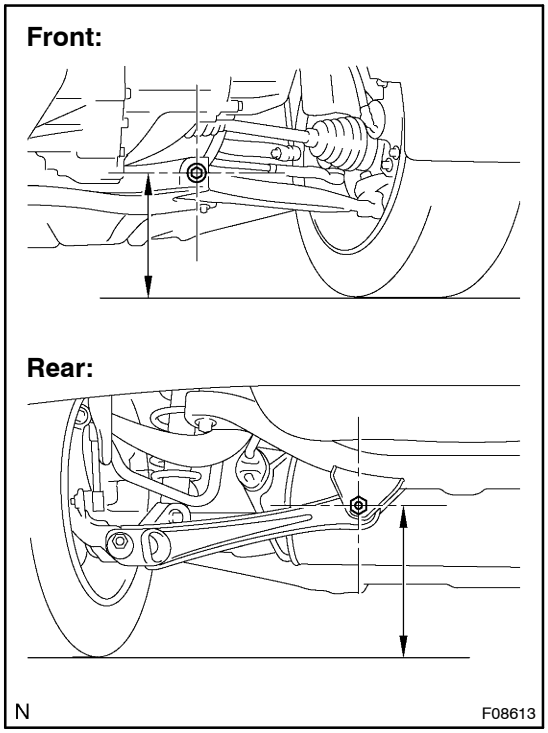


FRONT WHEEL ALIGNMENT

SA1CK–07

INSPECTION

1. MEASURE VEHICLE HEIGHT

Vehicle height:

Europe:

Tire size	Front*1 mm (in.)	Rear*2 mm (in.)
195/60R15	198 (7.80)	239 (9.41)
205/50R16	197 (7.76)	236 (9.29)

Australia:

Tire size	Front*1 mm (in.)	Rear*2 mm (in.)
205/55R15	197 (7.76)	239 (9.41)
205/50R16	200 (7.87)	237 (9.33)

*1: Front measuring point

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

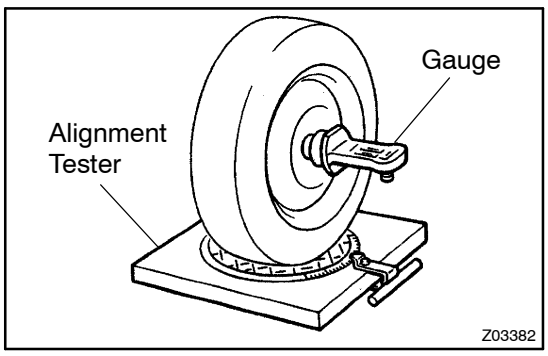
*2: Rear measuring point

Measure the distance from the ground to the center of the rear side lower suspension arm suspension member side set bolt.

NOTICE:

Before inspecting the wheel alignment, adjust the vehicle height to the specified value.

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



2. INSTALL CAMBER–CASTER–KINGPIN GAUGE OR POSITION VEHICLE ON WHEEL ALIGNMENT TESTER

Follow the specific instructions of the equipment manufacturer.

3. INSPECT CAMBER, CASTER AND STEERING AXIS INCLINATION

Camber, caster and steering axis inclination:

Europe:

Tire size: 195/60R15	
Camber	−0°25' ± 45' (−0.42° ± 0.75°)
Right−left error	45' (0.75°) or less
Caster	2°08' ± 45' (2.13° ± 0.75°)
Right−left error	45' (0.75°) or less
Steering axis inclination	13°04' ± 45' (13.07° ± 0.75°)
Right−left error	45' (0.75°) or less
Tire size: 205/50R16	
Camber	−0°26' ± 45' (−0.43° ± 0.75°)
Right−left error	45' (0.75°) or less
Caster	2°05' ± 45' (2.08° ± 0.75°)
Right−left error	45' (0.75°) or less
Steering axis inclination	13°07' ± 45' (13.12° ± 0.75°)
Right−left error	45' (0.75°) or less

Australia:

Camber	−0°23' ± 45' (−0.38° ± 0.75°)
Right−left error	45' (0.75°) or less
Caster	2°00' ± 45' (2.00° ± 0.75°)
Right−left error	45' (0.75°) or less
Steering axis inclination	13°02' ± 45' (13.03° ± 0.75°)
Right−left error	45' (0.75°) or less

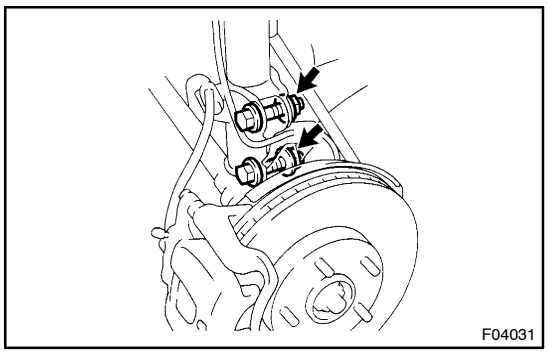
If the caster and steering axis inclination are not within the specified values, after the camber has been correctly adjusted, recheck the suspension parts for damaged and/or worn out parts.

4. ADJUST CAMBER

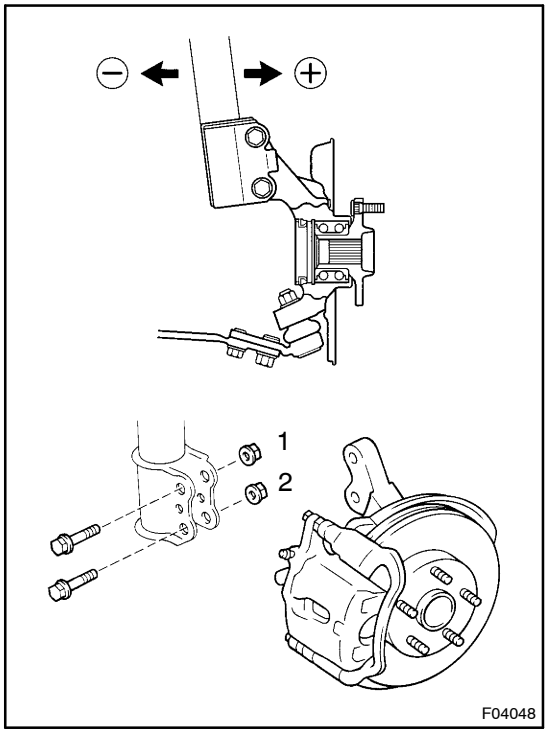
NOTICE:

After the camber has been adjusted, inspect the toe−in.

(a) Remove the front wheel.



(b) Remove the 2 nuts on the lower side of the shock absorber.
(c) Coat the threads of the nuts with engine oil.
(d) Temporarily install the 2 nuts.



(e) Adjust the camber by pushing or pulling the lower side of the shock absorber in the direction in which the camber adjustment is required.

(f) Tighten the nuts.
Torque: 153 N·m (1,560 kgf·cm, 113 ft·lbf)

(g) Install the front wheel.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

(h) Check the camber.

HINT:

- Try to adjust the camber to the center of the specified value.
- Adjusting value for the set bolts is 6' – 30' (0.1° – 0.5°).

If the camber is not within the specified value, using the following table, estimate how much additional camber adjustment will be required, and select the camber adjusting bolt.

Bolt / Adjusting Value	Set Bolt		Adjusting Bolt					
	90105–15001		90105–15004		90105–15005		90105–15006	
			1 Dot		2 Dots		3 Dots	
	11		•11		•11		•11	
	1	2	1	2	1	2	1	2
15'	●			●				
30'	●					●		
45'	●							●
1°00'			●					●
1°15'					●			●
1°30'							●	●

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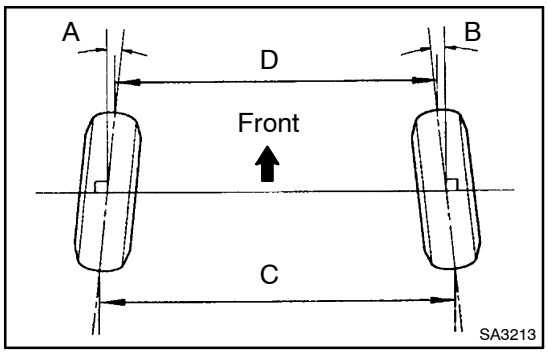
(i) Do the steps mentioned above again. Between step (b) and (c), replace 1 or 2 selected bolts.

HINT:

When replacing the 2 bolts, replace 1 bolt for each time.



5. INSPECT TOE–IN

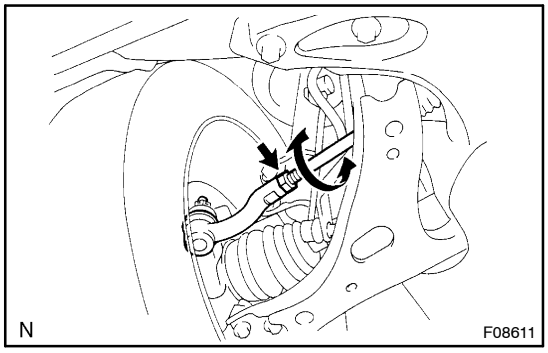
Toe–in:

Toe–in (total)	A + B: 0° ± 12' (0° ± 0.2°) C – D: 0 ± 2 mm (0 ± 0.08 in.)

If the toe–in is not within the specified value, adjust it at the rack ends.

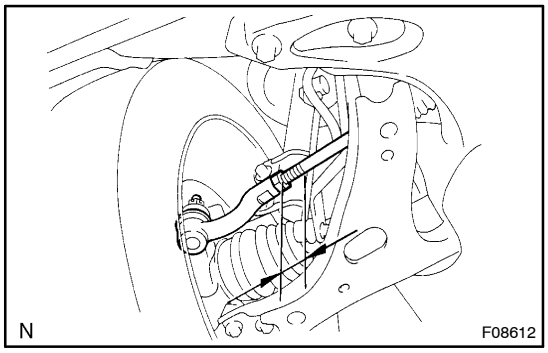
6. ADJUST TOE–IN

(a) Remove the rack boot set clips.



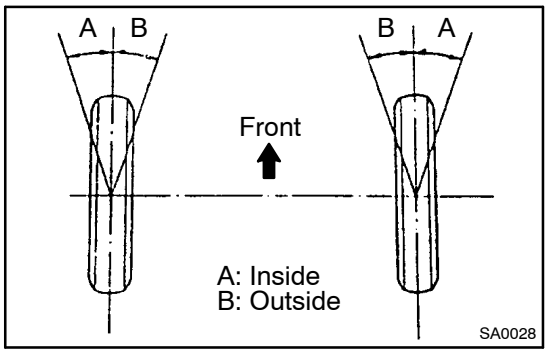
(b) Loosen the tie rod end lock nuts.
(c) Turn the right and left rack ends by an equal amount to adjust the toe–in.

HINT:
Try to adjust the toe–in to the center of the specified value.



(d) Make sure that the lengths of the right and left rack ends are the same.
Rack end length difference: 1.5 mm (0.059 in.) or less
(e) Torque the tie rod end lock nuts.
Torque: 74 N·m (750 kgf·cm, 54 ft·lbf)
(f) Place the boots on the seats and install the clips.

HINT:
Make sure that the boots are not twisted.



7. INSPECT WHEEL ANGLE

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

Wheel turning angle:

Europe:

Tire size: 195/60R15	
Inside wheel	38°46' ± 2° (38.77° ± 2°)
Outside wheel: Reference	33°24' (33.40°)
Tire size: 205/50R16	
Inside wheel	38°42' ± 2° (38.70° ± 2°)
Outside wheel: Reference	33°22' (33.37°)

Australia:

Inside wheel	38°48' ± 2° (38.80° ± 2°)
Outside wheel: Reference	33°26' (33.43°)

If the right and left inside wheel angles differ from the specified value, check the right and left rack end lengths.