

FRONT WHEEL ALIGNMENT INSPECTION

SA0R3-03

1. MEASURE VEHICLE HEIGHT

Tire size	Front* ¹ mm (in.)	Rear* ² mm (in.)
225/55R16 94V	239 (9.41)	225 (8.86)
235/45ZR17	237 (9.33)	223 (8.78)

*¹: Front measuring point

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

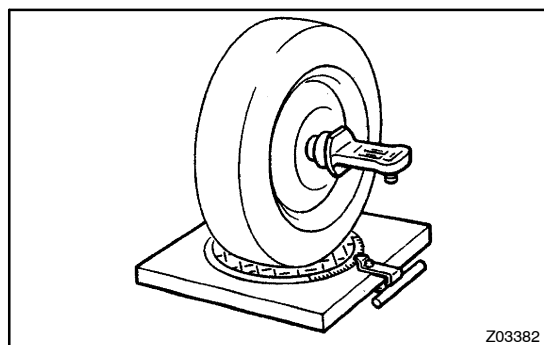
*²: Rear measuring point

Measure the distance 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.



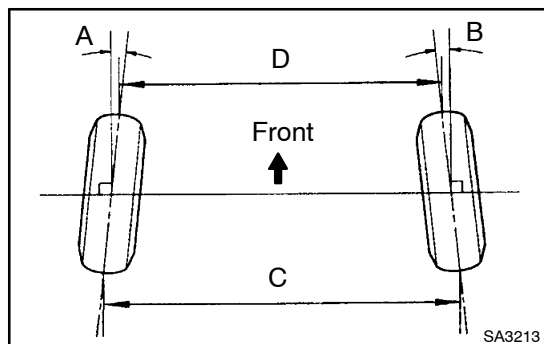
2. INSTALL CAMBER-CASTER-KINGPIN GAUGE ONTO WHEEL ALIGNMENT TESTER

Follow the specific instructions of the equipment manufacturer.

3. INSPECT CAMBER, CASTER AND STEERING AXIS INCLINATION

Camber	$-0^{\circ}18' \pm 30'$ ($-0.3^{\circ} \pm 0.5^{\circ}$)
Left-right error	30' (0.5°) or less
Caster	$7^{\circ}28' \pm 30'$ ($7.47^{\circ} \pm 0.5^{\circ}$)
Left-right error	30' (0.5°) or less
Steering axis inclination	$8^{\circ}54' \pm 30'$ ($8.9^{\circ} \pm 0.5^{\circ}$)
Left-right error	30' (0.5°) or less

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



4. INSPECT TOE-IN

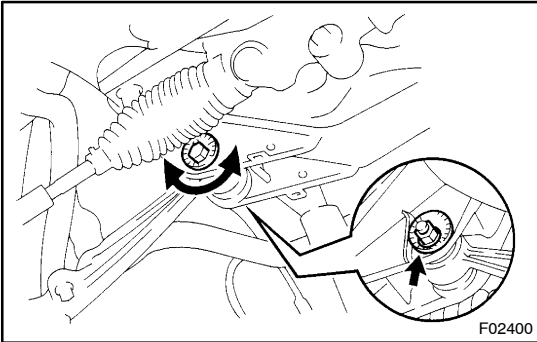
Toe-in (total)	A + B: $0^{\circ}09' \pm 12'$ ($0.15^{\circ} \pm 0.2^{\circ}$) C - D: 1.5 ± 2 mm (0.06 ± 0.08 in.)
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If the toe-in is not within the specification, adjust it at the rack ends.

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.



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

HINT:

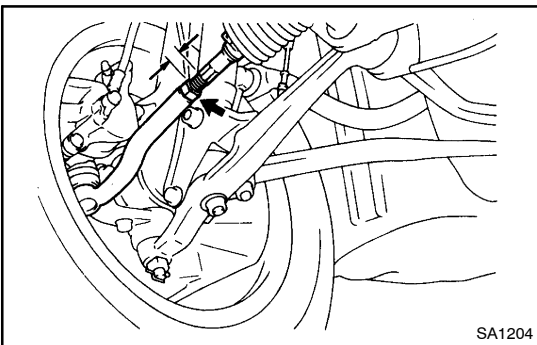
Camber changes about 5' (0.08°) with each graduation of the adjusting cam.

- 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.



SA1204

- 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

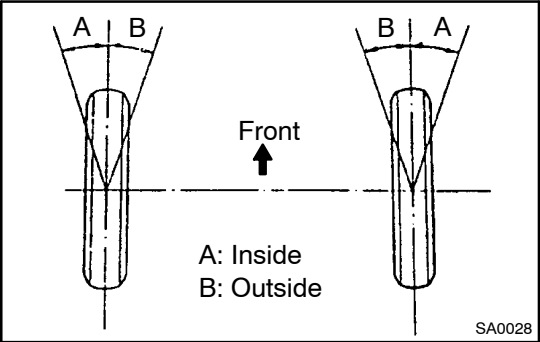
- Torque the tie rod end lock nuts.

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' (36°51' – 39°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.