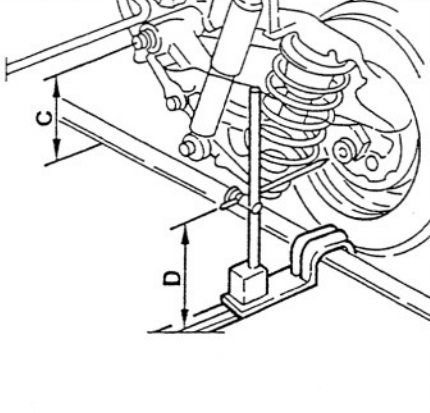
 B - A	1598	1747	1970
	- 20 ± 5 mm	- 20 ± 5 mm -35 ± 5 mm (1)	- 20 ± 5 mm -35 ± 5 mm (1)

(1): Sports version

N.B. Values measured with car unladen in running order (with specified fluids).



REAR GEOMETRY

 C - D	1598	1747	1970
	-10 ± 5 mm	-10 ± 5 mm -25 ± 5 mm (1)	-10 ± 5 mm -25 ± 5 mm (1)

(1): Sports version

N.B. Values measured with car unladen in running order (with specified fluids).



TIGHTENING TORQUES

Part	Nm	kgm
Bolts fastening shock absorber to wheel upright	66 ÷ 74	6.7 ÷ 7.5
Centre nut retaining helical spring to shock absorber	95 ÷ 105	9.7 ÷ 10.7
Screws fastening shock absorber to body	34 ÷ 42	3.5 ÷ 4.3
Nut fastening track rod to wheel upright	29 ÷ 37	3.0 ÷ 3.8
Bolt fastening wishbone to wheel upright	67 ÷ 74	6.8 ÷ 7.5
Nut fastening connecting rod to stabiliser bar	43 ÷ 53	4.4 ÷ 5.4
Nut fastening stabiliser bar connecting rod to wishbone	26 ÷ 33	2.7 ÷ 3.3
Screws fastening wishbone U-bolts to crossmember	59 ÷ 72	6.0 ÷ 7.3
Front screws fastening crossmember to body	92 ÷ 113	9.4 ÷ 11.5
Screws fastening upper crossmember connections	92 ÷ 113	9.4 ÷ 11.5
Screws fastening steering box to crossmember	43 ÷ 47	4.4 ÷ 4.8
Nuts fastening U-bolts connecting stabiliser bar to crossmember	29 ÷ 35	3.0 ÷ 3.6
Nut fastening axle shaft to wheel hub	67 ÷ 74 + 62° ± 2°	6.8 ÷ 7.5 + 62° ± 2°



SPECIAL TOOLS

TOOL NUMBER	DESCRIPTION
1.820.047.002	Plate per removing front wheel hub bearing inner ring (To be used with 1.820.223.000 and 1.821.051.000)
1.820.089.000	Tool for compressing front suspension spring
1.820.223.000	Half rings for removing front wheel hub bearing inner ring (To be used with 1.820.047.002 and 1.821.051.000)
1.820.238.000	Plate for compressing front suspension springs (To be used with 1.820.089.000)
1.820.247.000	Tool for retaining front shock absorber stem
1.821.045.000	Tool for removing installing bearing outer ring from front wheel upright (To be used with 1.821.149.000)
1.821.051.000	Tool for: - removing wheel hub from wheel upright - removing front wheel hub bearing inner ring (To be used with 1.820.047.002 and 1.820.223.000)
1.821.099.000	Tool for removing bearing outer ring from wheel upright
1.821.149.000	Supporto per removing bearing outer ring from front wheel upright (To be used with 1.821.045.000)
1.821.209.000	Tool for installing bearing and wheel hub in front wheel upright
1.822.117.000	Wrenche for slackening and tightening front shock absorber fastening nut