

## FRONT WHEEL ALIGNMENT INSPECTION

SA0R3-04

### 1. MEASURE VEHICLE HEIGHT

Tire size	Front*1 mm (in.)	Rear*2 mm (in.)
P215/60R16 94V	245 (9.63)	226 (8.90)
225/55R16 94V	240 (9.45)	221 (8.70)
235/45ZR17	238 (9.37)	219 (8.62)

\*1: Front measuring point

Measure from the ground to the center of the lower suspension arm mounting bolt.

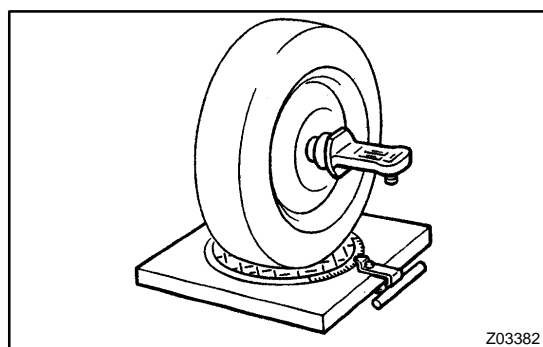
\*2: Rear measuring point

Measure from the ground to the center of the No.2 lower suspension arm mounting bolt.

#### NOTICE:

**Before inspecting the wheel alignment, adjust the vehicle height to the specification.**

If the vehicle height is not within the specification, try to adjust it by pushing down on or lifting the body.



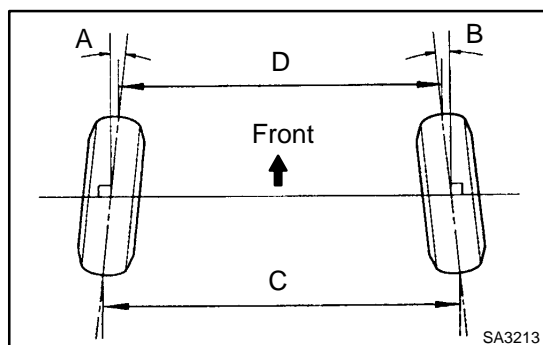
### 2. INSTALL CAMBER-CASTER-KINGPIN GAUGE ONTO WHEEL ALIGNMENT TESTER

Follow the specific instructions of the equipment manufacturer.

### 3. INSPECT CAMBER, CASTER AND STEERING AXIS INCLINATION

Camber	Left-right error	$-0^{\circ}16' \pm 30'$ ( $-0.27^{\circ} \pm 0.5^{\circ}$ ) 30' ( $0.5^{\circ}$ ) or less
Caster	Left-right error	$7^{\circ}33' \pm 30'$ ( $7.55^{\circ} \pm 0.5^{\circ}$ ) 30' ( $0.5^{\circ}$ ) or less
Steering axis inclination	Left-right error	$8^{\circ}52' \pm 30'$ ( $8.87^{\circ} \pm 0.5^{\circ}$ ) 30' ( $0.5^{\circ}$ ) or less

If the camber is not within the specification, adjust it by adjusting cam.



### 4. INSPECT TOE-IN

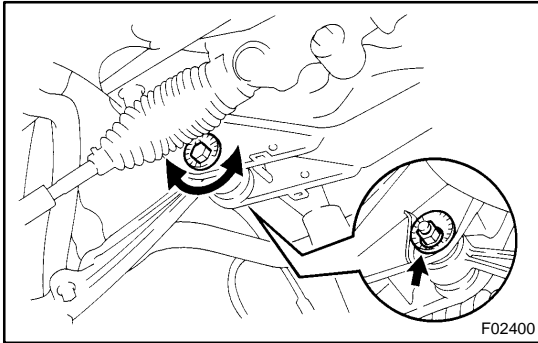
Toe-in (total)	A + B: $0^{\circ}09' \pm 12'$ ( $0.15^{\circ} \pm 0.2^{\circ}$ ) C - D: $1.5 \pm 2$ mm ( $0.06 \pm 0.08$ in.)
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If the toe-in is not within the specification, adjust it at the tie rod end.

## 5. ADJUST CAMBER

### HINT:

- After adjusting the camber, inspect the caster and toe-in.
- Try adjusting the camber to the center value of the specification.



- Loosen the camber adjusting cam nut of the lower suspension arm.
- Turn the camber adjusting cam of the lower suspension arm and adjust camber.

### HINT:

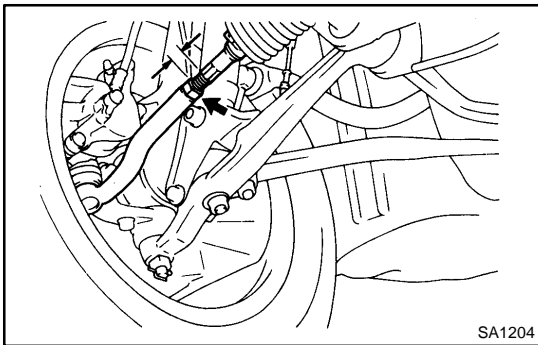
Camber changes about 5' (0.08°) with each graduation of the adjusting cam.

- Torque the camber adjusting cam nut of lower suspension arm.

**Torque: 172 N·m (1,755 kgf-cm, 127 ft-lbf)**

## 6. ADJUST TOE-IN

- Remove the boot clips.



- Loosen the tie rod end lock nuts.
- Turn the left and right rack ends an equal amount to adjust the toe-in.

### HINT:

- Try to adjust the toe-in to the center value.
- Make sure that the lengths of the left and right rack ends are same.

**Rack end length difference: 1.5 mm (0.059 in.) or less**

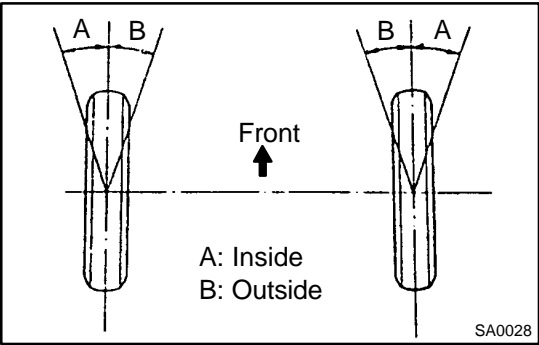
- Torque the tie rod end lock nuts.

**Torque: 56 N·m (570 kgf-cm, 41 ft-lbf)**

- Place the boot on the seat and clamp it.

### HINT:

Make sure that the boots are not twisted.



7. INSPECT WHEEL ANGLE

Turn the steering wheel fully, and measure the turning angle.

Inside wheel	38°51' (37°51' – 40°51') 38.85° (36.85° – 39.85°)
Outside wheel (Reference)	32°08' 32.13°

If the wheel angles differ from the standard of the specification, inspect the toe-in.