

C8428

(Front Wheel Alignment) INSPECTION AND ADJUSTMENT OF FRONT WHEEL ALIGNMENT

1. INSTALL WHEEL ALIGNMENT EQUIPMENT

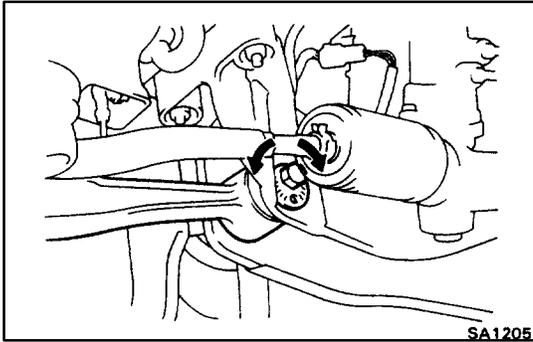
Follow the specific instructions of the equipment manufacturer.

2. CHECK CAMBER, CASTER AND STEERING AXIS INCLINATION

Inspection standard:

	Camber	Caster	Steering axis inclination
w/o Air suspension	$0^{\circ}05' \pm 45'$	$9^{\circ}15' \pm 45'$	$8^{\circ}40' \pm 45'$
w/ Air suspension	$-0^{\circ}05' \pm 45'$	$9^{\circ}50' \pm 45'$	$8^{\circ}50' \pm 45'$

If the measurement is not within the specification, adjust it by the following procedure.



SA1205

3. ADJUST CAMBER

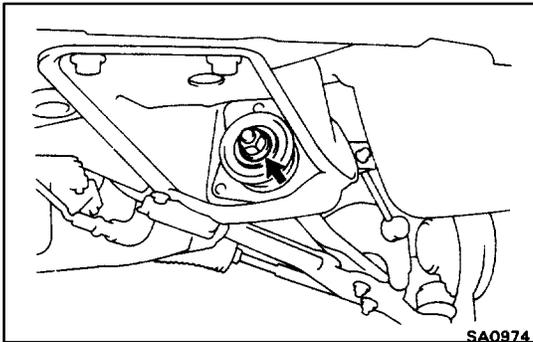
- (a) Loosen the camber adjusting cam nut.
- (b) Turn the camber adjusting cam and adjust camber.

Adjustment standard:

w/o Air suspension	$0^{\circ}05' \pm 30'$
w/ Air suspension	$-0^{\circ}05' \pm 30'$
Left-right error	30' or less

NOTICE: If the camber has been adjusted, inspect the caster and toe-in.

HINT: Camber changes about $7'30''$ with each graduation of the cam.



SA0874

4. ADJUST CASTER

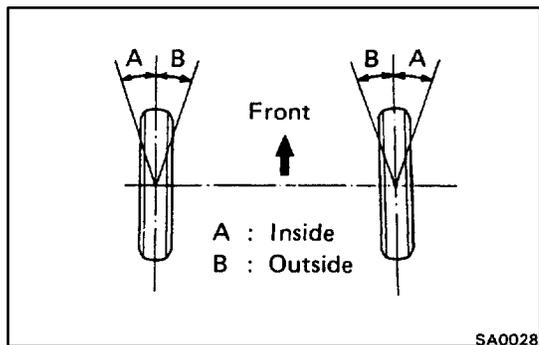
Loosen one of the two nuts on the strut bar cushion and tighten the nut on the opposite side by the same amount to change the length of the strut bar and adjust the caster.

Adjustment standard:

w/o Air suspension	$9^{\circ}15' \pm 30'$
w/ Air suspension	$9^{\circ}50' \pm 30'$
Left-right error	30' or less

NOTICE: Nuts should not be turned more than one rotation in one turn.

HINT: The caster changes approximately 10' for every rotation of the nut.



5. INSPECT WHEEL ANGLE

Wheel angle:

Inside wheel $39^{\circ}20' +1^{\circ}$
 -2°

Outside wheel (reference)

w/o Air suspension $32^{\circ}40'$

w/ Air suspension $32^{\circ}30'$

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

6. INSPECT TOE-IN

Measure the toe-in with a toe-in gauge in the following procedure.

- Bounce the vehicle up and down to stabilize the suspension.
- Move the vehicle forward about 5 m (16.4 ft) with the front wheel in the straight-ahead position on a level place.
- Mark the center of each rear tread and measure the distance between the marks on the right and left tires.
- Advance the vehicle until the marks on the rear sides of the tires come to the measuring heights of the gauge on the front side.

HINT: If the tire rolls too far, repeat from step (b).

- Measure the distance between the marks on the front of the tires.

Inspection standard:

w/o Air suspension 2 ± 2 mm (0.08 ± 0.08 in.)

w/ Air suspension 1 ± 2 mm (0.04 ± 0.08 in.)

If the toe-in is not within the specification, adjust it at the tie rod end.

7. ADJUST TOE-IN

- Remove the boot clips.
- Loosen the tie rod end lock nut.
- Turn the left and right tie rod ends an equal amount to adjust the toe-in.

Adjustment standard:

w/o Air suspension 2 ± 1 mm (0.08 ± 0.04 in.)

w/ Air suspension 1 ± 1 mm (0.04 ± 0.04 in.)

HINT: Measure that the lengths of the left and right tie rod ends length are the same.

Tie rod end length left-right error:

Less than 1.0 mm (0.039 in.)

- Torque the tie rod end lock nuts.

Torque: 570 kg-cm (41 ft-lb, 56 N-m)

- Place the boot on the seat and clamp it.

HINT: Make sure that the boots are not twisted.

8. CHECK SIDE SLIP (REFERENCE ONLY)

Side slip: 3.0 mm/m (0.118 in./3.3 ft) or less

