PORSCHE

ADJUSTMENT

TIRE INFLATION (COLD)

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

RIDING HEIGHT

NOTE: Check riding height with fuel tank full, spare tire and jack in vehicle.

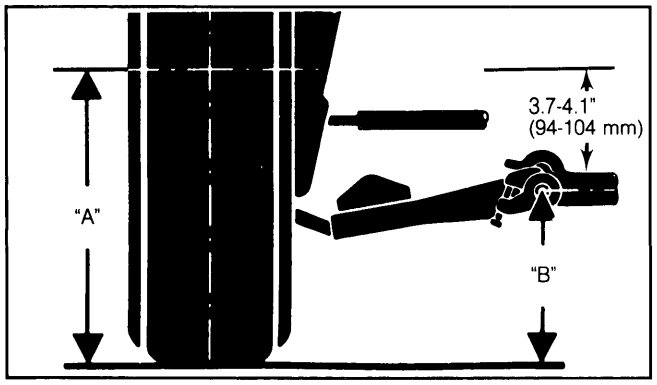
911SC (Front)

1) Checking or adjusting riding height must only be performed with vehicle on level floor. Mark center of front wheel hub cap (grease retainer cup).

2) Jounce vehicle several times to settle suspension. Measure distance "A" and "B" shown in *Fig. 1.* Difference between measurements should be 3.7-4.1" (94-104 mm).

3) To adjust, loosen or tighten torsion bar adjusting bolt until correct height is obtained. Jounce vehicle several times and recheck height. Make sure difference between right and left side measurements does not exceed .20" (5.1 mm).

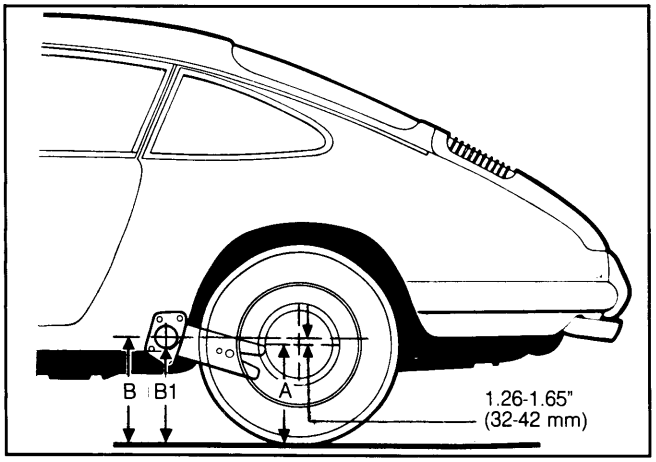
Fig. 1: Front Suspension Riding Height Measuring Points for 911SC



911SC (Rear)

1) To check riding height, vehicle must be on level floor. Mark center of rear wheel. Jounce vehicle several times to settle suspension. Measure distance "A" shown in *Fig. 2.*

Fig. 2: Rear Suspension Riding Height Measuring Points for 911SC



2) Distance "A" plus 1.26-1.65" (32-42 mm) equals "B"; however, distance "B" is difficult to measure because torsion bar is mounted off center in its rubber bushing. Therefore it is necessary to measure distance "B1" and add .585" (14.9 mm), radius of bushing. This total should equal "B".

3) After calculating "B", difference between "A" and "B" should be 1.26-1.65" (32-42 mm). Difference in height from left to right should not exceed .20" (5.1 mm). If values are not within specifications, check front height and rear torsion bar adjustment. Correct as necessary.

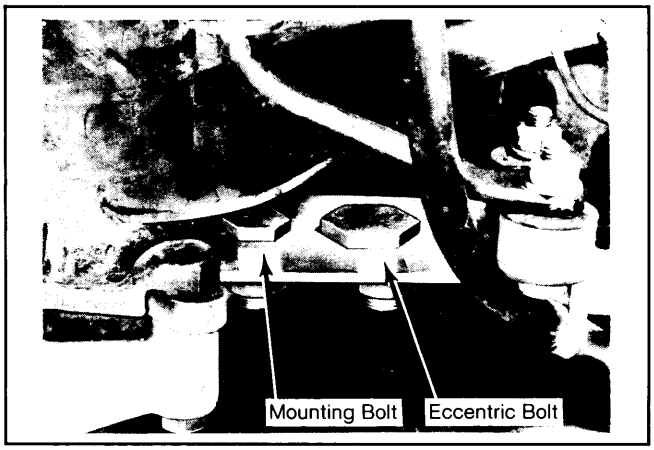
924 (Front & Rear)

1) Front height is adjusted by changing front spring. Spring plate removal is not required to adjust rear height at 2-piece spring plate. Loosen mounting bolt and adjust vehicle height with eccentric. *See Fig. 3.*

2) Height should be .319-.331" (8.1-8.4 mm) when measured from torsion bar center to center of wheel.

NOTE: If spring plate angle is 19° with stabilizer bar or 23° 40' without stabilizer bar, vehicle height is correct.

Fig. 3: Location of 924 & 944 Rear Riding Height & Camber Adjusting Bolts



928 (Front)

1) Checking or adjusting riding height must only be performed with vehicle on level floor. Place wheels in straight ahead position.

2) Measure distance from boss (on forward underside of lower control arm) to floor. Distance should be about 7.48" (190 mm). Height is determined by coil spring and is not adjustable at front axle.

928 (Rear)

1) Checking or adjusting riding height must only be performed with vehicle on level floor. Place front wheels in straight ahead position.

2) Measure distance from lower edge of crossmember (below camber adjusting cam) to floor. Distance should be 6.81-7.20" (173-183 mm).

3) To adjust vehicle upward, turn coil spring adjusting nut (located at under side of lower spring retainer) clockwise. Rear height must be adjusted to match front height. For example, if front height is .394" (10 mm) too high, rear height must be raised .394" (10 mm).

PORSCHE (Cont.)

911SC (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.

924 & 944 (Rear)

To adjust toe-in, reposition control arm flange in slots of spring plate. Use of adjusting tool (9171) is suggested.

928 (Rear)

To adjust rear toe-in, use eccentric located on front control arm bushing.

TORSION BAR ADJUSTMENT

911SC (Rear)

1) Place torsion bar into transverse tube with inner end splines first. Slip radius arm onto outer end splines of torsion bar.

2) Place leveling tool (VW 261) on lower edge of door opening and adjust level so bubble is in center of glass.

3) 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 3/4° ± 1/4°.

RENAULT

ADJUSTMENT

TIRE INFLATION (COLD)

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

RIDING HEIGHT

NOTE: Riding height should be set with fuel tank full and without additional weight in vehicle.

Front

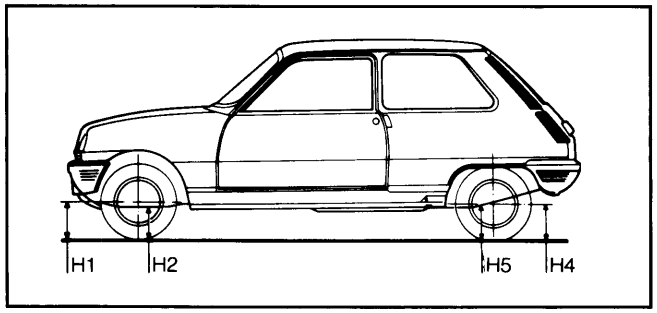
1) Checking or adjusting riding height can only be performed with vehicle on level floor. To calculate front riding height, measure distance from floor to center of wheel (H1) and distance from floor to front side member (H2) in line with wheel centers. *See Fig. 1.*

2) Subtract the 2 measurements (H1 from H2). Variation between right and left sides should not exceed 3/8" (9.5 mm). To adjust front riding height, mark position of torsion bar in bracket. Remove and rotate torsion bar until correct riding height is obtained.

Rear

1) On all models, rear riding height is calculated by measuring from floor to center of wheel (H4). Then measure from floor to the punched out hole in rear side member (H5). *See Fig. 1.* On Fuego measure between floor and center of front bolt at side arms (H5).

Fig. 1: Measurement Location Points For Riding Height



Fuego measurement (H5) is from floor to center of forward bolt on side arm.

2) The variation between right and left sides should not exceed 3/8" (9.5 mm). Adjust rear riding height in same manner as front riding height.

CASTER

Le Car

To adjust caster angle, loosen both lower control arm mounting bolts and add or remove shims to adjust caster to specifications. The addition or removal of 1 shim equals about 1° change in caster angle.

NOTE: Never use more than 2 shims between bushing and side member. Always check steering box height after caster adjustment.

All Others

Vehicle riding height controls caster angle. Caster is not adjustable.

CAMBER

All Models

Vehicle riding height controls camber. Camber angle is not adjustable. If not within specifications, inspect

CASTER ANGLE SPECIFICATIONS

Difference Between H2 & H5	Caster Angle
18i	
1 3/8" (35 mm)	3°
2 5/32" (55 mm)	2 1/2°
2 3/4" (70 mm)	2°
3 35/64" (90 mm)	1 1/2°
Le Car	
1 9/16" (40 mm)	12 1/2°
2 3/8" (60 mm)	12°
3 3/16" (80 mm)	11 1/2°
3 15/16" (100 mm)	11°
4 3/4" (120 mm)	10 1/2°
5 1/2" (140 mm)	10°
Fuego	
3/4" (20 mm)	3° 1/2'
1 3/8 (35 mm)	3°
2 5/32" (55 mm)	2° 1/2'
2 3/4" (70 mm)	2°

Wheel Alignment

PORSCHE (Cont.)

944 (Front & Rear)

1) Checking or adjusting riding height must only be performed with vehicle on level floor. Place front wheels in straight ahead position.

2) Measure from upper edge of bumper to floor. Measurement must be 19.75-21.25" (502-542 mm).

3) Front height is adjusted by changing front spring. Rear height is adjusted with 2-piece spring struts without removal of torsion bars.

4) Loosen joint between spring strut and trailing arm and adjust to specified value by turning camber eccentric. *See Fig. 3.*

CASTER

911SC

1) If caster angle is not within specifications, it will be necessary to remove adjuster plate which attaches to front suspension strut.

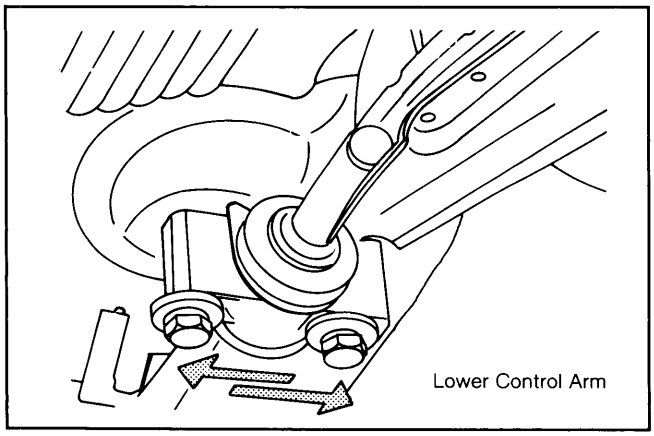
2) Remove enough front compartment carpet to allow access to top of each suspension strut. Mark position of each movable plate, located below each Allen screw.

3) Loosen each screw and upper suspension strut nut. Move assembly lengthwise to obtain correct caster angle. Tighten all 3 screws and suspension strut nut.

924 & 944

To adjust caster, move the rear control arm mount from side-to-side. *See Fig. 4.*

Fig. 4: 924 & 944 Front Caster Adjustment Location



928

Caster is adjusted at eccentric located on lower control arm. To adjust caster, use eccentric closest to brake disc.

CAMBER

911SC (Front)

1) If camber angle is not within specifications, it will be necessary to move adjuster plate which attaches to front suspension strut.

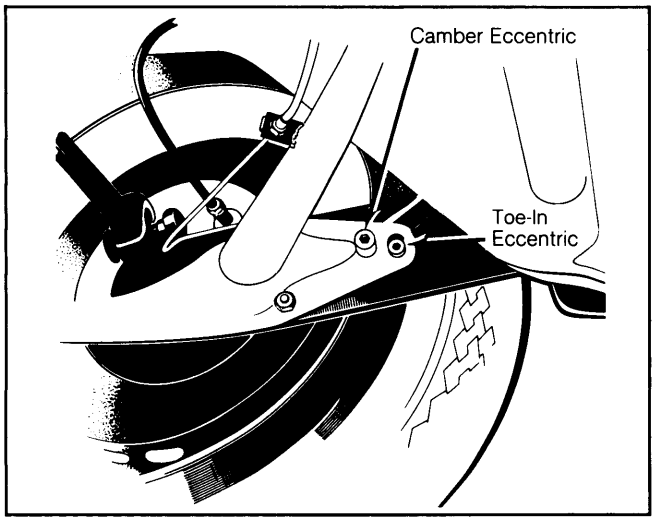
2) Follow procedure outlined for adjusting caster and move assembly from side-to-side to obtain correct camber angle. Tighten all 3 screws and suspension strut nut.

911SC (Rear)

1) To obtain correct camber angle at rear wheels, it is necessary to adjust rear torsion bars first. *See Torsion Bar Adjustment.*

2) Loosen nuts on retaining bolts and on eccentric at rear axle flange. *See Fig. 5.* Turn camber eccentric until camber angle is within specifications. Tighten retaining nuts and eccentric nut.

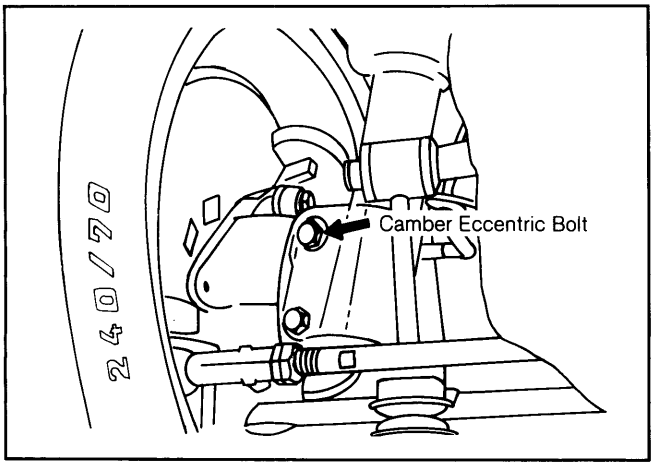
Fig. 5: 911SC Rear Camber Adjustment Points



924 & 944 (Front)

To adjust camber, turn eccentric bolt located at base of suspension strut. *See Fig. 6.*

Fig. 6: 924 & 944 Front Camber Eccentric Bolt Location



924 & 944 (Rear)

To adjust, loosen bolts between spring plate and diagonal arm flange. Bring camber to specification by turning eccentric. *See Fig. 3.*

928 (Front)

To adjust camber, use 2nd eccentric adjuster in from disc brake located on lower control arm.

928 (Rear)

To adjust camber, use eccentric located on inner control arm bushing.

TOE-IN

All Models (Front)

Place front wheels in straight-ahead position. Adjust left and right tie rods equally to obtain specified setting. Coat each tie rod with anti-corrosive compound after adjustment.