VOLKSWAGEN 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

Caster angle is part of front axle design and is not adjustable. If not within specifications, inspect front suspension for wear or damage and repair or replace components as necessary.

CAMBER

Type I & II Exc. Super Beetle (Front) – If adjustment is necessary, loosen lock nut on upper ball joint stud. To adjust, turn eccentric camber adjusting bushing (max. 90°) until camber angle is set to specifications. *NOTE – Difference in camber between wheels should not vary more than ½ °.* Tighten lock nut and recheck camber.

Super Beetle (Front) – If adjustment is necessary, loosen nut on eccentric camber adjusting bolt. To adjust, turn eccentric camber adjusting bolt until camber angle is set to specifications. *NOTE – Difference in camber between wheels should not vary more than ½ °.* Tighten nut and recheck camber.

Dasher (Front) – If adjustment is necessary, loosen nuts attaching ball joint to track control arm. To adjust, insert suitable adjusting tool (40-200) in adjusting holes in control arm and pry ball joint sideways until camber is set to specifications. *NOTE – Difference in camber between wheels should not vary more than ½ °.* Tighten attaching nuts and recheck camber.

Rabbit & Scirocco (Front) – If adjustment is necessary, loosen nuts of suspension strut-to-wheel bearing housing mounting bolts. Turn eccentric bolt (upper mounting bolt) until specified camber angle is obtained. Tighten mounting bolt nuts and recheck camber angle.

Dasher, Rabbit & Scirocco (Rear) – Rear camber is not adjustable. If camber angle is not to specifications, inspect rear suspension for wear or damage and repair or replace components as necessary.

All Other Models (Rear) – Camber angle is dependent upon torsion bar adjustment. If camber angle is not within specifications, *see Torsion Bar Adjustment.*

TOE-IN

Rabbit & Scirocco (Front) – With front wheels in straight-ahead position, loosen lock nut on right side tie-rod. *NOTE – Toe-in can be adjusted with right side tie-rod only; left side tie-rod is not adjustable.* Hold axle boot to avoid twisting and adjust right side tie-rod until specified toe-in is obtained. Tighten lock nut and recheck toe-in.

All Other Models (Front) – With front wheels in straight-ahead position, loosen clamps on tie-rods. Turn both tie-rods equally until correct toe-in is obtained. Tighten clamps and recheck toe-in.

Type I (Rear) – If adjustment is necessary, remove nuts securing spring plate but do not remove bolts. To adjust, move diagonal arm forward or backward in slotted spring plate mounting holes until toe-in is set to specifications. Install spring plate attaching nuts and recheck toe-in.

Type II (Rear) – If adjustment is necessary, loosen bolts attaching bearing housing to spring plate and diagonal arm. To adjust, change position of bearing housing in elongated holes in spring plate. Tighten bolts and recheck toe-in.

All Other Models (Rear) – Toe-in is not adjustable. If toe-in is not within specifications, inspect rear suspension for wear or damage and repair or replace components as necessary.

TORSION BAR ADJUSTMENT (REAR)

Type I – Using a suitable protractor, find deviation of vehicle from horizontal plane and note reading which will be used in setting angle of spring plate. Install spring plate on torsion bar and measure position with protractor. If not within specifications, adjust by moving torsion bar, one spline at a time, forward or backward until correct position is obtained.

Type II – Using suitable protractor (VW 245a) check horizontal position of vehicle on one frame side member. Reading should be noted since it will be used in setting spring plate angle. Insert inner end of torsion bar in center anchor and press spring plate on outer end of torsion bar. Adjust protractor on unloaded spring plate until bubble is in center position. Adjust torsion bar one spline forward or rearward until correct specifications are obtained.

Torsion Bar Specifications

Application	Setting (Degrees)
Type I (All)	$21\frac{1}{3} + \frac{5}{6}$
Type II	
Station Wagon	$20 + \frac{5}{6}$
Kombi & Van	$23 + \frac{5}{6}$

VOLKSWAGEN SPECIFICATIONS & ADJUSTMENTS (Cont.)

WHEEL ALIGNMENT SPECIFICATIONS

Application	Caster (Degrees)	Camber (Degrees)	Toe-In (Inches)	Toe-Out On Turns (Degrees)	
				Inner	Outer
Type I (Front)					
Exc. Super Beetle	$3\frac{1}{3} \pm 1$	$\frac{1}{2} \pm \frac{1}{3}$	$\frac{1}{6}$ to $\frac{7}{32}$	20	18
Super Beetle	$2 \pm \frac{1}{2}$	$\frac{5}{6} \pm \frac{1}{3}$	$\frac{3}{32}$ to $\frac{3}{16}$	20	19-20
Type I (Rear)					
Exc. "The Thing"	.....	$-1 \pm \frac{2}{3}$	$-\frac{5}{64}$ to $\frac{5}{64}$	.....	.....
"The Thing"	.....	$\frac{1}{3} \pm \frac{2}{3}$	$-\frac{5}{64}$ to $\frac{5}{64}$	.....	.....
Type II					
Front	$3 \pm \frac{2}{3}$	$\frac{2}{3} \pm \frac{1}{3}$	0 to $\frac{1}{8}$	20	17-18
Rear	.....	$-\frac{5}{6} \pm \frac{1}{2}$	$-\frac{3}{64}$ to $\frac{9}{64}$	.....	.....
Dasher					
Front	$\frac{1}{6} \pm \frac{1}{2}$	$\frac{1}{2} \pm \frac{1}{2}$	①$\frac{1}{6} \pm \frac{1}{4}°$	.....	.....
Rear	.....	$-\frac{1}{2} \pm \frac{1}{2}$	①$0 \pm \frac{5}{6}°$	.....	.....
Rabbit & Scirocco					
Front	$2 \pm \frac{1}{2}$	$\frac{1}{2} \pm \frac{1}{2}$	①$-\frac{1}{6} \pm \frac{1}{4}°$	.....	.....
Rear	.....	$-1 \pm \frac{1}{2}$	①$0 \pm \frac{1}{4}°$	.....	.....

① – Measured in degrees.