

6. Suspension and steering

Wheel alignment

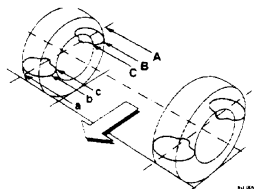
Check with the vehicle unladen and with a full fuel tank.

King pin inclination (KPI)	$13^{\circ}14' \pm 1^{\circ}$
Castor	$3^{\circ}15' \pm 1^{\circ}$
Camber	$-0^{\circ}24' \pm 1^{\circ}$

The maximum permitted difference between the left and right-hand wheels is 40'.

Try to adjust the wheel alignment to specification if the measured values are outside the tolerance range.

Toe-in



	A-a	B-b	C-c
Front	0-2 mm	0-1.5 mm	0-1 mm
Rear*,(not adjustable)	2-5 mm	1.5-4.5 mm	1-4 mm

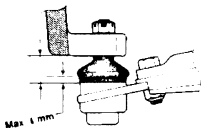
61. Front suspension

Stub axle ball joints

Max. permissible axial displacement	mm	1
Radial clearance	mm	0.5

Tightening torques

	Nm
Subframe studs	110
Wishbone to subframe	85
Subframe, nuts	110
Stub axle ball joint to wishbone	75
MacPherson strut (front shock absorber), retaining bolts	21
Bolts, weight on subframe	21
Fitted bolts for shock absorber	110



64. Steering gear

Steering housing

	no power steering	power steering
Make	Volvo	Cam Gear
Number of steering wheel turns from lock to lock	4.47	3.1
Thrust block, axial clearance mm	0.04-0.08	0.04 - 0.08
Max. turning moment, pinion shaft Nm	0.6-2.0	0.7-1.6

Steering housing lubrication

For Service purposes Volvo grease (Part No. 1161001) must be used

Quantity	cc	50
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Power steering pump

	D19T + airco	Other
Used on	Hyposy	Saginaw TC/CB
Type	Electrical	Mechanical
Drive	type A, F, or G	type A, F, or G
Type of fluid	ATF	
Max. pump pressure MPa (Bar)	9.5(95)	8(80)
Reservoir capacity dm ³	0.7	0.7
Maximum displacement per revolution cc	-	13.7
Current consumption at 5/90 bar A	15/64	

Tightening torques

	Nm
Stub axle ball joint to wishbone, bolts	75
Castle nut, stub axle ball joint	55
Castle nut, tie rod ball joint	55
Lock nut, tie rod ball joint	60
Wishbone to subframe, bolts	85
Pivot bolt, steering column adjusting mechanism (old version)	22
Pivot bolt, steering column adjusting mechanism (new version)	10
Steering column attachment bolts	23
Steering shaft universal joint, pinch-bolt	21
Steering wheel securing nut, without SRS	55
Steering wheel securing nut, with SRS	60
Pinion shaft lock nut	25
Tie rod to rack	85
High-pressure pipe unions to steering housing	47
Tie rod lock nut (adjusting)	75
Pinion shaft universal joint, pinch-bolt	17
Regulating valve in pump housing	75
Hydraulic pump high-pressure pipe, banjo bolt	40
High-pressure pipe to hydraulic pump	45
Hydraulic pump pivot bolt	40
Hydraulic pump retaining bolts	30
Steering housing to subframe, bolts	30
Pipes on steering housing	35
Union nuts, hoses on steering housing	40
Shear bolts, steering wheel lock	21
Thrust block lock nut	35

Pinion shaft cap	35
Heat shield on steering housing	5
Electrical power steering (D19T with air-conditioning):	
- Union nut, upper oil pipe	22
- Union nut, lower oil pipe	30
- Electrical terminal (M6)	7
- Electrical terminal (M8)	10

65. Rear suspension

Rear stabilizer, diameter	mm	15
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Tightening torques

	Nm
Radius arm retaining nuts and bolts	40
Panhard rod bolts:	
- to body	75
- to rear axle	110
Trailing arm attachment bolts	40
Stabilizer U-bolt assembly, bolt	21
Rear stub axle bolts	40
Hub and brake disc assembly, lock nut	160
Rear caliper	70
Shock absorber retaining bolts, lower	40
Shock absorber retaining bolts, upper	50
Link rod to body	21
Link rod to stabilizer	30