

## CHRYSLER CORP. IMPORTS (Cont.)

the factory. If camber is not within specifications, check suspension components for damage.

### TOE-IN

**Arrow, Champ & Colt Hatchbacks** — Position wheels in straight-ahead position. If toe-in is not to specifications, loosen locking nuts on tie rod turnbuckles. Rotate buckles until toe-in is within specifications. Tighten lock nuts. Adjustment must be made equally to both sides of vehicle.

**All Others** — Position wheels in straight-ahead position. If toe-in is not to specifications, loosen locking nut on left tie rod turnbuckle. Rotate buckle until toe-in is within specifications. Tighten lock nut.

**NOTE** — After adjusting toe-in, check difference in lengths of left and right tie rods. If difference exceeds .20" (5 mm), remove right tie rod and adjust length until difference is .20" (5 mm) or less.

## COURIER

### ADJUSTMENT

### TOE-IN

#### TIRE INFLATION

Before attempting caster or camber adjustments, ensure tires are correctly inflated. Specifications are located on glove box door; especially consider radial tires, they require a different pressure than conventional tires.

**NOTE** — Vehicle must be unloaded, except fuel, water, and oil should be at their proper levels.

#### CASTER

To adjust caster, adjust shims between upper control arm and frame or turn control arm shaft until correct specifications are obtained.

#### CAMBER

To adjust camber, adjust shims between upper control arm and frame until correct specifications are obtained. Shims are available in the following sizes: .039" (1 mm), .063" (1.6 mm), .079" (2 mm) and .126" (3.2 mm).

1) Raise vehicle until front wheels clear ground. Turn wheel by hand and scribe a line in center of each tire tread. Measure distance between marked lines in front of front wheel and at rear of front wheel. Both measurements must be taken at equal distances from ground.

2) If distance between wheels at rear is greater than that at front, but within specifications, adjustment is correct. If adjustment is wrong, loosen clamp bolts and adjust tie rod to specifications.

**NOTE** — Tighten clamping bolts with bolts horizontal and below steering link to prevent interference with center steering link.

## DATSUN

### ADJUSTMENT

### CAMBER

#### TIRE INFLATION (COLD)

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

#### CASTER

**Pickup** — Caster is adjusted by increasing or decreasing thickness of shims inserted between upper link spindle and upper link mounting bracket. Caster adjustment affects camber adjustment, if you change caster specification, camber specification is also changed.

**NOTE** — Total thickness of shims must be within .236" (6.0 mm) and must not collectively total more than 3 individual shims. Difference of total thickness between front and rear must be within .079" (2.0 mm).

**All Others** — Caster 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.

**Pickup** — Camber is adjusted by increasing or decreasing thickness of shims inserted between upper link spindle and upper link mounting bracket. If you change camber adjustment you also change caster adjustment.

**NOTE** — Total thickness of shims must be within .236" (6 mm) and must not collectively total more than 3 individual shims. Difference of total thickness between front and rear shims must be within .079" (2 mm).

**All Others** — 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.

#### TOE-IN

**810** — Place front wheel facing straight ahead. Ensure steering gear faces same direction. Adjust tie rod (tie rod) so that steering gear side has a distance or 14.35" (364.5 mm) bet-

# Wheel Alignment

## 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.

Normal Toe-In Specifications <sup>①</sup>		
Application	Distance Between Lock Nuts	Distance Between Ball Joints
210 .....	12.4" (315 mm) .....	.....
280ZX		
Man. Steering ....	1.16" (29.5 mm) .....	.....
Power Steering .....	.....	14.42" (366.3 mm)
310 .....	5.24" (133 mm) .....	.....
510 .....	5.0" (127 mm) .....	.....
Pickup .....	.....	13.07" (332 mm)

① — Basic adjustment specifications. For final adjustment specifications, see Wheel Alignment Specifications in this section

## 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, addition 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.

**X1/9** — If caster is not to specifications, adjust by adding or removing shims located between stabilizer bar and stabilizer bar 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 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 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 camber, remove equal number of shims from both screws. 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

**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 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.