Tire Wear

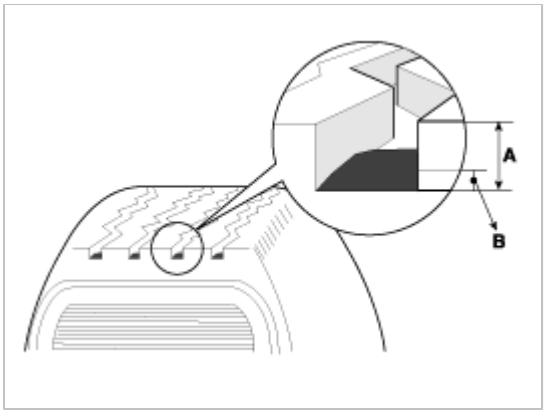
1. Measure the tread depth of the tires.

Tread depth [limit] : 1.6 mm (0.063 in)

2. If the remaining tread(A) depth is less than the limit, replace the tire.

NOTE

When the tread depth of the tires is less than 1.6 mm (0.063 in), the wear indicators(B) will appear.

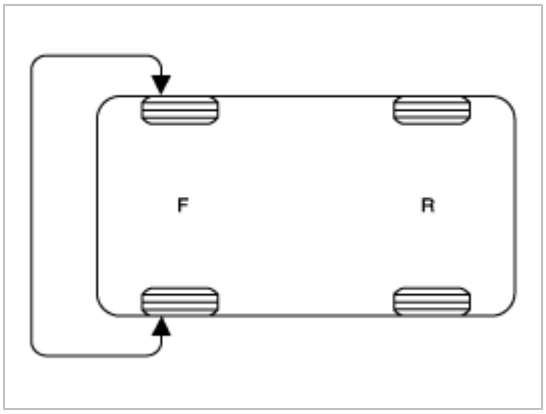


Tire Rotation

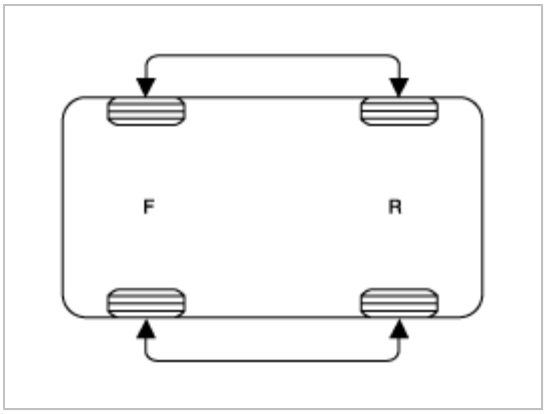
Checking For Pull And Wander

If the steering pulls to one side, rotate the tires according to the following wheel rotation procedure.

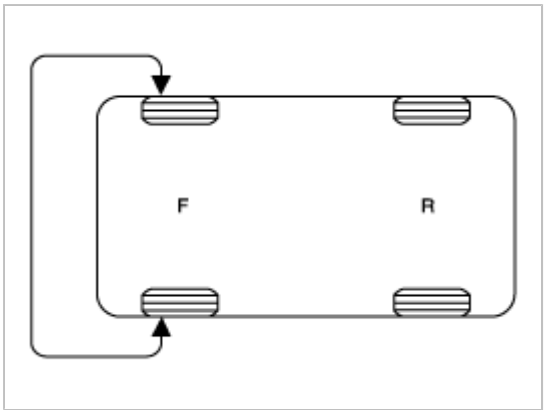
1. Rotate the front right and front left tires, and perform a road test in order to confirm vehicle stability.



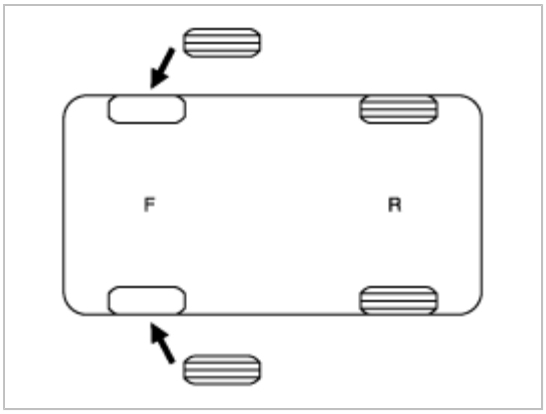
2. If the steering pulls to the opposite side, rotate the front and rear tires, and perform a road test again.



3. If the steering continues to pull to one side, rotate the front right and left tires again, and perform a road test.



4. If the steering continues to pull to the opposite side, replace the front wheels with new ones.

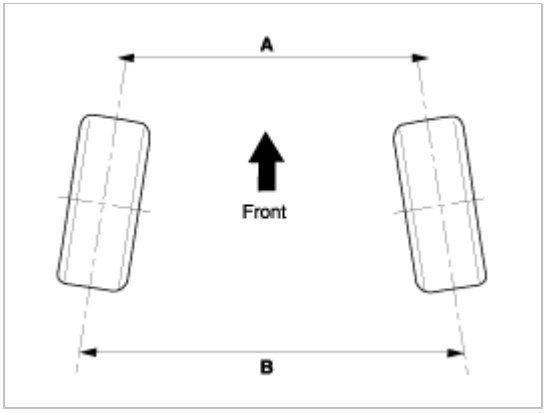


Wheel Alignment

When using commercially available computerized four wheel alignment equipment (caster, camber, toe) to inspect the front wheel alignment, always position the car on a level surface with the front wheels facing straight ahead. Prior to inspection, make sure that the front suspension and steering system are in normal operating condition and that the wheels and tires face straight ahead and the tires are inflated to the specified pressure.

Toe

Toe is a measurement of how much the front of the wheels are turned in or out from the straight-ahead position.



Item	Description
A - B < 0	Positive (+) toe (toe in)
A - B > 0	Negative (-) toe (toe out)

When the wheels are turned in toward the front of the vehicle, toe is positive (+) (toe in). When the wheels are turned out toward the front of the vehicle, toe is negative(-) (toe out). Toe is measured in degrees, from side to side, and totaled.

[Front]

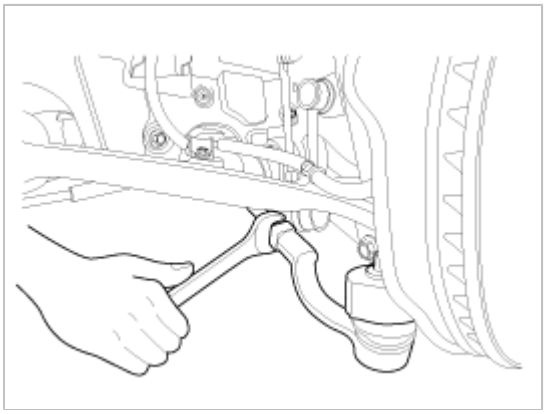
Toe-in(B-A or angle a+b) is adjusted by turning the tie rod turnbuckles. Toe-in on the left front wheel can be reduced by turning the tie rod toward the rear of the car. Toe- in change is adjusted by turning the tie rods for the right and left heels simultaneously at the same amount as follows.

Standard value :
Toe-in
Total : 0.28°±0.16°
Individual : 0.14°±0.8°

NOTE

- Toe-in adjustment should be made by turning the right and left tie rods at the same amount.
- When adjusting toe-in, loosen the outer bellows clip to prevent twisting the bellows.
- After the adjustment, tighten the tie rod end lock nuts firmly and reinstall the bellows clip.
- Adjust each toe-in to be the range of ±1°.

Tie rod(A) Specified torque :
50~55N.m (5~5.5kgf.m, 36.2~39.8lb-ft)



[Rear]

Standard value :
Toe-in
Total : 0.16°±0.2°
Individual : 0.8°±0.1°

Adjust the toe-in by turning the cambolt of the assist arm.

Left cambolt : Clockwise → toe-out
Right cambolt : Clockwise → toe-in
The variation of toe by a rotation of the cambolt :
About

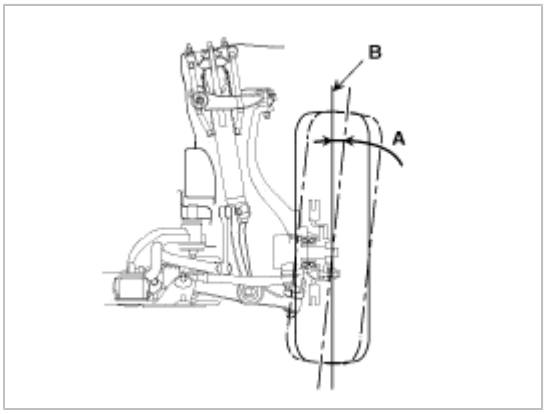
CAUTION

- Each toe should be within 0.1° ± 0.1°.
  If the difference between right and left is not within +0.2°, repeat adjustment.
- After adjusting the cambolt, tighten the nut to the specified torque.

Camber

[Front]

Camber is the inward or outward tilting of the wheels at the top.



Item	Description
A	Positive camber angle
B	True vertical

When the wheel tilts out at the top, then the camber is positive (+).

When the wheel tilts in at the top, then the camber is negative(-).

Standard value : -0.5° ± 0.5°

NOTE

Camber is pre-set at the factory and doesn't need to be adjusted. If the camber is not within the standard value, replace the bent or damaged parts.

[Rear]

Standard value : -1.5° ± 0.5°
Difference between right and left angle is within 0.5°

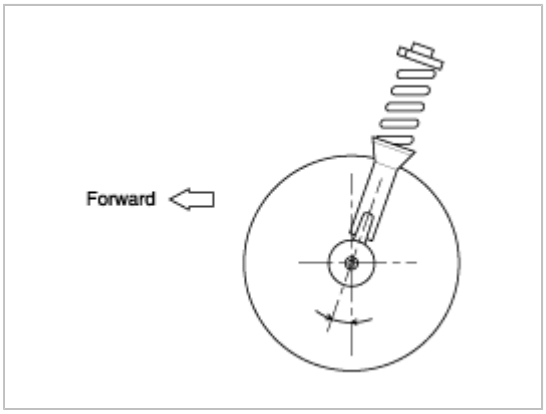
Adjust the camber by turning the cambolt of the rear lower arm.

Left cambolt : Clockwise → camber(-)
Right cambolt : Clockwise →camber(+)
The variation of camber by a rotation of the cambolt :
About 0.09°

Caster

Caster is the tilting of the strut axis either forward or backward from vertical. A backward tilt is positive (+) and a forward tilt is negative (-).
Caster is pre-set at the factory and doesn't need to be adjusted. If the caster is not within the standard value, replace the bent or damaged parts.

Caster : 7.45° ± 0.5°



NOTE

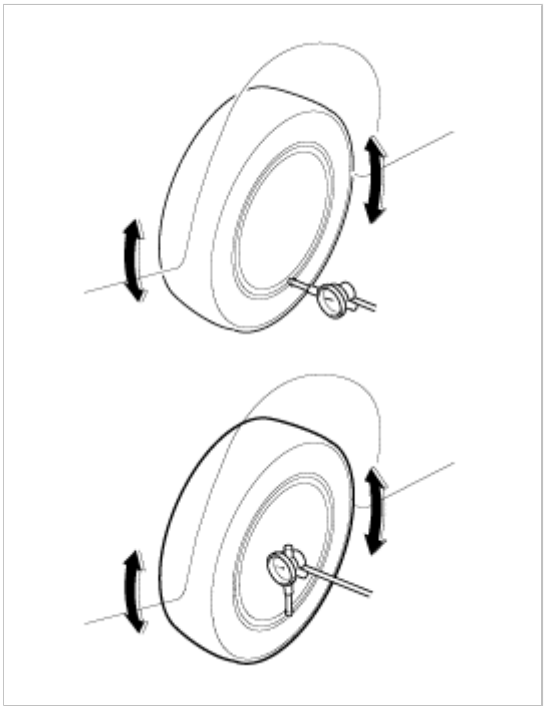
- The worn loose or damaged parts of the front suspension assembly must be replaced prior to measuring front wheel alignment.
- Caster are pre-set to the specified value at the factory and don't need to be adjusted.
- If the caster are not within specifications, replace bent or damaged parts.
- The difference of left and right wheels about the the caster must be within the range of 0° ± 0.5°.

Wheel Runout

1. Jack up the vehicle and support it with jack stands.
2. Measure the wheel runout with a dial indicator as illustrated.

3. Replace the wheel if the wheel runout exceeds the limit.

Limit		Radial	Axial
Runout mm	Aluminium	0.3	0.3



Wheel Nut Tightening

1. Tightening torque.

Tightening torque :
90 ~ 110N.m (9 ~ 11kgf.m, 65.1 ~ 79.5lb-ft)

> CAUTION
>
> When using an impact gun, final tightening torque should be checked using a torque wrench.

2. Tightening order.
Check the torque again after tightening the wheel nuts diagonally.