DATSUN (Cont.)

ween ball joints. Adjust idler arm side so distance between ball joints is 14.19" (360.5 mm). Tighten clamp bolts after adjustment.

All Others – Place wheels in straight-ahead position, then make sure steering wheel and steering gear are also in straight-ahead position. Adjust toe-in by varying the length of steering side rods (tie rods). Loosen lock nuts and rotate rods evenly until toe-in is within specifications.

Toe-In Specifications①

Application	Side Rod Length② In. (mm)	Tie Rod Length③ In. (mm)
200SX	2.8 (71)	.....
210	12.4 (315)	.....
280ZX		
Man. Steering	1.16 (29.5)	.....
Power Steering	.....	14.42 (366.3)
310	5.24 (133)	.....
510	5.0 (127)	.....
810	1.42 (43)	.....
Pickup		
2-WD	.....	13.07 (332)
4-WD	.....	10.83 (275)

① – Pre-alignment adjustments if side rods or tie rods have been disassembled. For final adjustment specifications, see Wheel Alignment Specifications in this section.
② – From side rod lock nut-to-boot end of side rod.
③ – From center-to-center of tie rod ends.

FIAT

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

Brava & Strada – If caster is not to specifications, raise and support front of vehicle. Remove stabilizer bar (strut rod) to control arm nut and disconnect control arm from body. Remove end of stabilizer bar (strut rod) from control arm. To adjust caster, additon of shims between end of stabilizer bar (strut rod) and rubber pad of control arm will decrease caster angle. Removal of shims will increase caster angle. Reverse removal procedure and recheck caster.

Spider 2000 – 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.

X19 — If caster is not within specifications, adjust by adding or subtracting shims located between strut rod and strut rod support.

CAMBER

Brava & Strada (Front) – Camber is preset at factory and cannot be adjusted. If not to specifications, check suspension for wear or damage and repair or replace components as necessary.

Strada (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, remove equal number of shims on both bolts attaching control arm to body. To decrease camber, add an equal number of shims on both bolts. Reverse removal procedure and recheck camber.

Spider 2000 – If camber is not within specifications, adjust by changing amount of 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. To decrease camber, add an equal amount of shims to both studs. Reverse removal procedure and check camber.

NOTE – *Adding or removing equal amount of shims will not affect caster.*

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

TOE-IN

NOTE – *Lengthen tie rod to toe wheel in and shorten tie rod to toe wheel out.*

Brava, Strada & X1/9 (Front) – Place front wheels in straight-ahead position. If toe-in is not to specifications, loosen sleeve locking nut on tie rods. To adjust, rotate tie rod until correct toe-in specifications are obtained. Hold tie rod in position and lock nut against tie rod sleeve.

Spider 2000 – Place front wheels in straight-ahead position. If toe-in is not within specifications, loosen 4 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.*

Strada (Rear) – If rear toe-in is not to 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

FIAT (Cont.)

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 toe-in, add shims to front screw or remove shims from rear screw.

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 top of wheel opening to ground. If front height measurement is not within specifications, check rear height before attempting to repair front suspension. See *Riding Height Specifications table.*

Riding Height Specifications

Application	Front In. (mm)	Rear In. (mm)
Accord		
LX	25.2 (639)	23.7 (603)
Hatchback	25.6 (651)	23.7 (603)
Sedan	25.4 (646)	23.7 (603)
Civic		
Hatchback	24.8 (631)	24.4 (620)
Wagon	25.1 (638)	25.7 (653)
Sedan	24.9 (632)	24.4 (620)
Prelude	24.4 (620)	24.2 (615)

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 – 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 – To adjust toe-in, loosen lock nuts on radius arm adjusting bolts. Rotate adjusting bolt until toe is within specifications, then tighten lock nuts. On Accord models, each notch on cam plate is equal to .20" (5 mm). On Civic models, each notch on cam plate is equal to .63" (16 mm). On Prelude models, each notch on cam plate is equal to .60" (15 mm).

NOTE – *Notches on cam plate are for reference only. Do not use notches to equalize adjustments on rear radius rods.*

ISUZU

ADJUSTMENT

TIRE INFLATION (COLD)

Before attempting to check and/or adjust wheel alignment, make sure tires are properly inflated. Refer to owner's manual for manufacturer's specifications. Check front end for loose parts and front coil springs for correct riding height.

CASTER

Pickup — Caster angle is set by varying length of strut rod, by loosening and turning lock nuts.

All Other Models — Caster is not adjustable. If caster is not within specifications, check suspension components as necessary to bring caster into specifications.

CAMBER

Pickup — Camber is adjusted by adding or subtracting equal amount of shims from front and rear of bolts on upper control arm.

All Other Models — Camber may be adjusted by removing the upper ball joint, rotating it 180° and reinstalling ball joint. Approximately 1° of camber may be obtained.

TOE-IN

All Models — To adjust toe-in, center steering wheel, loosen lock nuts on tie rods and turn tie rods until toe-in is within specifications. Tighten tie rod lock nuts.

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

XJ6 (Front) – 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. Measure distance between center of outer headlight and ground on both sides of vehicle. Height should be 24.6" (611 mm) minimum. To adjust height, install or remove spring spacers from front coil springs.

JAGUAR (Cont.)

NOTE – *Spring spacers are 1/8" (3.2 mm) thick and will change riding height approximately 5/16" (7.9 mm).*

XJ6 (Rear) – Check that vehicle is full of fuel, oil and water, and that tires are properly inflated. Roll vehicle forward 3 car lengths to settle rear suspension system. Measure distance between lower surface of rear crossmember and ground on both sides of vehicle. Correct height should be 7.2-7.7" (183-195 mm). If height is not within specifications, replace all 4 rear springs.

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, fabricate 2 setting tools as shown in *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.

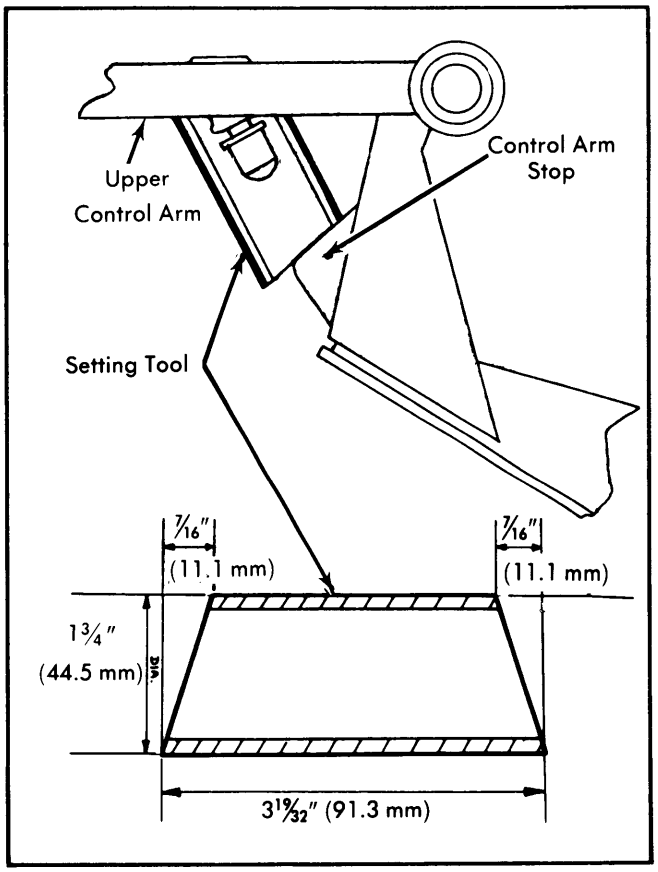

Fig. 1 Dimensions for Fabricating Setting Tools

3) Compress rear suspension and install 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.

CASTER

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

XJ6 – 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.

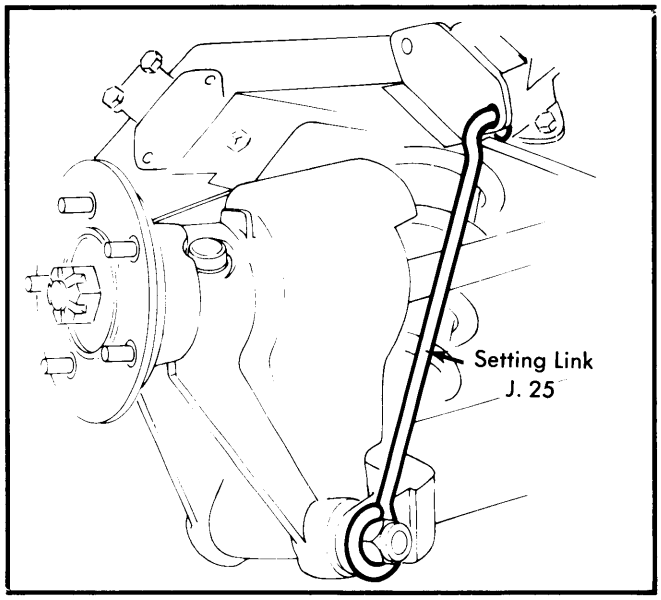

Fig. 2 Rear Suspension in Locked Position with Special Tool

CAMBER

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

XJ6 (Front) – Place wheels in straight-ahead position. Measure camber angle. Make sure front wheels are within 1/4° of each other. Adjustment is accomplished by adding or subtracting shims. See *Fig. 3*. Adding shims increases camber angle. Make sure same number of shims are used on each bolt.

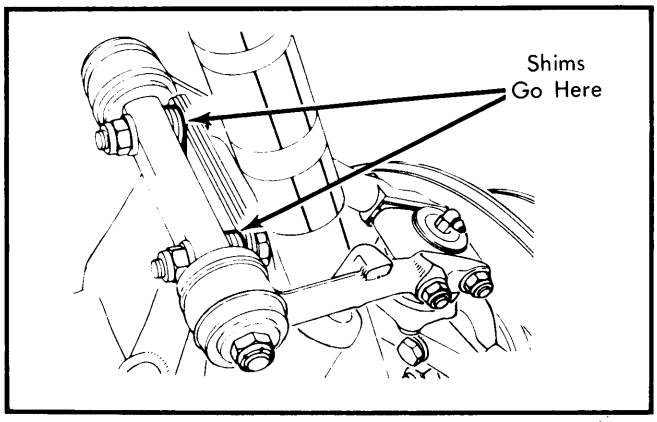

Fig. 3 Shim Placement for Front Camber Angle Adjustment

XJ6 (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 (J. 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.