

FRONT WHEEL ALIGNMENT INSPECTION

SA11U-05

1. MEASURE VEHICLE HEIGHT

Vehicle height (SEDAN):

(Great Britain sports package):

Front vehicle height	Rear vehicle height
72 mm (2.83 in.)	85 mm (3.35 in.)

(China):

Front vehicle height	Rear vehicle height
56 mm (2.20 in.)	66 mm (2.60 in.)

(Except Great Britain sports package and China):

Front vehicle height	Rear vehicle height
66 mm (2.60 in.)	66 mm (2.60 in.)

Vehicle height (WAGON):

(Great Britain sports package):

Front vehicle height	Rear vehicle height
72 mm (2.83 in.)	85 mm (3.35 in.)

(Except Great Britain sports package):

Front vehicle height	Rear vehicle height
66 mm (2.60 in.)	66 mm (2.60 in.)

Measuring points:

A: Ground clearance of the front No. 1 lower suspension arm mounting bolt center.

B: Ground clearance of the front wheel center.

C: Ground clearance of the rear wheel center.

D: Ground clearance of the No. 2 lower suspension arm mounting bolt (Suspension member side) tail center.

Vehicle height:

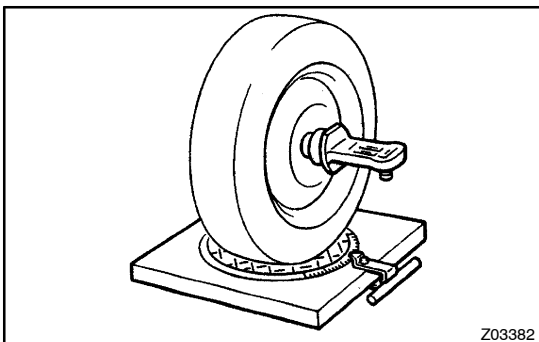
Front: B - A

Rear: C - D

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 (SEDAN):
(Great Britain sports package):**

Camber	Right-left error	$-0^{\circ}30' \pm 30'$ ($-0.5^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Caster	Right-left error	$6^{\circ}07' \pm 30'$ ($6.12^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Steering axis inclination	Right-left error	$9^{\circ}25' \pm 30'$ ($9.42^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less

(China):

Camber	Right-left error	$-0^{\circ}06' \pm 30'$ ($-0.10^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Caster	Right-left error	$5^{\circ}43' \pm 30'$ ($5.72^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Steering axis inclination	Right-left error	$9^{\circ}01' \pm 30'$ ($9.02^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less

(Except Great Britain sports package and China):

Camber	Right-left error	$-0^{\circ}21' \pm 30'$ ($-0.35^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Caster	Right-left error	$5^{\circ}46' \pm 30'$ ($5.77^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Steering axis inclination	Right-left error	$9^{\circ}16' \pm 30'$ ($9.27^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less

**Camber, caster and steering axis inclination (WAGON):
(Great Britain sports package):**

Camber	Right-left error	$-0^{\circ}30' \pm 30'$ ($-0.5^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Caster	Right-left error	$6^{\circ}07' \pm 30'$ ($6.12^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Steering axis inclination	Right-left error	$9^{\circ}25' \pm 30'$ ($9.42^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less

(Except Great Britain sports package):

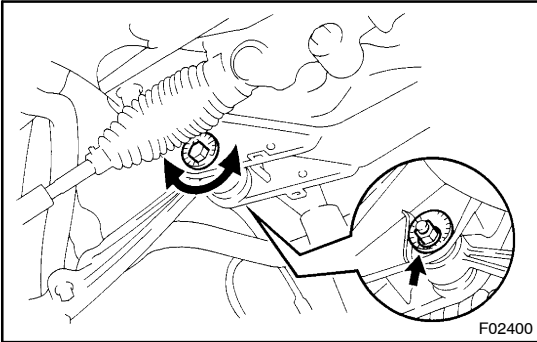
Camber	Right-left error	$-0^{\circ}21' \pm 30'$ ($-0.35^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Caster	Right-left error	$5^{\circ}46' \pm 30'$ ($5.77^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less
Steering axis inclination	Right-left error	$9^{\circ}16' \pm 30'$ ($9.27^{\circ} \pm 0.5^{\circ}$) 30' (0.5°) or less

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

4. ADJUST CAMBER

HINT:

After adjusting the camber, inspect the caster and toe-in.

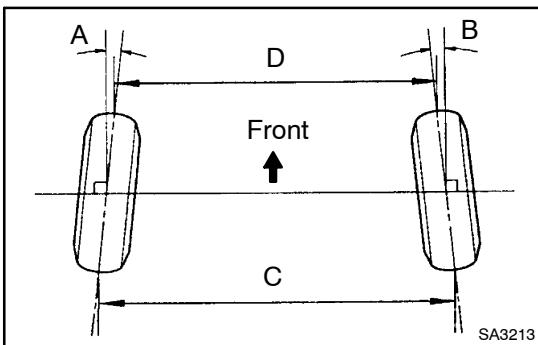


- (a) Loosen the camber adjusting cam nut of the No. 1 lower suspension arm.
- (b) Turn the camber adjusting cam of the No. 1 lower suspension arm and adjust the camber.

HINT:

- Try to adjust the camber to the center of the specified value.
 - Camber will change about 7.5' (0.13°) with each graduation of the adjusting cam.
- (c) Torque the camber adjusting cam nut of the No. 1 lower suspension arm.

Torque: 184 N·m (1,880 kgf·cm, 136 ft·lbf)



5. INSPECT TOE-IN

Toe-in:

Toe-in (total)	A + B: $0^{\circ}06' \pm 12'$ ($0.1^{\circ} \pm 0.2^{\circ}$) C - D: 1 ± 2 mm (0.04 ± 0.08 in.)
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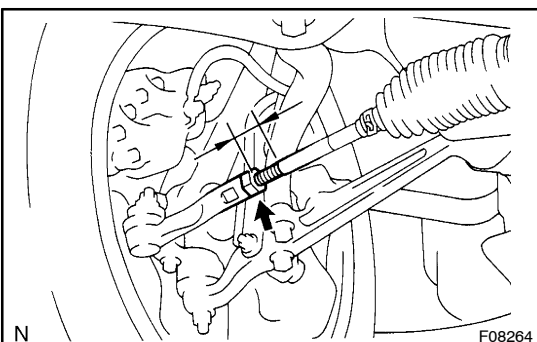
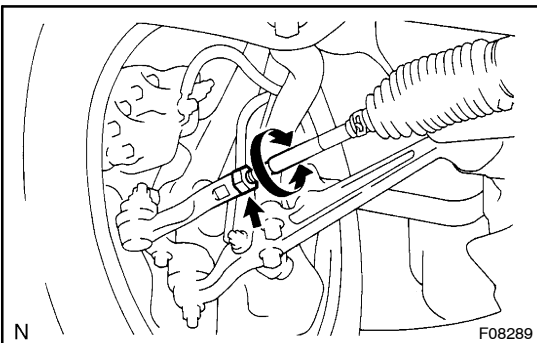
If the toe-in is not within the specified value, adjust it at the rack ends.

6. ADJUST TOE-IN

- (a) Using pliers, remove the boot 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:

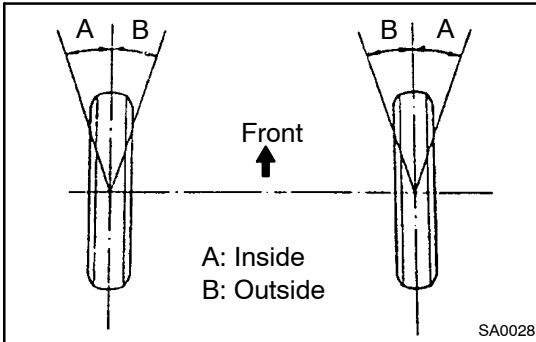
Try to adjust the toe-in to the center of the specified value.



- (d) Make sure that the lengths of the right and left rack ends are same.
Rack end length difference: 1.5 mm (0.059 in.) or less
- (e) Torque the tie rod end lock nuts.
Torque: 56 N·m (570 kgf·cm, 41 ft·lbf)
- (f) Place the boots on the seats and using pliers, 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 (SEDAN)

(Great Britain sports package):

Inside wheel	41°01' (39°01' - 42°01')
	41.02° (39.02° - 42.02°)
Outside wheel (Reference)	33°23'
	33.38°

(China):

Inside wheel	41°03' (39°03' - 42°03')
	41.05° (39.05° - 42.05°)
Outside wheel (Reference)	33°40'
	33.6°

(Except Great Britain sports package and China):

Inside wheel	41°02' (39°02' - 42°02')
	41.03° (39.03° - 42.03°)
Outside wheel (Reference)	33°30'
	33.5°

Wheel turning angle (WAGON)

(Great Britain sports package):

Inside wheel	41°01' (39°01' - 42°01')
	41.02° (39.02° - 42.02°)
Outside wheel (Reference)	33°23'
	33.38°

(Except Great Britain sports package):

Inside wheel	41°02' (39°02' - 42°02')
	41.03° (39.03° - 42.03°)
Outside wheel (Reference)	33°30'
	33.5°

If the right and left inside wheel angles differ from the specified value, inspect the toe-in.