TRIUMPH (Cont.)

TR7 – Camber angle is not adjustable. If camber angle is not within specifications, inspect suspension system for wear or damage and repair or replace components as necessary.

TOE-IN

All Models (Front) – Set front wheels in straight ahead position. If adjustment is necessary, loosen steering link (tie rod) lock nuts and gaiter clips. Rotate adjusting sleeves equal amounts until correct toe-in is obtained. Tighten lock nuts and recheck toe-in.

Spitfire (Rear) – If toe-in is not to specifications, loosen bolts holdings strut front support. Adjust as necessary by adding to or removing from the shims fitted between support and body. Tighten bolts and recheck toe-in.

VOLKSWAGEN

ADJUSTMENT

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 1 (Front) – Bolt mounting inner end of control arm is also eccentric bolt for camber adjustment. Loosen lock nut and turn eccentric until camber is within specifications. Tighten lock nut.

Type 2 (Front) – Loosen self-locking nut in bottom of upper ball joint stud. Adjust camber by turning bushing with appropriate wrench. Bushing can be turned a maximum of 90° to either side.

NOTE – *Basic setting is achieved when eccentric notch faces in forward position.*

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 1°. Tighten attaching nuts and recheck camber.*

NOTE – *On Dasher models, insert tool from front on right side and from rear on left side.*

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.

Type 1 (Rear) – Camber angle is dependent on torsion bar adjustment. If camber angle is not within specifications, see *Torsion Bar Adjustment.*

Type 2 (Rear) – If minor adjustment is necessary, loosen bolts attaching bearing housing to spring plate and diagonal arm. Adjust by changing position of bearing housing in elongated holes in spring plate. Tighten bolts and recheck camber.

NOTE – *Range that this procedure covers is small. Also, see Torsion Bar Adjustment.*

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.

TOE-IN

Type 1 (Front) – Loosen lock nuts and hex tapered rings at each end of right side tie rod. Turn right side tie rod until each wheel is set to half the specified toe. Rotating tie rod toward front of vehicle increases toe. Opposite direction rotation decreases toe.

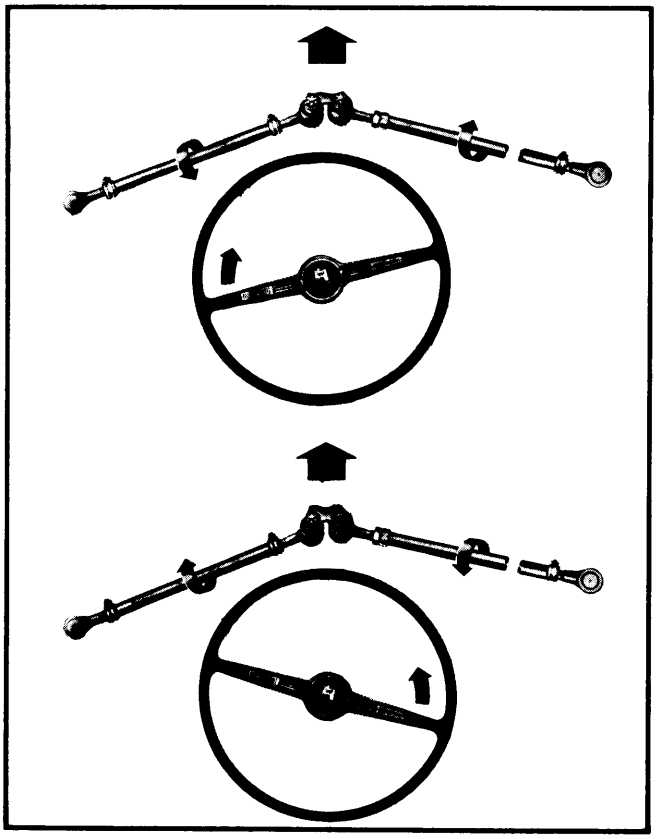

Fig. 1 Direction of Tie Rod Rotation to Align Steering Wheel (Type 1 Only)

VOLKSWAGEN (Cont.)

Type 2 (Front) – Loosen both clamp bolts on right side tie rod. Rotate right side tie rod until toe is within specifications. Rotating tie rod toward front of vehicle increases toe. Opposite direction rotation decreases toe.

Dasher, Rabbit, Scirocco (Front) – Place front wheels in straight-ahead position. Loosen lock nut on adjustable tie rod end (left side, Dasher; right side, Rabbit and Scirocco). Hold axle boot to avoid twisting. Adjust tie rod until specified toe-in is obtained. Tighten lock nut and recheck toe-in.

Type 1 (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 2 (Rear) – If adjustment is necessary, loosen bolts in axle tube flange. Hook toe setting tool (VW 160) in position and set toe-in to specifications.

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 1 – 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 2 – Using a suitable protractor, check horizontal position of vehicle on one frame side member. Reading should be noted; 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	Degrees
Type 1	21°20′+20′
Type 2	
Kombi, Campmobile	20°+50′
Station Wagon	23°+50′

VOLVO

ADJUSTMENT

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 cannot be adjusted. If not within specifications, check front end components for damage.

CAMBER

If camber is not within specifications, loosen nuts at strut assembly upper attachment. Use special tool 5038 (or equivalent) at strut upper attachment to adjust camber. Tighten lock nuts. Recheck camber.

TOE-IN

Place wheels in straight-ahead position and loosen lock nut and rubber dust boot outer clamp. Turn tie rods until toe is within specifications. Make sure length of tie rods does not differ more than .08" (2 mm). Measure difference between groove in tie rod and lock nut.