

Wheel Alignment

1970-73 AUDI SPECIFICATIONS & ADJUSTMENTS

TIRE INFLATION (COLD)

Before attempting to check or adjust wheel alignment, ensure that tires are properly inflated. Model 100 and 100 LS require 26 psi (1.827 kg/cm²) in front and rear tires. Model S90 and Fox require 24 psi (1.687 kg/cm²) in front and rear tires.

RIDING HEIGHT

S90 (Front) — With vehicle unloaded and on level ground, check front ground clearance from floor to center of lower wishbone bearing support. If measurement is not within specifications, turn adjusting screw on crossmember to correct height. Both sides must be adjusted to specifications.

S90 (Rear) — Rear riding height is nonadjustable. Measure at lower edge of frame cross tube to floor. If measurement is not within specifications, check for damage to suspension components.

100 & 100LS — With wheel in straight ahead position, measure camber angle. If not to specifications, adjust by loosening lock nut "B", bolt "C" and turning eccentric nut "A".

Fox — With vehicle loaded down or placed on blocks, measure camber angle. If not to specifications, adjust by loosening both mounting bolts and use suitable tool (Audi 40-200).

Fox — Check wheel rims for runout and replace as necessary. Measure distance between front edges of front rims and rear edges of front rims. Difference in these two measurements is toe-in. If not within specifications, adjust tie-rod (located just behind steering rack).

100LS (Front) — With vehicle unloaded and on level ground, check front ground clearance from floor to front bearing shell of lower wishbone. If distance is lower than specifications, correct riding height. Remove coil spring assembly from vehicle and shock absorber from coil spring assembly. For removal and installation procedures see *Coil Spring/Shock Absorber Assembly in SUSPENSION Section*. Install spacers in position on shock absorber shaft to adjust ground clearance. Each spacer gives .393" (9.98 mm) increase in clearance. Assemble and install coil spring assembly and shock absorber into vehicle.

100LS (Rear) — With vehicle unloaded and on level ground, check rear ground clearance at lower edge of frame cross tube to floor. If not within specifications, adjust torsion bar. See *Crossmember Tube & Torsion Bars in SUSPENSION Section*.

100 (Front) — Measure clearance from ground to bottom of front control arm bushing. If clearance is less than specified, coil spring must be replaced or spacers added. See *Audi 100LS in SUSPENSION Section*.

100 (Rear) — Measure clearance from ground to lower hump of torsion bar assembly, just in front of rear wheel. If clearance not to specifications, adjust height by loosening bolts which attach torsion arms to torsion bar housing. With vehicle blocked up to proper height, tighten attaching bolts and recheck clearance.

Fox (Front) — Measure clearance from ground to lower edge of front engine platform mounting bolt head. If height is not to specifications, adjust by adding spacers to coil spring. See *Audi Fox in SUSPENSION Section*.

Fox (Rear) — Measure clearance from ground to lower domed surface of body next to control arm bushing. If clearance is less than specified, install heavier springs. See *Audi Fox in SUSPENSION Section*.

All Models — With riding height correct and before checking or adjusting wheel alignment, wooden blocks or adjustable supports must be in place and vehicle loaded down. Front supports are placed under front bearing shell of lower wishbone. Rear supports are placed under mounting plates on rear cross tube. Load vehicle until it is resting on support stands.

Chassis Support Heights

Application	Front in. (mm)	Rear in. (mm)
S90.....	6.7 (170.18)	9.84 (249.93)
100 & 100LS (To Chassis No.8001/8101 077 290) ...	7.24 (183.90)	6.77 (171.96)
100 & 100LS (From Chassis No.8001/8101 077 291	7.24 (183.90)	7.0 (178.00)
Fox.....	8.48 (215.5)	8.16 (207.5)

Riding Height Dimensions

Application	Front in. (mm)	Rear in. (mm)
S90.....	7.88 (200.15)	10.64 (270.25)
100.....	8.4 (213.36)	8.62 (218.94)
100LS.....	8.19 (208.02)	7.77 (197.35)
Fox.....	9.4 (238.76)	8.87 (223.01)

CASTER

NOTE — Before checking or adjusting wheel alignment, vehicle must be under specified loaded conditions (see *Riding Height, All Models*).

S90 — To adjust, loosen nut on upper wishbone to mounting bracket screw. Turn eccentric to change caster angle. Eccentric moving rear wishbone joint forward increases caster and reverse movement decreases caster. Torque lock nut to 54.2 ft. lbs. (7.49 mkg) when caster is within specifications.

100 & 100LS — Caster is determined from difference in camber at 20° left and 20° right wheel lock. Caster is negative if left wheel at right lock shows larger camber than at left lock. Caster is considered positive if left wheel at left lock shows a larger camber than at right lock. Adjust by loosening lock nut "D" and turning eccentric bolt "E". Be sure to adjust equally on both sides and retighten lock nut (see illustration).

Fox — Caster angle is not adjustable. However, if not to specifications, check suspension for wear or damage. Repair or replace necessary components.

Wheel Alignment

1970-73 AUDI SPECIFICATIONS & ADJUSTMENTS (Cont.)

CAMBER

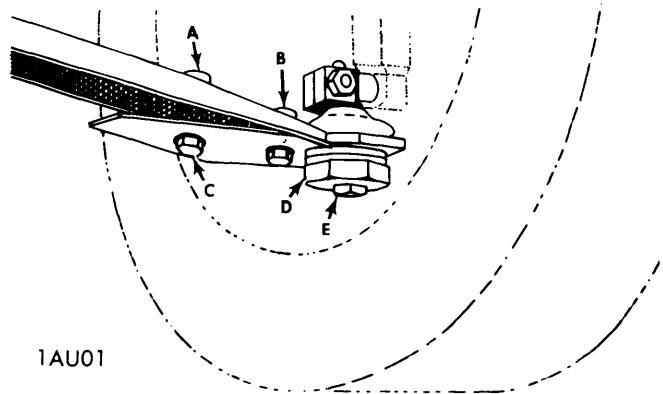
NOTE — Before checking or adjusting wheel alignment, vehicle must be under specified loaded conditions (see Riding Height, All Models).

S90 — To adjust, loosen nut on upper wishbone to mounting bracket screw. Rotate adjusting tube to change camber angle. When wishbone joint moves away from center of vehicle, camber increases and reverse movement decreases camber. Torque lock nut to 54.2 ft. lbs. (7.49 mkg) when camber is within specifications.

TOE-IN

All Others — Toe-in must be checked with front wheels pressed together with a pressure of approx. 22.0 lbs. or the rear wheels apart. To adjust, loosen track rod bolt clamp and hose clip securing boot. Rotate track rod until toe-in with specifications. For large corrections both track rods must be

turned approx. same amount. If correction to be made is small, adjustment can be made to only one side: Tighten clamp bolt and hose clip.



CASTER & CAMBER ADJUSTING POINTS 100LS

WHEEL ALIGNMENT SPECIFICATIONS					
R — Right F — Front Rr — Rear L — Left Man — Man Steering Pwr — Power Steering	Caster (Degrees)	Camber (Degrees)	Toe-In (Inches)	Toe-Out On Turns	
				Inner	Outer
S90 Wagon	0°12' ±20'	0°13' ±20'	0 to -.08
S90 Wagon	0°11' ±20'	0°14' ±20'	0 to -.08
100	0°6' ±20'	0°11' ±40'	0 to .08	20°	19°
100LS	0°6' ±20'	0°11' ±20'	0 to -.079
Fox	0°30' ±30'	0°30' ±20'	0 to .08	20°	18°45'