

# WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

## 1993 Toyota Celica

1993 WHEEL ALIGNMENT  
Toyota Specifications & Procedures

Celica

### WHEEL ALIGNMENT PROCEDURES

#### TURNING ANGLE

Turn steering wheel fully right and then left, and observe turning radius on both wheels. If turning radius is incorrect, inspect and replace any damaged or worn front suspension components. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article.

#### CAMBER ADJUSTMENT

Front Suspension

1) Check tires for wear and improper inflation. Inspect front wheel bearings for looseness. Check wheel runout. Wheel runout should not exceed 0.04" (1.0 mm).

2) Inspect front suspension components for looseness. Ensure front shock absorbers work properly. Measure vehicle riding height. See RIDING HEIGHT ADJUSTMENT article in this section.

3) Measure camber of both front wheels. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article. If camber is not within specification, inspect and replace any damaged or worn front suspension components. Camber is not adjustable.

Rear Suspension

Check tires for wear and improper inflation. Measure camber of both rear wheels. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article. If camber is not within specification, inspect and replace any damaged or worn rear suspension components. Camber is not adjustable.

#### CASTER ADJUSTMENT

Front Suspension

1) Measure riding height, camber, and steering axis inclination. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article. If adjustment is necessary, see appropriate adjustment procedure.

2) Measure caster of both front wheels. If caster is not within specification, inspect and replace any damaged or worn front suspension components. Caster is not adjustable.

#### STEERING AXIS/KING PIN INCLINATION

Measure riding height and camber. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article. If adjustment is necessary, see appropriate adjustment procedure. Measure steering axis inclination of both front wheels. If steering axis inclination is not within specification, inspect and replace any damaged or worn front suspension components. See WHEEL ALIGNMENT SPECIFICATIONS table at the end of this article. Steering axis/king pin inclination is not adjustable.

#### TOE-IN ADJUSTMENT

### Front Suspension

Measure riding height, camber, steering axis inclination, and caster. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article. If adjustment is necessary, see appropriate adjustment procedure. Set front wheels to straight-ahead position. Bounce both ends of vehicle several times to settle suspension. Measure toe-in. If necessary, adjust toe-in by changing length of tie rods.

### Rear Suspension

1) Measure rear camber. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article. If adjustment is necessary, see appropriate adjustment procedure.

2) Bounce both ends of vehicle several times to settle suspension. On Celica, measure distance between each wheel rim and corner of cam bracket. See Fig. 1. Ensure both distances are the same.

3) If toe-in is not within specification, adjust toe-in by rotating rear toe adjuster cam. See WHEEL ALIGNMENT SPECIFICATIONS table at end of article.

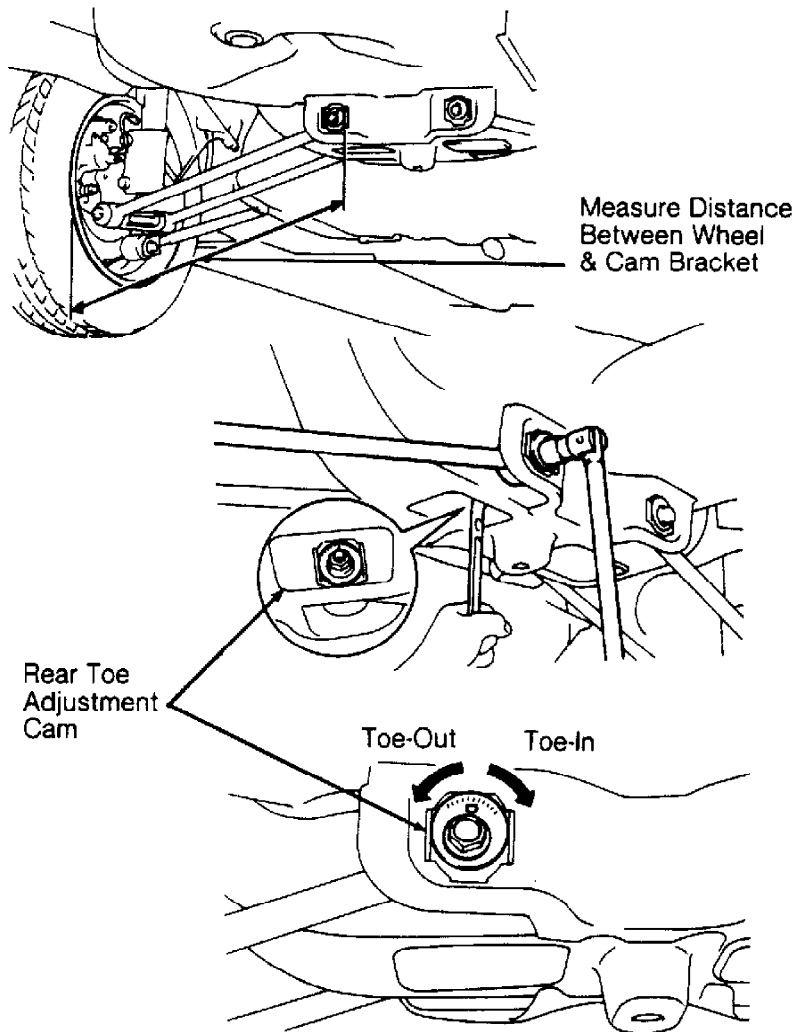


Fig. 1: Adjusting Rear Toe-In  
Courtesy of Toyota Motor Sales, U.S.A., Inc.

## TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. Lbs. (N.m)
Rear Toe Adjuster Cams .....	83 (113)
Tie Rod Lock Nuts .....	41 (56)
Wheel Lug Nuts .....	76 (103)

**WHEEL ALIGNMENT SPECIFICATIONS**

WHEEL ALIGNMENT SPECIFICATIONS TABLE

Application	Preferred	Range
Camber (1)		
Front .....	-0.17 .....	-0.92 To 0.58
Rear .....	-1.25 .....	-2 To -0.5
Caster (1)	0.92 .....	0.17 To 1.67
Steering Axis		
Inclination (1) .....	14.17 .....	.....
Toe-In (2)		
Front .....	0 (0) ..	-0.08 To 0.08 (-2 To 2)
Rear .....	0.2 (5) ...	0.12 To 0.28 (3 To 7)
Toe-In (1)		
Front .....	0 .....	-0.2 To 0.2
Rear .....	0.5 .....	0.3 To 0.7
Toe-Out On Turns (1)		
Inner .....	33.5 .....	.....
Outer .....	29.5 .....	.....

(1) - Measurement in degrees.

(2) - Measurement in inches (mm).