SUBARU (Cont.)

2) To increase riding height, turn outer end and inner end of torsion bar in direction opposite to cast-in arrow on outer end of bar. Height changes .20" (5 mm) with each shift in serration.

3) Initially set vehicle rear riding height by inserting torsion bar with its missing serrations aligned with markings on outer bracket surface and trailing arm inner surface. This should equal the approximate riding height. See Riding Height Specifications table.

4) Measure riding height at lower face of crossmember to floor and determine numbers of teeth to be shifted on inner and/or outer serrations.

NOTE: Vehicle must be in unloaded condition.

5) At top of shock absorber, remove bolt attaching shock to body. Raise rear of vehicle and remove wheel. Remove lock bolt of outer bushing. Remove bolts connecting outer and inner arms with brake drum supported by a jack to prevent brake hose damage.

6) Place alignment mark on outer bushing, crossmember and torsion bar for reassembly reference. Measure vertical distance between end of outer arm and vehicle body. Pull out outer arm and torsion bar until inner serration is completely disengaged.

7) Rotate torsion bar and outer arm to shift matching of inner serration by appropriate pitches and engage inner serration with crossmember. Pull outer arm from torsion bar and rotate outer arm in opposite direction to shift matching of outer serration by appropriate pitches.

NOTE: Do not disengage inner serration of torsion bar from crossmember.

8) Install outer arm to torsion bar and crossmember, then measure vertical distance between end of outer arm and vehicle body. Change in this distance shows half of change in riding height clearance caused by adjustment.

9) Install bolts connecting outer and inner arms. Repeat adjustment procedure on opposite wheel. Install wheels and lower vehicle. Install shock absorbers and outer bushing lock bolt. Check rear riding height adjustment. If correct, tighten lock bolt on outer bushing. If incorrect, repeat adjustment on each wheel.

RIDING HEIGHT SPECIFICATIONS

Application	Front In. (mm)	Rear In. (mm)
1600 & 1800 2-WD		
Wagon	9.65-10.63 (245-270)	11.02-11.81 (280-300)
All Others	9.45-10.43 (240-265)	10.24-11.02 (260-280)
1600 & 1800 4-WD		
Hatchback	10.43-11.42 (265-290)	12.60-13.39 (320-340)
Wagon	10.63-11.61 (270-295)	13.19-13.98 (335-355)

CASTER

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

CAMBER

Camber angle is not adjustable. If angle is not to specifications, inspect suspension for wear or damage. Repair or replace components as necessary.

TOE-IN

If toe-in is not within specifications, loosen both left and right tie rod jam nuts. Turn both tie rods an equal amount until specified toe-in is obtained. Tighten jam nuts and recheck wheel alignment.

TOYOTA

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

Before adjusting wheel alignment, check riding height. Riding height must be checked with vehicle on level floor. Jounce vehicle serveral times and allow suspension to settle. Check riding height measurement as shown in *Fig. 1 and 2.* If riding height is not within specifications listed in Riding Height Specifications table, check and repair or replace suspension components.

CAMBER & CASTER

Pickup (2-WD)

1) If camber or caster angles are not within specifications, adjust by adding or removing shims between upper control arm shaft and front suspension crossmember.

2) To increase camber, remove shims from upper control arm shaft bolts in equal amounts. To decrease camber, add shims to upper control arm shaft bolts in equal amounts.

RIDING HEIGHT SPECIFICATIONS

Application	Front In. (mm)	Rear In. (mm)
Celica	9.1 (232)	9.4 (240)
Supra	8.8 (223)	10.4 (265)
Corolla	9.1 (232)	9.1 (232)
Corona		
13" Tire	9.0 (229)	8.8 (223)
14" Tire	9.3 (235)	9.0 (229)
Cressida	9.2 (234)	9.8 (248)
Pickup		
1/2 Ton (2-WD)		
7.00x14	10.3 (262)	11.4 (288)
E78x14	10.0 (254)	11.1 (281)
ER78x14	9.9 (251)	10.7 (271)
205/70SRx14	9.5 (242)	10.3 (262)
3/4 Ton (2-WD)	11.0 (279)	12.0 (305)
Starlet		
12" Tire	8.8 (223)	8.9 (225)
13" Tire	9.1 (231)	9.1 (231)
Tercel	8.5 (216)	10.2 (258)

Wheel Alignment

TOYOTA (Cont.)

Fig. 1: Riding Height Measurement Points for All Models (Exc. Pickup & Land Cruiser)

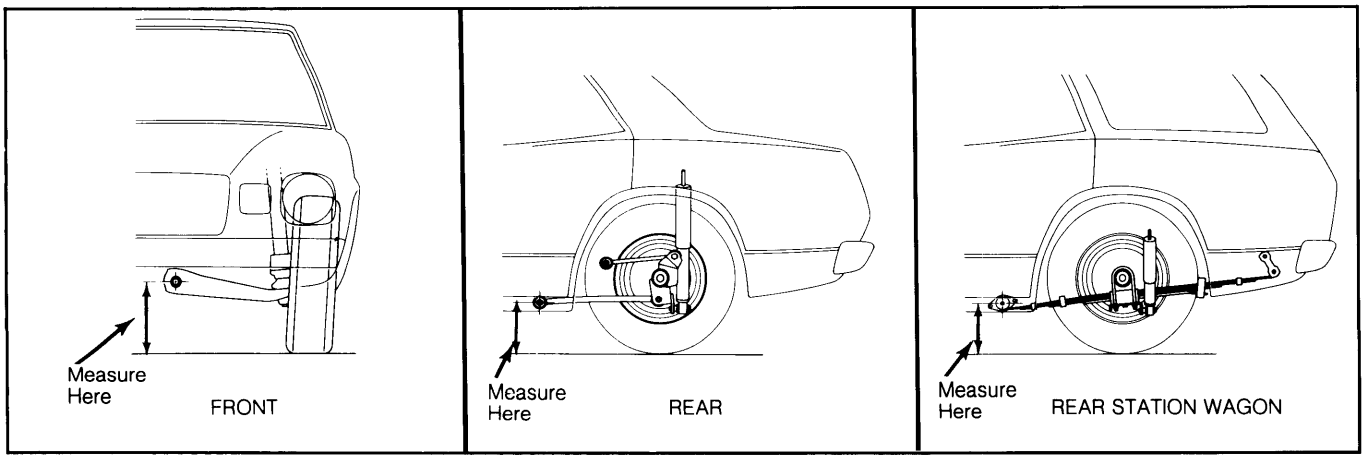
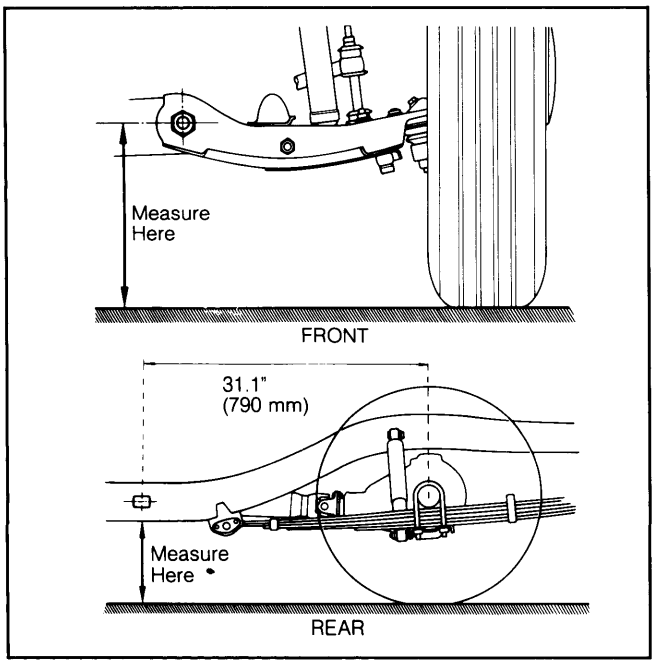


Fig. 2: Riding Height Measurement Points for Pickup (2-WD) Models



3) To increase caster, add shims to rear side of upper control arm shaft bolt or remove shims from front side. To decrease caster, remove shims from rear side of upper control arm shaft bolt or add shims to front side.

Land Cruiser & Pickup (4-WD)

Camber and caster are not adjustable. If not within specifications, inspect and repair or replace front suspension components as necessary.

Starlet

Camber is not adjustable. To adjust caster, add or subtracting spacers on sway bar.

All Other Models

If caster angle is not within specifications, adjust by loosening nuts on strut rod and turning nuts to lengthen or storten strut rod.

NOTE: Camber is not adjustable except on pickup models. If camber angle is not within specifications, check front end for bent or worn parts and replace as necessary.

TOE-IN

All Models

If toe-in is not within specifications, loosen tie rod clamp bolts and rotate adjusting sleeves an equal amount until correct toe-in is obtained. Position clamp bolts at right angles to slot in tie-rod and tighten bolts.

VOLKSWAGEN

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

Vanagon

If caster is not within specifications, adjust by changing length of strut bar at crossmember mount. After adjusting caster, check and adjust camber.

All Other Models

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

CAMBER

Vanagon (Front)

If camber is not within specifications, loosen nut on upper control arm shaft and rotate shaft until camber angle is set to specifications. Tighten nut and recheck camber.