

Wheel Alignment

MAZDA (Cont.)

remove 4 nuts attaching shock absorber support to fender apron. Raise front of vehicle and support with jack stands, then remove wheel on side to be adjusted.

2) Press shock absorber downward and change position of support according to table and Fig. 1. Tighten shock absorber support mounting nuts. Install wheel, lower vehicle and recheck caster and camber.

Caster and Camber Adjustment			
Adjustment		Variation	
	Shock Absorber Support	Caster	Camber
A	0	0	0
B	90°	½°	0
C	180°	½°	½°
D	270°	0	½°

Pickup — To adjust, change shims between upper arm shaft and support bracket or turn upper arm shaft until specifications are obtained.

CAMBER

GLC — Camber is not adjustable. If caster is not to specifications, inspect suspension for excessive wear or damage. Replace components as necessary.

RX7 & 626 — See procedure given under Caster adjustment.

Pickup — To adjust, change shims between upper arm shaft and support bracket until specifications for camber are within limits.

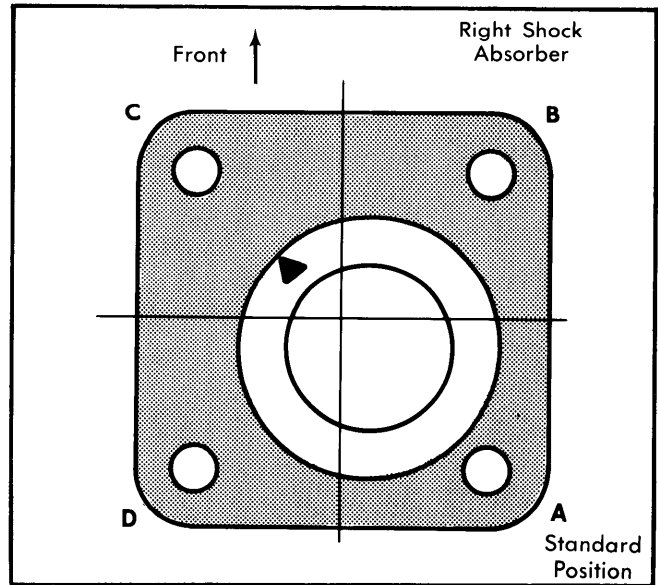


Fig. 1 RX7 & 626 Caster and Camber Adjusting Pad (Position "C" Shown)

TOE-IN

1) Raise front of vehicle. Turn wheels by hand and mark a line in center of each tire tread. Place vehicle in straight-ahead position and lower vehicle to ground.

2) Measure distance between marked lines at both front and rear of wheel. Make sure measurements are made equal distances from ground. Distance at rear of wheel should be .24" (6 mm) more than that at front wheels. Loosen lock nuts and turn tie rods until adjustment is correct.

MERCEDES-BENZ

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.

CASTER

Front — Test under loaded condition. Load vehicle with 2 weights of 143 lbs. (64.9 kg) on rear seat and a full tank of fuel. If caster is not to specifications, loosen lock nut on eccentric bolt on front side of lower control arm. To adjust, rotate eccentric bolt until caster angle is within specifications. Hold eccentric bolt in place and tighten lock nut.

CAMBER

Front — Test under loaded condition. Load vehicle with 2 weights of 143 lbs. (64.9 kg) on front seat, 1 similar weight on rear seat and a full tank of fuel. If camber is not within specifications, loosen lock nut of eccentric bolt on rear side of lower control arm. To adjust, rotate eccentric bolt until camber is within specifications. Hold eccentric bolt in place and tighten lock nut.

TOE-IN

Front — Place wheels in straight-ahead position. If toe-in is not within specifications, adjust by loosening lock nuts on outer steering links and rotating links to obtain specified toe-in. Make sure steering links are adjusted equally.

MG

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.

NOTE — All checks must be made with vehicle unloaded, tires properly inflated and steering wheel in straight-ahead posi-

tion. Before making checks, ensure suspension components are in good condition. If necessary, repair damaged components before making wheel alignment checks.

CAMBER & CASTER

Camber and caster are not adjustable. If alignment is not within specifications, inspect for damaged suspension parts and repair or replace as necessary.

MG (Cont.)

TOE-IN

Turn front wheels to straight-ahead position and check toe-in measurement. Move vehicle ahead so front wheels rotate 180° and take second reading. Average both readings to check toe-

in. If not within specifications, loosen lock nut for each tie rod and loosen clips securing rubber boots to tie rods. To adjust, rotate both tie rods equally to obtain specified toe-in. Tighten lock nuts and clips on tie rods.

NOTE — Tie rods must be equal lengths.

PEUGEOT

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.

TOE-IN

Position wheels in straight-ahead position. If toe-in is not to specifications, loosen clamping bolts on the 2 steering links. To

adjust, rotate 2 steering links simultaneously in either direction necessary to obtain specified toe-in. Tighten clamping bolt and recheck toe-in.

CAMBER & CASTER

Camber and caster are not adjustable. If alignment is not within specifications, inspect for damaged suspension parts and repair or replace as necessary.

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 — Riding height should be set with fuel tank full and spare tire included.

911SC (Front) — 1) Checking or adjusting riding height can only be performed with vehicle on level surface. Mark center of front wheel hub cap (grease retainer cup). Bounce vehicle several times to settle suspension. Measure distance "A" shown in Fig. 1. Measure distance "B" shown in Fig 1. Difference between measurements (riding height) should be 3.7-4.1" (94-104 mm).

2) If necessary, loosen or tighten torsion bar adjusting bolt until correct height is obtained. Bounce vehicle several times and recheck height. Make sure difference between right and left side measurements does not exceed .20" (5 mm).

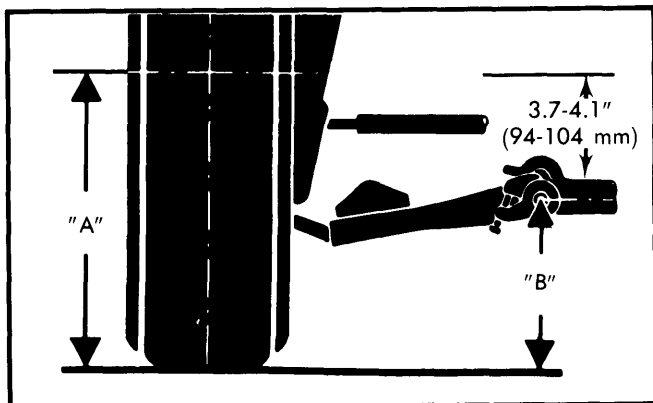


Fig. 1 Front Suspension Riding Height Measuring Points for 911SC

911SC (Rear) — Checking or adjusting riding height can only be performed with vehicle on level surface. Mark center of rear wheel. Bounce vehicle several times to settle suspension. Measure distance "a" shown in Fig. 2. Distance "a" plus 1.26-1.65" (32-42mm) equals "b"; however, distance "b" is difficult to measure because the torsion bar is mounted off center in its rubber bushing. Therefore it is necessary to measure distance "b1" and add .585" (14.8 mm), radius of bushing. This total should equal "b". 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 mm). If values are not within specifications, check front height and rear torsion bar adjustment. Correct as required.

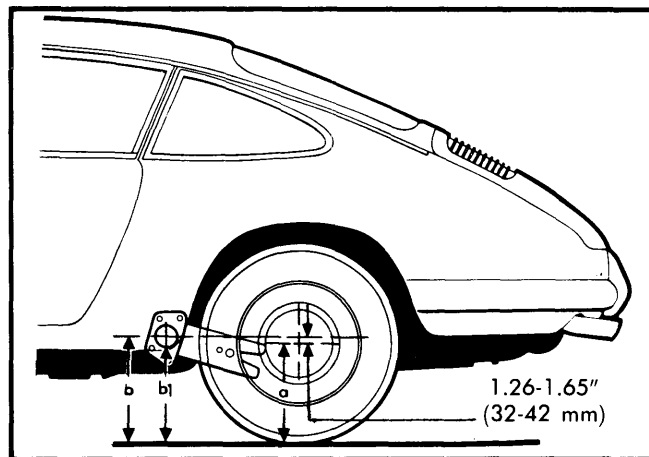


Fig. 2 Rear Suspension Riding Height Measuring Points for 911SC

924 (Rear) — Rear height is adjusted at 2-piece spring plate; spring plate removal is not required. Loosen mounting bolt and adjust vehicle height with eccentric bolt. See Fig. 3. Height should be .311-.319" (7.9-8.1 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 will be correct.

Wheel Alignment

PORSCHE (Cont.)

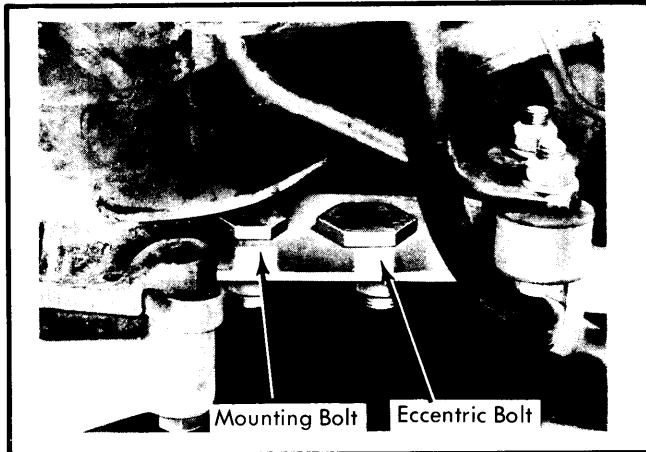


Fig. 3 Location of 924 Rear Riding Height Adjusting bolt

928 (Front) — Park vehicle on level ground. Place wheels in straight-ahead position. Measure distance from boss (on forward underside of lower control arm) to ground. Distance should be about 7.48" (190 mm). Height is determined by coil spring and is not adjustable at front axle.

928 (Rear) — Place vehicle on level surface. Place front wheels in straight-ahead position. Measure distance from lower edge of crossmember (below camber adjusting cam) to ground. Distance should be 6.81-7.20" (173-183 mm).

- 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.
EXAMPLE: If front height is .394" (10 mm) too high, rear height must be raised .394" (10 mm).

CASTER

911SC — If caster angle is not within specifications, it will be necessary to remove adjuster plate which attaches to front shock absorber. Remove enough front compartment 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 lengthwise to obtain correct caster angle. Tighten all 3 screws and shock absorber nut.

924 — Adjust caster by moving the rear control arm mount from side-to-side. See Fig. 4.

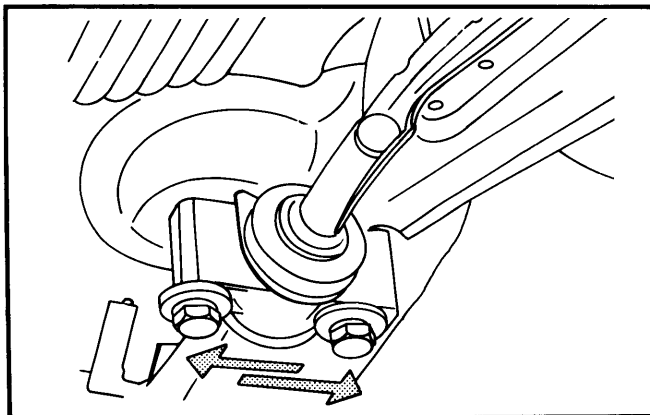


Fig. 4 924 Caster Adjustment Location

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

CAMBER

911SC (Front) — If camber angle is not within specifications, it will be necessary to move adjuster plate which attaches to front shock absorber. Follow procedure outlined for adjusting caster and move assembly from side-to-side to obtain correct camber angle. Tighten all 3 screws and shock absorber nut.

911SC (Rear) — To obtain correct camber angle at rear wheels, it is necessary to adjust rear torsion bars first. See *Torsion Bar Adjustment*. Then, loosen nuts on retaining bolts and an eccentric bolt at rear axle flange. Turn camber eccentric until camber angle is within specifications. Tighten retaining nuts and eccentric bolt nuts.

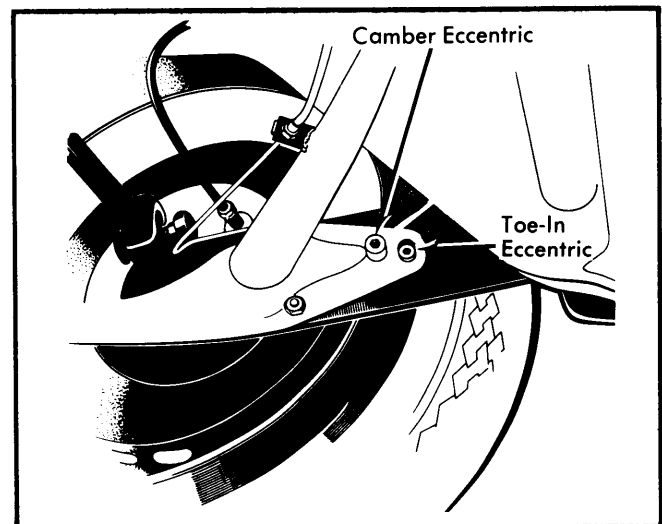


Fig. 5 911SC Rear Camber Adjustment Points

924 (Front) — Adjust camber by turning eccentric bolt shown in Fig. 6.

924 (Rear) — Loosen bolts between spring plate and diagonal arm flange. Bring camber to specification by turning eccentric.

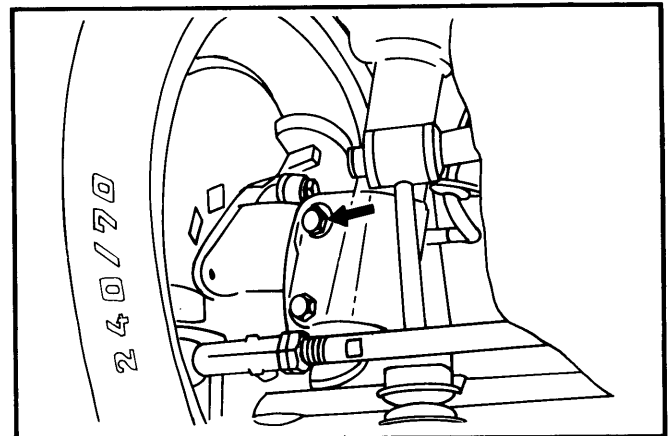


Fig. 6 924 Front Camber Eccentric Bolt Location

928 (Front) — Camber is adjusted at eccentric located on lower control arm. To adjust camber, use eccentric farthest away from brake disc.