

Wheel Alignment

FIAT SPECIFICATIONS & ADJUSTMENTS

TIRE INFLATION (COLD)

Before attempting to check or adjust wheel alignment, make sure tires are properly inflated. Refer to manufacturers specifications given in owner's manual.

CASTER

Model 131 & 128 (Except. Sport L) – If caster is not to specifications, raise front of vehicle. Remove stabilizer bar-to-control arm nut and disconnect control arm from body. Remove end of stabilizer bar from control arm. To adjust caster, addition of shims between end of stabilizer bar and rubber pad of control arm will decrease caster angle and removal of shims will increase caster angle. Reverse removal procedure and recheck caster.

Model 128 Sport L – If caster is not to specifications, adjust by adding or removing shims located between stabilizer bar bushing and frame.

Model 124 – If caster is not within specifications, raise front of vehicle and remove wheel and shock absorber. Using suitable tool (A.74174), compress spring to relieve lower control arm and loosen nuts holding control arm pivot bar to crossmember. To adjust caster, remove shims from front stud and move to rear stud to increase caster. To decrease caster, remove shims from rear stud and move shims to front stud. Reverse removal procedure and check caster.

Model X1/9 – If caster is not to specifications, adjust by adding or removing shims located between stabilizer bar and stabilizer bar support.

CAMBER

Model 124 – If camber is not within specifications, adjust by changing shims. Raise front of vehicle, remove wheel and shock absorber. Using suitable tool (A.74174), compress spring to relieve lower control arm and loosen nuts holding control arm pivot bar to crossmember. To increase camber, remove equal amount of shims from both studs and add equal amount of shims to decrease camber. *NOTE* – Adding or removing equal amounts of shims will not affect caster. Reverse removal procedure and check camber.

Model 128 & 131 Front – Camber is nonadjustable. If not within specifications, inspect suspension for damage and repair or replace parts as necessary.

Model 128 Rear – If rear camber is not within specifications raise rear of vehicle and compress one end of leaf spring, shifting it from flexible guide anchoring spring to control arm. Remove guide and slowly release spring. Remove nuts attaching pivot to body and loosen screw to free adjustment shims. To increase camber, add an equal number of shims on both screws attaching control arm to body. To decrease, remove equal number of shims from both screws. Reverse removal procedure and check camber.

Model X1/9 Front & Rear – Camber is nonadjustable. If not within specifications, inspect suspension for damage and repair or replace parts as necessary.

TOE-IN

Model 128, 131 & X1/9 Front – Place front wheels in straight-ahead position. If toe-in is not within specifications,

WHEEL ALIGNMENT SPECIFICATIONS					
Application	Caster (Degrees)	Camber (Degrees)	Toe-In (Inches)	Toe-Out On Turns (Degrees)	
				Inner	Outer
Model 124					
Sport Coupe	$3 \pm \frac{1}{2}$	$\frac{1}{4} \pm \frac{1}{2}$	$\frac{13}{64}$ to $\frac{23}{64}$	.....	.....
Sport Spider	$3\frac{1}{6} \pm \frac{1}{2}$	$\frac{1}{6} \pm \frac{1}{2}$	$\frac{5}{32}$ to $\frac{5}{16}$	.....	.....
Model 128 Front					
Sedan & Wagon	$1\frac{2}{3} \pm \frac{1}{2}$	$1\frac{2}{3} \pm \frac{1}{2}$	$-\frac{1}{8}$ to $\frac{3}{64}$	.....	.....
Coupe	$1\frac{2}{3} \pm \frac{1}{2}$	$1\frac{1}{3} \pm \frac{1}{2}$	$-\frac{1}{16}$ to $\frac{3}{32}$	.....	.....
Model 128 Rear					
Sedan	.....	$0 \pm \frac{1}{3}$	$\frac{1}{16}$ to $\frac{7}{32}$	.....	.....
Wagon	.....	$\frac{2}{3} \pm \frac{1}{2}$	$\frac{1}{16}$ to $\frac{7}{32}$	.....	.....
Coupe	.....	$-1\frac{1}{6} \pm \frac{1}{2}$	$\frac{3}{64}$ to $\frac{15}{64}$	.....	.....
Model 131					
Sedan, Coupe & Wagon	$3\frac{3}{4} \pm \frac{1}{2}$	$1 \pm \frac{1}{2}$	$\frac{15}{64}$ to $\frac{25}{64}$	.....	.....
Model X1/9					
Front	$7 \pm \frac{1}{2}$	$-\frac{1}{2} \pm \frac{1}{2}$	$\frac{5}{64}$ to $\frac{15}{64}$	.....	.....
Rear	.....	$-1\frac{2}{3} \pm \frac{1}{2}$	$\frac{5}{32}$ to $\frac{15}{64}$	.....	.....

FIAT SPECIFICATIONS & ADJUSTMENTS (Cont.)

loosen sleeve locking nut on tie rods. To adjust, rotate hexagon on ball pin to set toe-in to specifications. Hold hexagon in position and lock nut against tie rod sleeve.

Model 128 Rear — If rear toe-in is not within specifications raise rear of vehicle and compress one end of leaf spring, shifting it from flexible guide anchoring spring to control arm. Remove guide and slowly release spring. Remove nuts attaching pivot to body and loosen screws to free adjustment shims. To increase toe-in, add shims to rear screw or remove shims from front screw. To decrease, add shims to front screw or remove shims from rear screw.

Model 124 Front — Place front wheels in straight-ahead position. If toe-in is not within specifications, loosen four clamps securing sleeves on tie rods. Rotate tie rods in opposite direction (by equal amounts) to set toe-in to specifications. Tighten clamp nuts. *NOTE* — *Expansion slot in sleeve must coincide with clamp joint when clamp is fully tightened.*

Model X1/9 Rear — If rear wheel toe-in is not within specifications, loosen clamps securing sleeves to reaction rods. Adjust toe-in by lengthening or shortening reaction rods. Tighten clamps and recheck toe-in.