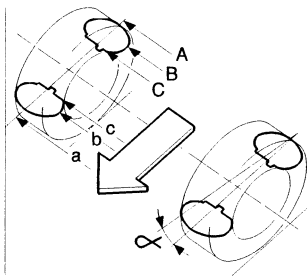


Section 6 Suspension and steering

Group 60 Wheel alignment

| | | |
|---|--------|-----|
| Turning circle, measured at tyres | metres | 12 |
| Turns of the steering wheel | | 3.2 |

| Angle (* can be adjusted) | Check and setting values | Max difference between right and left-hand side |
|---|----------------------------|---|
| Front | | |
| Camber | $-0.5^\circ \pm 1.0^\circ$ | $0.2^\circ \pm 0.7^\circ$ |
| Can be adjusted $\pm 1^\circ$ using a conversion kit (see Service Manual and Service Bulletin). | | |
| Caster | $3.35^\circ \pm 1.0^\circ$ | 1.0° |
| Toe-in* | $0.33^\circ \pm 0.1^\circ$ | 0.1° |
| Rear | | |
| Camber | $-1^\circ \pm 0.5^\circ$ | |
| Toe-in* | $0.1^\circ \pm 0.2^\circ$ | |
| Thrust angle* | $0^\circ \pm 0.25^\circ$ | |



Conversion table for Toe-in
from degrees to mm (inches)

| | A - a mm (inches) | B - b mm (inches) | C - c mm (inches) |
|-----------|------------------------------------|------------------------------------|------------------------------------|
| 16" wheel | 3.6 ± 1.0 (0.14 \pm 0.04) | 2.9 ± 0.9 (0.11 \pm 0.04) | 2.5 ± 0.8 (0.10 \pm 0.03) |
| 17" wheel | 3.6 ± 1.0 (0.14 \pm 0.04) | 2.9 ± 0.9 (0.11 \pm 0.04) | 2.7 ± 0.8 (0.11 \pm 0.03) |
| 18" wheel | 3.6 ± 1.0 (0.14 \pm 0.04) | 2.9 ± 0.9 (0.11 \pm 0.04) | 2.7 ± 0.8 (0.11 \pm 0.03) |

Group 61 Front suspension

| Designation | Tightening torques Nm | Dimension |
|---------------------------------|---------------------------|-----------|
| Ball joint - Spring strut | 50 ± 12 | M10 |
| Ball joint - Link arm | | M8 |
| step 1 | 18 | |
| step 2 | angle-tighten 120° | |

C70

Group 64 Steering

| Designation | Tightening torques Nm | Dimension |
|--------------------------------------|--------------------------|-----------|
| Control arm - Sub-frame | | M12 |
| step 1 | 65 | |
| step 2 angle-tighten | 120° | |
| Anti-roll bar - Sub-frame | 50 ± 12 | M10 |
| Anti-roll bar - Link | 50 ± 12 | M10 |
| Link - Spring strut | 50 ± 12 | M10 |
| Spring strut - Body | 25 ± 6 | M8 |
| Shock absorber - Steering arm | | M12 |
| step 1 | 65 | |
| step 2 angle-tighten | 90° | |
| Front wheel hub - Steering arm | | M12 |
| step 1 | 20 | |
| step 2 | 45 | |
| step 3 angle-tighten | 60° | |
| Front wheel hub - Drive shaft | | M22 |
| step 1 | 120 | |
| step 2 angle-tighten | 60° | |
| Screw joint - Shock absorber | 70 ± 15 | M14 |
| Shock absorber - Upper bearing | 70 ± 15 | M14 |

Group 64 Steering

| Steering gear | | |
|--|------------|------------------|
| Make | | TRW or SMI |
| Turns of the steering wheel lock to lock | | 2.9 |
| Gear ratios | | 16.8: 1 |
| Friction torque, measured at input shaft | Nm | 0.6 - 1.8 |
| Power steering balance check: | | |
| pump pressure at specified steering shaft torque | MPa | 1.2 |
| torque on steering shaft | Nm | 3.0 - 4.0 |
| greatest permitted difference between right and left | Nm | 0.7 |
| Lubricants | | |
| Grease | Volvo P/N. | 11 61 001 |
| volume | grammes | 100 |
| Hydraulic fluid | | |
| ATF oil | | G, Dexron II D/E |
| or power steering fluid | Volvo P/N. | 11 61 317 |

| | | |
|------------------------|--------|-------------|
| Steering gear | | |
| volume | litres | 0.8 |
| Power steering pump | | |
| Maximum pressure | MPa | 8.3 or 10.0 |

| Designation | Tightening torques Nm | Dimension |
|--|--------------------------|-----------|
| Steering wheel - steering column, upper | 40 ± 10 | M12 |
| Airbag unit - Steering wheel | 10 ± 2.5 | M6 |
| Steering shaft, lower - Steering column, steering gear | 20 ± 5 | M8 |
| Steering column - Bracket, steering bracket | 16 ± 4 | M8 |
| Steering gear - Sub-frame, side | 50 ± 12 | M10 |
| Steering gear - Mounting, centre | 80 ± 20 | M12 |
| Track rod - Outer ball joint | 70 ± 15 | M14 |
| Track rod ball joint - Steering arm | 70 ± 15 | M12 |
| Bracket - Sub-frame | 25 ± 6 | M8 |
| Limiter, steering gear - Sub-frame | 50 ± 12 | M10 |
| Limiter - Bracket, power steering pipe ... | 25 ± 6 | M8 |
| Mounting, centre - Sub-frame | 50 ± 12 | M10 |
| Strut, steering column - Strut, A post | 25 ± 6 | M8 |
| Collision protection system, power steering pump - Front mounting plate | 25 ± 6 | M8 |

Group 65 Rear suspension

| Designation | Tightening torques Nm | Dimension |
|----------------------------------|--------------------------|-----------|
| Rear axle link - Body | | M14 |
| step 1 | 105 | |
| step 2 | 90° | |
| Bracket - Body | | M12 |
| step 1 | 65 | |
| step 2 | 60° | |
| Rear axle link - Trailing arm | | M12 |
| step 1 | 65 | |
| step 2 | 120° | |
| Bushing housing - Transverse arm | | M10 |
| step 1 | 50 | |
| step 2 | 120° | |

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Group 65 Rear suspension

| Designation | Tightening torques Nm | Dimension |
|---|--------------------------|-----------|
| Bushing - Transverse arm | 80 ± 20 | M12 |
| Shock absorber - Lower mounting | 80 ± 20 | M12 |
| Shock absorber - Upper bearing | 40 ± 10 | M10 |
| Shock absorber (Nivomat) - Upper bearing | 40 ± 10 | M12 |
| Shock absorber (Nivomat) - Upper bearing step 1 | 20 | M10 |
| step 2 | angle-tighten 90° | |
| Spring mounting - Spring seat | 40 ± 10 | M10 |
| Rear wheel hub - Stub axle | | M22 |
| step 1 | 120 | M10 |
| step 2 | angle-tighten 30° | |
| Stub axle - Endplate | | M10 |
| step 1 | 35 | M8 |
| step 2 | angle-tighten 60° | |
| Upper bearing - Body | 25 ± 6 | M10 |
| Anti-roll bar - Tie plate, left | | M10 |
| step 1 | 50 | M10 |
| step 2 | angle-tighten 90° | |
| Washer, upper spring mounting - Body .. | 40 ± 10 | M12 |
| Wheel - Hub | 100 ± 25 | M12 |
| Anti-roll bar - Transverse arm, left | | M12 |
| step 1 | 65 | M12 |
| step 2 | angle-tighten 90° | |
| Anti-roll bar - Transverse arm, right | | M12 |
| step 1 | 65 | M10 |
| step 2 | angle-tighten 90° | |
| Anti-roll bar - Transverse arm, right | 50 ± 12 | M10 |