

Wheel Alignment

DATSUN (Cont.)

Riding Height Specifications

Application	Height In. (mm)
620 Pickup (All Models)	3.1-3.3 (79-84)

CASTER

All Models Exc. Pickup — Preset at factory and cannot be adjusted. If not to specifications, check suspension for wear or damage and repair or replace components as necessary.

Pickup — Caster is adjusted by increasing or decreasing thickness of shims inserted between upper link spindle and upper link mounting bracket. When front shim thickness increases, caster decreases. **NOTE** — Do not adjust caster with difference between front and rear shim thickness beyond .079" (2 mm).

CAMBER

All Models (Exc. Pickup) — Preset at factory and cannot be adjusted. If not to specifications, check suspension for wear or damage and repair or replace components as necessary.

Pickup — Camber is adjusted by increasing or decreasing the thickness of shims inserted between upper link spindle and upper link mounting bracket. When thickness of shims increase, camber decreases.

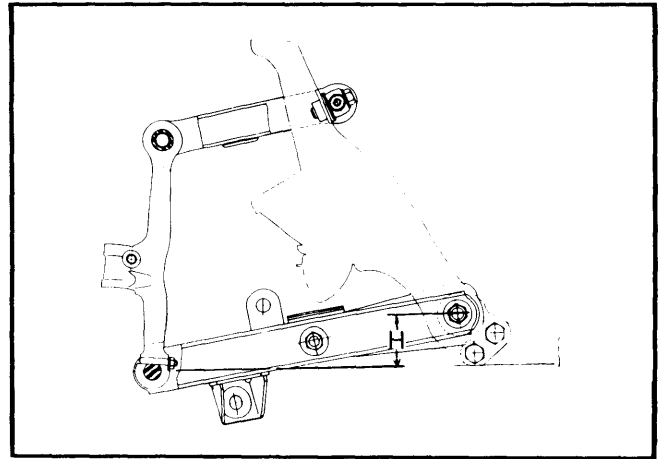


Fig. 1 Pickup Front Suspension Riding Height Measurement Point

TOE-IN

All Models Except Pickup — Adjust by loosening each side steering link lock nut and adjusting steering link to change toe-in. **NOTE** — Left and right side steering links should be adjusted equally. Tighten lock nuts.

Pickup — Adjust by loosening steering cross link lock nuts, and adjusting steering cross link to change toe-in. Tighten lock nuts.

FIAT

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

Model 128 & 131 (Except 128 3P) — If caster is not to specifications, raise front of vehicle. Remove stabilizer bar-to-control arm nut and disconnect control arm from body. Remove end of stabilizer bar from control arm. To adjust caster, addition of shims between end of stabilizer bar and rubber pad of control arm will decrease caster angle and removal of shims will increase caster angle. Reverse removal procedure and recheck caster.

Model 124 — If caster is not within specifications, raise front of vehicle and remove wheel and shock absorber. Using suitable tool (A.74174), compress spring to relieve lower control arm and loosen nuts holding control arm pivot bar to crossmember. To adjust caster, remove shims from front stud and move to rear stud to increase caster. To decrease caster, remove shims from rear stud and move shims to front stud. Reverse removal procedure and check caster.

Model X1/9 — If caster is not to specifications, adjust by adding or removing shims located between stabilizer bar and stabilizer bar support.

CAMBER

Model 124 — If camber is not within specifications, adjust by changing shims. Raise front of vehicle, remove wheel and shock absorber. Using suitable tool (A.74174), compress spring to relieve lower control arm and loosen nuts holding control arm pivot bar to crossmember. To increase camber, remove equal amount of shims from both studs and add equal amount of shims to decrease camber. **NOTE** — Adding or removing equal amounts of shims will not affect caster. Reverse removal procedure and check camber.

Model 128 & 131 Front — Camber is nonadjustable. If not within specifications, inspect suspension for damage and repair or replace parts as necessary.

Model 128 Rear — If rear camber is not within specifications raise rear of vehicle and compress one end of leaf spring, shifting it from flexible guide anchoring spring to control arm. Remove guide and slowly release spring. Remove nuts attaching pivot to body and loosen screw to free adjustment shims. To increase camber, add an equal number of shims on both screws attaching control arm to body. To decrease, remove equal number of shims from both screws. Reverse removal procedure and check camber.

FIAT (Cont.)

Model X1/9 Front & Rear — Camber is nonadjustable. If not within specifications, inspect suspension for damage and repair or replace parts as necessary.

TOE-IN

Model 124 Front — Place front wheels in straight-ahead position. If toe-in is not within specifications, loosen four clamps securing sleeves on tie rods. Rotate tie rods in opposite direction (by equal amounts) to set toe-in to specifications. Tighten clamp nuts. **NOTE** — Expansion slot in sleeve must coincide with clamp joint when clamp is fully tightened.

Model 128, 131 & X1/9 Front — Place front wheels in straight-ahead position. If toe-in is not within specifications,

loosen sleeve locking nut on tie rods. To adjust, rotate hexagon on ball pin to set toe-in to specifications. Hold hexagon in position and lock nut against tie rod sleeve.

Model 128 Rear — If rear toe-in is not within specifications raise rear of vehicle and compress one end of leaf spring, shifting it from flexible guide anchoring spring to control arm. Remove guide and slowly release spring. Remove nuts attaching pivot to body and loosen screws to free adjustment shims. To increase toe-in, add shims to rear screw or remove shims from front screw. To decrease, add shims to front screw or remove shims from rear screw.

Model X1/9 Rear — If rear wheel toe-in is not within specifications, loosen clamps securing sleeves to reaction rods. Adjust toe-in by lengthening or shortening reaction rods. Tighten clamps and recheck toe-in.

HONDA

ADJUSTMENT

TIRE INFLATION (COLD)

Before checking or adjusting wheel alignment, make sure tires are correctly inflated. Refer to manufacturers specifications located in glove box.

RIDING HEIGHT

Make sure tires are properly inflated. Measure from bottom of side marker lamps to ground. If height measurement is not within specifications, check rear height before attempting to repair front suspension.

Riding Height Specifications

Application	Front	Rear
Civic	25.78" (655 mm)	24.01" (610 mm)
CVCC		
Sedan	24.2" (615 mm)	20.7" (525 mm)
Station Wgn.	24.2" (615 mm)	23.5" (598 mm)
Accord	24.0" (610 mm)	25.4" (645 mm)

CASTER

Caster is nonadjustable. If alignment is not within specifications, inspect for damaged parts and replace as necessary.

CAMBER

Camber is nonadjustable. If alignment is not within specifications, inspect for damaged parts and replace as necessary.

TOE-OUT

Front, CVCC and Accord — Loosen lock nuts at each end of tie rods. Turn tie rod until toe-out is within specifications. Use same procedure for both sides. To center steering wheel after toe has been adjusted, turn both tie rods in same direction until steering wheel (spokes) are centered. Tighten lock nuts.

TOE-IN

Rear, CVCC and Accord — To adjust toe-in, loosen nuts on radius rods. Rotate radius rods until toe-in is within specifications, then tighten lock nuts. **NOTE** — Each notch on cam plate is equal to $\frac{3}{64}$ " movement.

JAGUAR

ADJUSTMENT

TIRE INFLATION (COLD)

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

RIDING HEIGHT

All Models (Front) — 1) Check that vehicle is full of fuel, oil, and water, and that tires are properly inflated. Press down on front bumper and slowly release, then lift up on bumper and slowly release, this will settle front suspension.

Wheel Alignment

JAGUAR (Cont.)

- 2) On XJ6 and XJ12 models, measure distance between center of outer headlight and ground on both sides of vehicle. Height should be 24.6" (611 mm) minimum.
- 3) On XJS models, measure distance between lower face of crossmember and ground on both sides. Height should be 6.0" (152 mm) minimum, plus thickness of slip plates.
- 4) On all models, adjust by installing or removing spring spacers from front coil springs. **NOTE** — Spring spacers are $\frac{1}{8}$ " (3.2 mm) thick and will change riding height approximately $\frac{5}{16}$ " (7.9 mm).

All Models (Rear) — Check that vehicle is full of gasoline, water and oil, and that tires are properly inflated. Roll vehicle forward three car lengths to settle suspension system. Measure distance between lower surface of rear crossmember and ground on both sides of vehicle. Correct height should be $7.45 \pm .25$ (189 \pm 6 mm). If height is correct, it will be unnecessary to proceed further, however if height is incorrect, all four rear springs will need to be replaced.

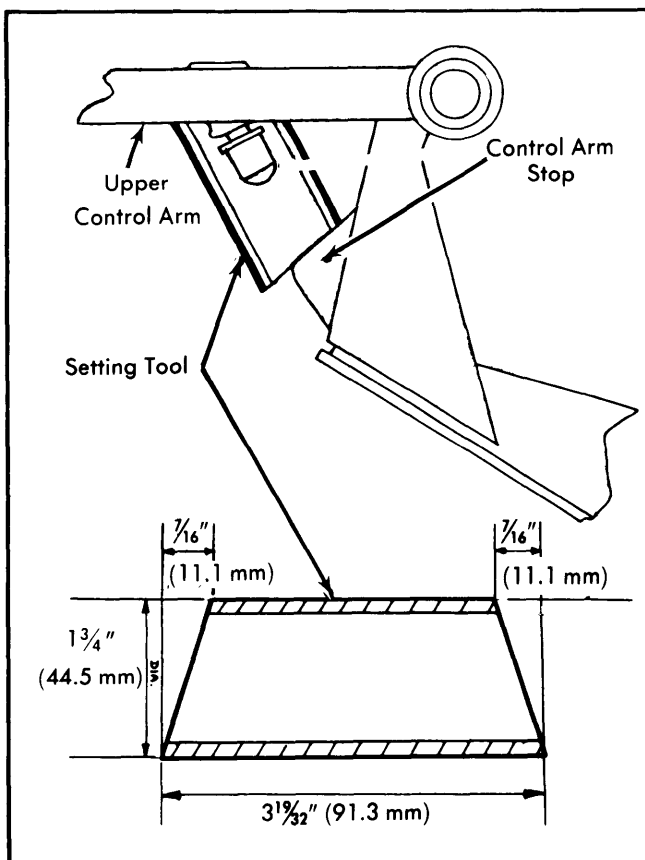


Fig. 1 Dimensions for Fabricating the Two Necessary Setting Tools

PREPARATION FOR CASTER & CAMBER ADJUSTMENT

- 1) Ensure vehicle is on level ground and that tires are properly inflated. Before checking or adjusting caster or camber it will be necessary to fabricate two setting tools (See Fig. 1).

- 2) Compress front suspension and insert tools under upper control arms, adjacent to control arm rubber stops and over brackets welded to bottom of control arms.
- 3) Compress rear suspension and install suitable suspension setting links (J. 25), to lock rear suspension in place (See Fig. 2). Vehicle is now locked in half-loaded condition and caster and camber can be checked and adjusted.

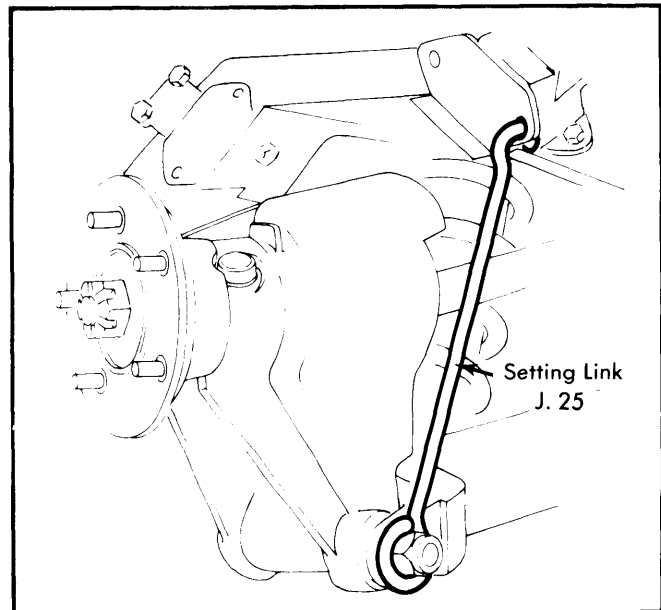


Fig. 2 Rear Suspension in Locked Position with Special Tool

CASTER

NOTE — Before adjusting caster angle, make sure car is standing at normal riding height.

All Models — If caster angle is not within specifications, adjust by moving shims on front and rear of upper control arm ball joint. To increase caster, loosen bolts securing upper ball joint and move shims from rear of ball joint to front of ball joint. To decrease caster, reverse procedure. Tighten ball joint attaching bolts and recheck caster angle.

CAMBER

NOTE — Before attempting to check or adjust camber angle it will be necessary to make sure that vehicle is in half-loaded condition.

All Models (Front) — With wheels in straight-ahead position, measure camber angle. **NOTE** — Two front wheels must be within $\frac{1}{4}$ ° of each other. Adjustment is accomplished by means of shims placed between control arm mounting bracket and the frame. Adding shims increases camber angle. **NOTE** — Be sure to use the same number of shims on each bolt, otherwise caster angle will be affected.

All Models (Rear) — Before checking rear wheel camber, rear suspension must be in the half-loaded position. See Preparation for Caster & Camber Adjustment. To adjust, remove suspension setting links (JD.25), raise and support rear of vehicle and remove wheels. Loosen nuts securing half-shaft to brake disc, then add or remove shims as required to bring camber angle within specifications. **NOTE** — Addition of one