PORSCHE (Cont.)

CAMBER

911 Series & Turbo Carrera (Front) – If camber angle is not to specifications, it will be necessary to move adjuster plate which attaches to front shock absorber. Remove enough carpet to allow access to top of each shock absorber. Mark position of each movable plate located below each Allen screw. Loosen each screw and upper shock absorber nut. Move assembly from side to side-to-obtain correct camber angle. Tighten all three screws and shock absorber nut.

924 – Adjust camber by turning eccentric bolt. See *Fig. 4*.

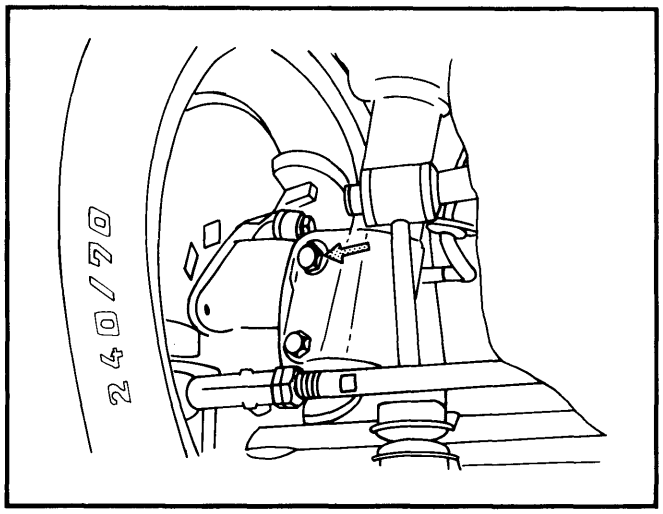

Fig. 4 Eccentric Bolt for Camber Adjustment on 924 Models

NOTE – *Rear wheel camber is not adjustable on 924 models.*

911 Series (Rear) – In order to obtain correct camber value at rear wheels, it is necessary that rear torsion bars be adjusted first. See *Torsion Bar Adjustment*. Now, loosen nuts on retaining bolts and on eccentric bolt at rear axle flange. Turn camber eccentric until camber angle is within specifications. Tighten retaining nuts and eccentric bolt nuts.

TOE-IN

NOTE – *All toe-in specifications are given in inches.*

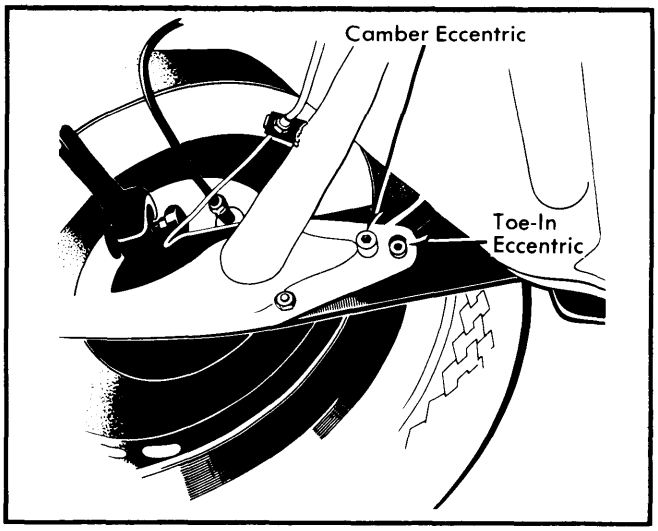

Fig. 5 911 Rear Wheel Adjustment Points

All Models (Front) – Place front wheels in straight-ahead position. Adjust left and right steering links (tie rods) equally to obtain specified setting. Coat each steering link with anti-corrosive compound after adjustment.

911 Series (Rear) – To adjust rear wheel toe-in, loosen nuts on retaining bolts and adjusting eccentrics at rear axle flange. Turn toe-in eccentric until toe-in is set to specifications. Hold eccentric stationary and tighten all lock nuts.

TORSION BAR ADJUSTMENT

911 Series (Rear) – Place torsion bar into transverse tube with inner end splines first. Slip radius arm onto outer end splines of torsion bar. Place suitable leveling tool (VW 261) on lower edge of door opening and adjust level so bubble is in center of glass. Check adjustment (degrees) of free hanging radius arm with same leveling tool. If not to specifications, adjust by turning torsion bar and radius arm in opposite directions. Adjustment of both radius arms must each equal 36°45′±15′.

RENAULT

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

R-12 & R-17 – If caster angle is not within specifications, loosen lock nuts "C" and "D" on strut rod. See *Fig. 2*. To reduce caster angle, unscrew nut "B" and tighten nut "A". To increase caster angle, unscrew nut "A" and tighten nut "B". When caster angle is within specifications, tighten all nuts.

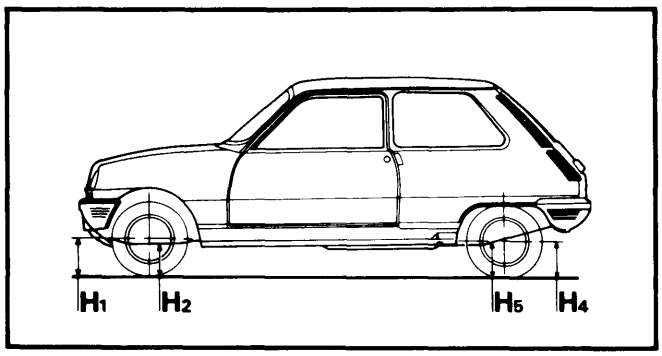

Fig. 1 Riding Height Measurement Points

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RENAULT (Cont.)

R-5 – 1) Vehicle riding height must be calculated before adjusting caster. Measure distance between ground and rear side member (H5, *Fig. 1*). Measure distance between ground and front side member in line with wheel centers (H2, *Fig. 1*). Subtract measurements and refer to table for correct caster angle.

2) With caster angle determined, loosen both lower control arm mounting bolts. Add or remove caster shims to bring adjustment within specifications. One shim is equal to about 1°.

NOTE – *Never use more than two shims between bushing and side member. Always check steering box height after adjustment.*

Caster Angle Table

Subtracted Value	Caster Angle
1 9/16" (40 mm)	12½°
2 3/8" (60 mm)	12°
3 1/8" (80 mm)	11½°
3 15/16" (100 mm)	11°
4 3/4" (120 mm)	10½°
5 1/2" (140 mm)	10°

CAMBER

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

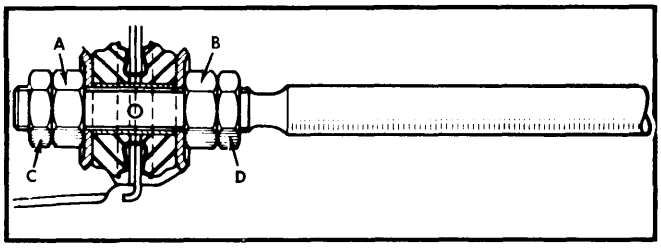

Fig. 2 Caster Adjustment Points at Tie Rod Mounting (All Models Except R-5)

TOE-IN

If toe-in is not to specifications, disconnect steering arm at rack end. Loosen lock nut on steering end fitting. To increase toe-in, unscrew end fitting. To decrease, screw in fitting. Tighten lock nut and connect steering arm. Recheck toe-in.

SAAB

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

All Models – To adjust caster, add or remove shims under upper control arm bushing brackets. Changing shims from front to rear bracket increases caster angle. Moving shims from rear to front decreases caster angle. **NOTE** – *Same thickness of shims removed from front must be placed under rear and vice versa. Change in caster also effects camber.*

CAMBER

All Models – To adjust camber, add or remove shims under upper control arm bushing brackets. Increasing shims under both brackets reduces camber angle and removing shims under both increases camber. **NOTE** – *Always add or remove same thickness of shims at front and rear or caster angle will be affected.*

TOE-IN

All Models – With wheels in straight-ahead position, loosen steering link (tie rod) lock nut and turn adjustable sleeve until correct toe-in is obtained. Tighten lock nuts and recheck toe-in.

NOTE – *After adjustment of toe-in, measurement "A" (Fig. 1) of tie rod must not exceed 1.0" (25 mm). For tie rods opposite to each other, the difference between measurement "A" must not exceed .08" (2 mm).*

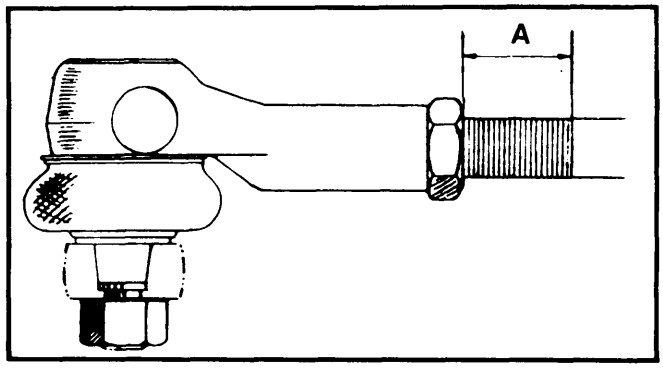

Fig. 1 View Showing Tie Rod Length Measurement

SUBARU

ADJUSTMENT

TIRE INFLATION (COLD)

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

RIDING HEIGHT (REAR)

Riding height is adjusted by changing the size of the angle between trailing arm center line and the markings on outer bracket. See *Fig. 1*. The trailing arm and outer bracket have full serrations around the torsion bar mounting hole, while torsion bar has one missing serration, thus allowing torsion bar to be inserted at any angle.

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