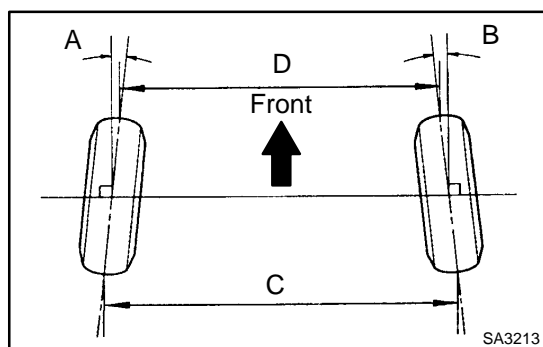
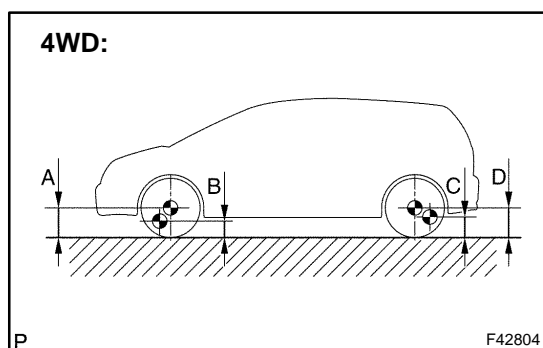
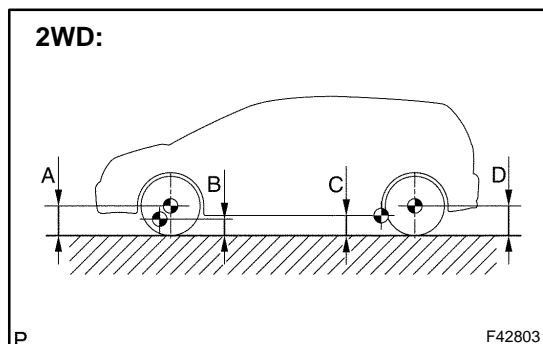


FRONT WHEEL ALIGNMENT

ADJUSTMENT

26081-02

1. INSPECT TIRE (See page 28-1)



2. MEASURE VEHICLE HEIGHT

Vehicle height:

2WD:

Front	A – B: 89 mm (3.50 in.)
Rear	D – C: 41 mm (1.61 in.)

4WD:

Front	A – B: 83 mm (3.27 in.)
Rear	D – C: 38 mm (1.50 in.)

Measuring points:

A: Ground clearance of front wheel center

B: Ground clearance of lower suspension arm front bolt center

C: (2WD):

Ground clearance of axle beam set bolt center

(4WD):

Ground clearance of rear lower suspension arm rear bolt center

D: Ground clearance of rear wheel center

NOTICE:

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

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

3. INSPECT TOE-IN

Toe-in:

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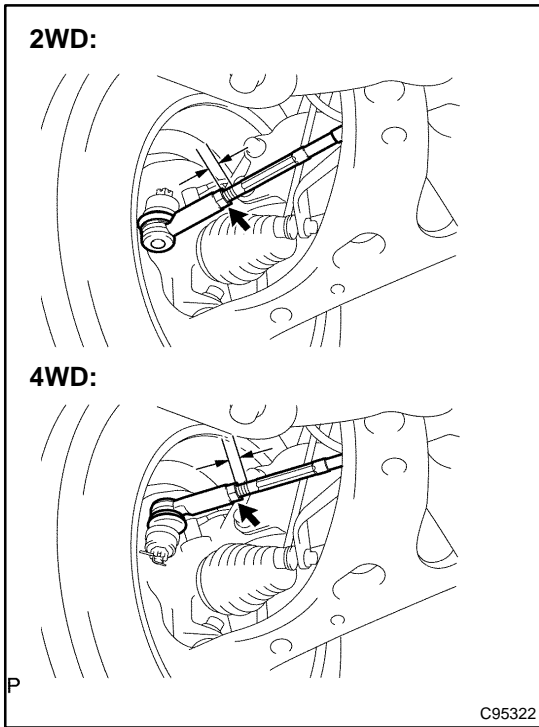
If the toe-in is not within the specified value, adjust it at the rack ends.

4. ADJUST TOE-IN

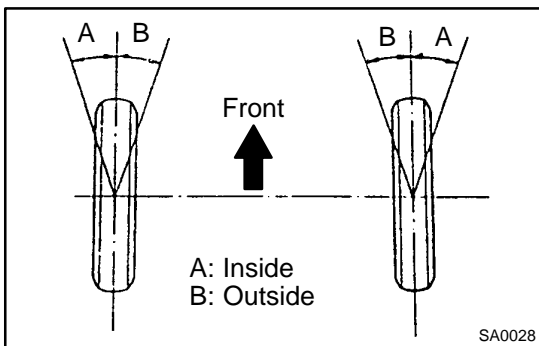
- Remove the rack boot set clips.
- Loosen the tie rod end lock nuts.
- Turn the right and left rack ends by an equal amount to adjust the toe-in.

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 (755 kgf·cm, 55 ft·lbf)
 - (f) Place the boots on the seats and install the clips.
- HINT:**
Make sure that the boots are not twisted.



5. INSPECT WHEEL ANGLE

- (a) Turn the steering wheel fully and measure the turning angle.

Wheel turning angle:

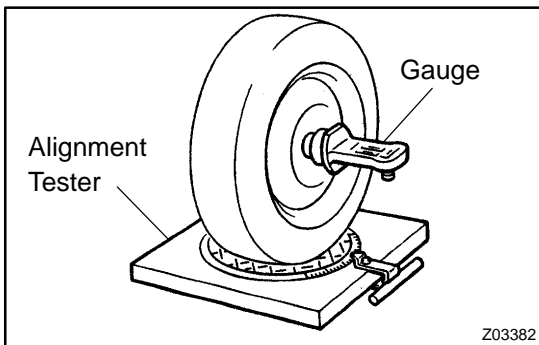
2WD:

Inside wheel	36° 40' (36.67°) ± 2°
Outside wheel: Reference	31° 53' (31.88°)

4WD:

Inside wheel	37° 03' (37.05°) ± 2°
Outside wheel: Reference	32° 02' (32.03°)

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



6. INSPECT CAMBER, CASTER AND STEERING AXIS INCLINATION

- (a) Install the camber-caster-kingpin gauge or position vehicle on wheel alignment tester.
- (b) Inspect the camber, caster and steering axis inclination.

Camber, caster and steering axis inclination:

2WD

Camber	Right-left error	-0°34' ± 45' (-0.57° ± 0.75°) 45' (0.75°) or less
Caster	Right-left error	2°47' ± 45' (2.78° ± 0.75°) 45' (0.75°) or less
Steering axis inclination	Right-left error	12°28' ± 45' (12.47° ± 0.75°) 45' (0.75°) or less

4WD

Camber		$-0^{\circ}29' \pm 45'$ ($-0.48^{\circ} \pm 0.75^{\circ}$)
	Right-left error	45' (0.75°) or less
Caster		$2^{\circ}46' \pm 45'$ ($2.77^{\circ} \pm 0.75^{\circ}$)
	Right-left error	45' (0.75°) or less
Steering axis inclination		$12^{\circ}13' \pm 45'$ ($12.22^{\circ} \pm 0.75^{\circ}$)
	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, re-check the suspension parts for damaged and/or worn out parts.

7. ADJUST CAMBER**NOTICE:**

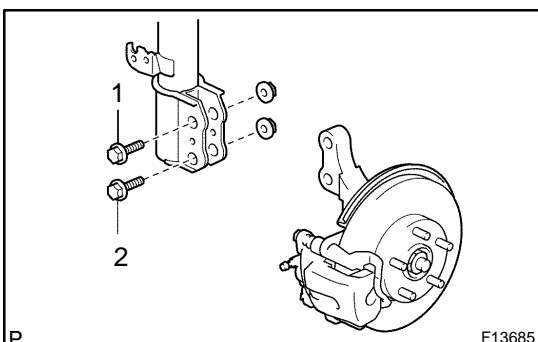
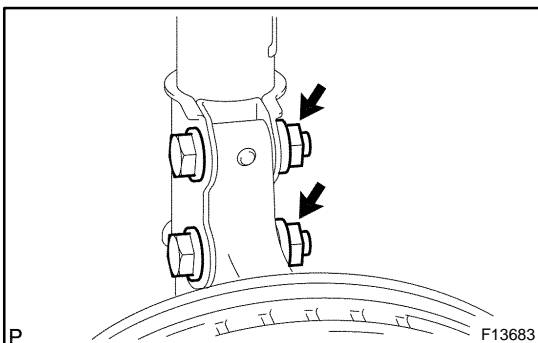
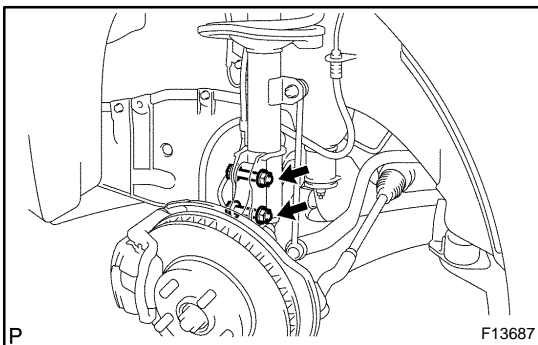
After the camber has been adjusted, inspect the toe-in.

- (a) Remove the front wheel.
- (b) Remove the 2 nuts on the lower side of the shock absorber assy front LH.

NOTICE:

When removing nut, stop the bolt from rotating and loosen the nut.

- (c) Clean the installation surfaces of the shock absorber assy front LH and the steering knuckle.
- (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: 220 N·m (2,243 kgf·cm, 162 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 $-1^{\circ}30' - 0^{\circ}30'$ ($-1.5^{\circ} - 0.5^{\circ}$).

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					
	90105-17001		90105-17003		90105-17004		90105-17005	
			1 Dot 		2 Dots 		3 Dots 	
	1	2	1	2	1	2	1	2
-1°30' -- -1°15'							●	●
-1°15' -- -1°00'					●			●
-1°00' -- -45'			●					●
-45' -- -30'	●							●
-30' -- -15'	●					●		
-15' - 0'	●			●				
0' - 15'	●			●				
15' - 30'	●					●		
30' - 45'	●							●
45' - 1°00'			●					●
1°00' - 1°15'					●			●
1°15' - 1°30'							●	●

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- (i) Perform the steps mentioned above again. At step (e), replace 1 or 2 selected bolts.

HINT:

When replacing the 2 bolts, replace 1 bolt at a time.