

SS-2

Suspension System

General Information

Specifications

Front Suspension

Item		Specification
Suspension type		MacPherson Strut
Shock absorber	Type	Gas
		A.S.D
Coil spring	Free Height [I.D. color]	314.9mm (12.39 in.) [Yellow - Yellow]
		324.9mm (12.79 in.) [Green - Green]

Rear Suspension

Item		Specification
Suspension type		Multi link
Shock absorber	Type	Gas
		A.S.D
Coil spring	Free Height [I.D. color]	318.0mm (12.51 in.) [Gray - 2]
		324.3mm (12.76 in.) [Pink - White]

Wheel & Tire

Item	Specification
Wheel	6.5J * 16
	7.0J * 17
Tire	215/ 65 R16
	225/ 55 R17
Tire pressure	2.2kg/cm ² (32psi)

General Information

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Wheel Alignment

Front

Item		Specification	
		Front	Rear
Toe-in	Individual	$0 \pm 0.08^\circ$	$0.08^\circ \pm 0.08^\circ$
	Total	$0 \pm 0.2^\circ$	$0.2^\circ \pm 0.2^\circ$
Camber angle		$-0.5^\circ \pm 0.5^\circ$	$-1.0^\circ \pm 0.5^\circ$
Caster angle		$4.47^\circ \pm 0.5^\circ$	-
King-pin angle		$13.24^\circ \pm 0.5^\circ$	-

Tightening Torque

Front Suspension

Item	Tightening torque (kgf.m)		
	Nm	kgf.m	lb-ft
Hub nuts	88.3 ~ 107.9	9.0 ~ 11.0	65.1 ~ 79.6
Strut assembly to knuckle	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Strut assembly lock nut	44.1 ~ 58.8	4.5 ~ 6.0	32.5 ~ 43.4
Stabilizer link to strut assembly	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Lower arm to sub frame (Front)	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Lower arm to sub frame (Rear)	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Lower arm to knuckle	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Stabilizer bar to stabilizer link	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Stabilizer to sub frame	44.1 ~ 53.9	4.5 ~ 5.5	32.5 ~ 39.8
Sub frame to body	156.9 ~ 176.5	16.0 ~ 18.0	115.7 ~ 130.2
Tie rod end castle nut	34.3 ~ 44.1	3.5 ~ 4.5	25.3 ~ 32.5
Universal joint to pinion of steering gear	29.4 ~ 34.3	3.0 ~ 3.5	21.7 ~ 25.3

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Suspension System

Rear Suspension

Item	Tightening torque (kgf.m)		
	Nm	kgf.m	lb-ft
Hub nuts	88.3 ~ 107.9	9.0 ~ 11.0	65.1 ~ 79.6
Trailing arm to body	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Trailing arm to knuckle	29.4 ~ 34.3	3.5 ~ 5.5	25.3 ~ 39.8
Assist arm to sub frame	78.5 ~ 98.1	8.0 ~ 10.0	57.9 ~ 72.3
Assist arm to knuckle	44.1 ~ 53.9	4.5 ~ 5.5	32.5 ~ 39.8
Lower arm to sub frame	117.7 ~ 137.3	12.0 ~ 14.0	86.8 ~ 101.3
Lower arm to knuckle	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Upper arm to sub frame	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Upper arm to knuckle	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Shock absorber to frame	49.0 ~ 63.7	5.0 ~ 6.5	36.2 ~ 47.0
Shock absorber to knuckle	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Stabilizer bar to stabilizer link	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Stabilizer bar to sub frame	44.1 ~ 53.9	4.5 ~ 5.5	32.5 ~ 39.8
Sub frame mounting bolt & nut	156.9 ~ 176.5	16.0 ~ 18.0	115.7 ~ 130.2

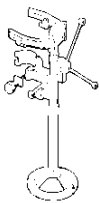
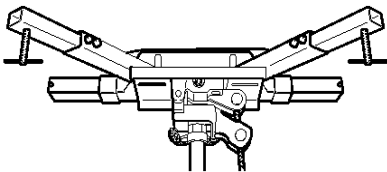
شرکت دیجیتال خودرو (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

General Information

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Special Service Tools

Tool (Number and Name)	Illustration	Use
09546-26000 Strut spring compressor	 E4626000	Compression of coil spring
09624-38000 Crossmember supporter	 EKBF005A	Supporting of the crossmember

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Suspension System

Troubleshooting

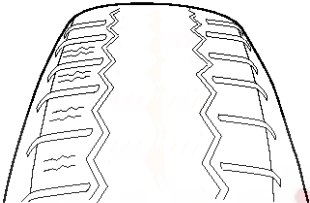
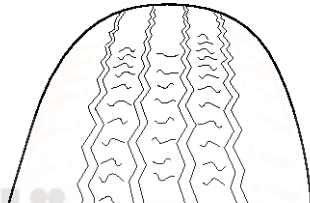
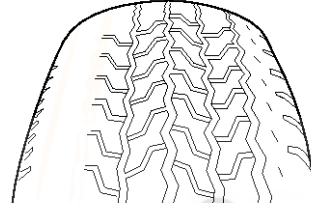
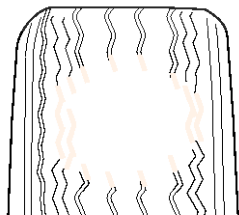
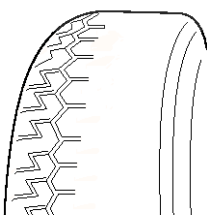
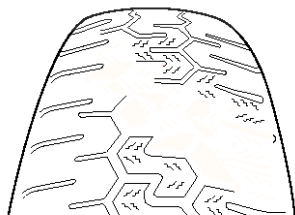
Symptom	Possible cause	Remedy
Hard steering	Improper front wheel alignment Excessive turning resistance of lower arm ball joint Low tire pressure No power assist	Correct Replace Adjust Repair and replace
Poor return of steering wheel to center	Improper front wheel alignment	Correct
Poor or rough ride	Improper front wheel alignment Malfunctioning shock absorber Broken or worn stabilizer Broken or worn coil spring Worn lower arm bushing	Correct Repair or replace Replace Replace Replace the lower arm assembly
Abnormal tire wear	Improper front wheel alignment Improper tire pressure Malfunctioning shock absorber	Correct Adjust Replace
Wandering	Improper front wheel alignment Poor turning resistance of lower arm ball joint Loose or worn lower arm bushing	Correct Repair Retighten or replace
Vehicle pulls to one side	Improper front wheel alignment Excessive turning resistance of lower arm ball joint Broken or worn coil spring Bent lower arm	Correct Replace Replace Repair
Steering wheel shimmy	Improper front wheel alignment Poor turning resistance of lower arm ball joint Broken or worn stabilizer Worn lower arm bushing Malfunctioning shock absorber Broken or worn coil spring	Correct Replace Replace Replace Replace Replace
Bottoming	Broken or worn coil spring Malfunctioning shock absorber	Replace Replace

General Information

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Wheel /tire noise, vibration and harshness concerns are directly related to vehicle speed and are not generally affected by acceleration, coasting or decelerating. Also, out-of-balance wheel and tires can vibrate at more than one speed. A vibration that is affected by the engine rpm, or is eliminated by placing the transmission in Neutral is not related to the tire and wheel. As a general rule, tire and wheel vibrations felt in the steering wheel are related to the front tire and wheel assemblies. Vibrations felt in the seat or floor are related to the rear tire and wheel assemblies. This can initially isolate a concern to the front or rear.

Careful attention must be paid to the tire and wheels. There are several symptoms that can be caused by damaged or worn tire and wheels. Perform a careful visual inspection of the tires and wheel assemblies. Spin the tires slowly and watch for signs of lateral or radial runout. Refer to the tire wear chart to determine the tire wear conditions and actions

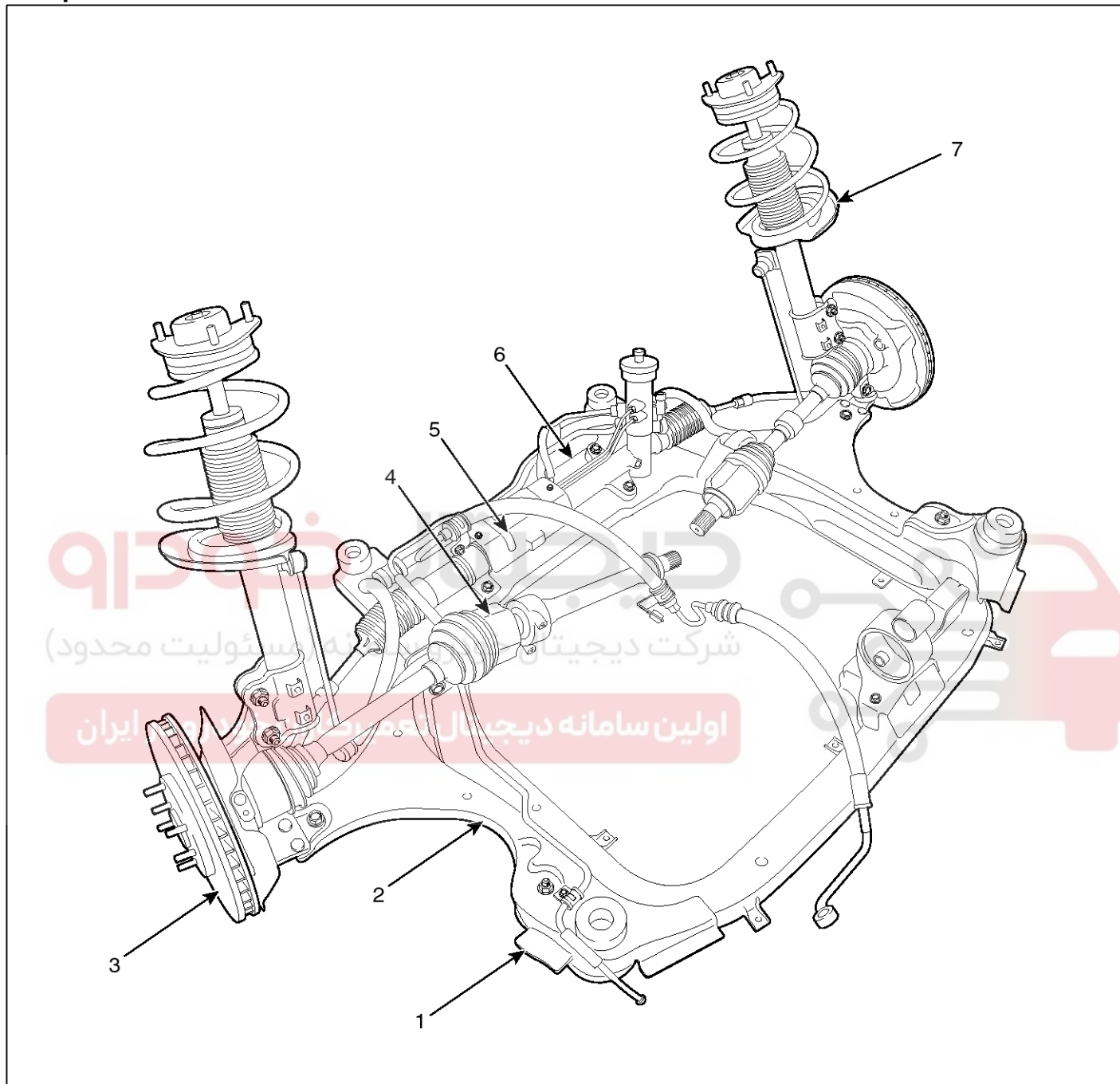
Wheel and tire diagnosis		
Rapid wear at the center	Rapid wear at both shoulders	Wear at one shoulder
 <p>AHIE002A</p> <ul style="list-style-type: none"> Center-tread down to fabric due to excessive over inflated tires Lack of rotation Excessive toe on drive wheels Heavy acceleration on drive 	 <p>AHIE002B</p> <ul style="list-style-type: none"> Under-inflated tires Worn suspension components Excessive cornering speeds Lack of rotation 	 <p>AHIE002C</p> <ul style="list-style-type: none"> Toe adjustment out of specification Camber out of specification Damaged strut Damaged lower arm
Partial wear	Feathered edge	Wear pattern
 <p>AHIE002D</p> <ul style="list-style-type: none"> Caused by irregular burrs on brake drums 	 <p>AHIE002F</p> <ul style="list-style-type: none"> Toe adjustment out of specification Damaged or worn tie rods Damaged knuckle 	 <p>AHIE002G</p> <ul style="list-style-type: none"> Excessive toe on non-drive wheels Lack of rotation

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Suspension System

Front Suspension System

Components



SVGSS0024D

1. Sub frame
2. Lower arm
3. Front disk
4. Drive shaft

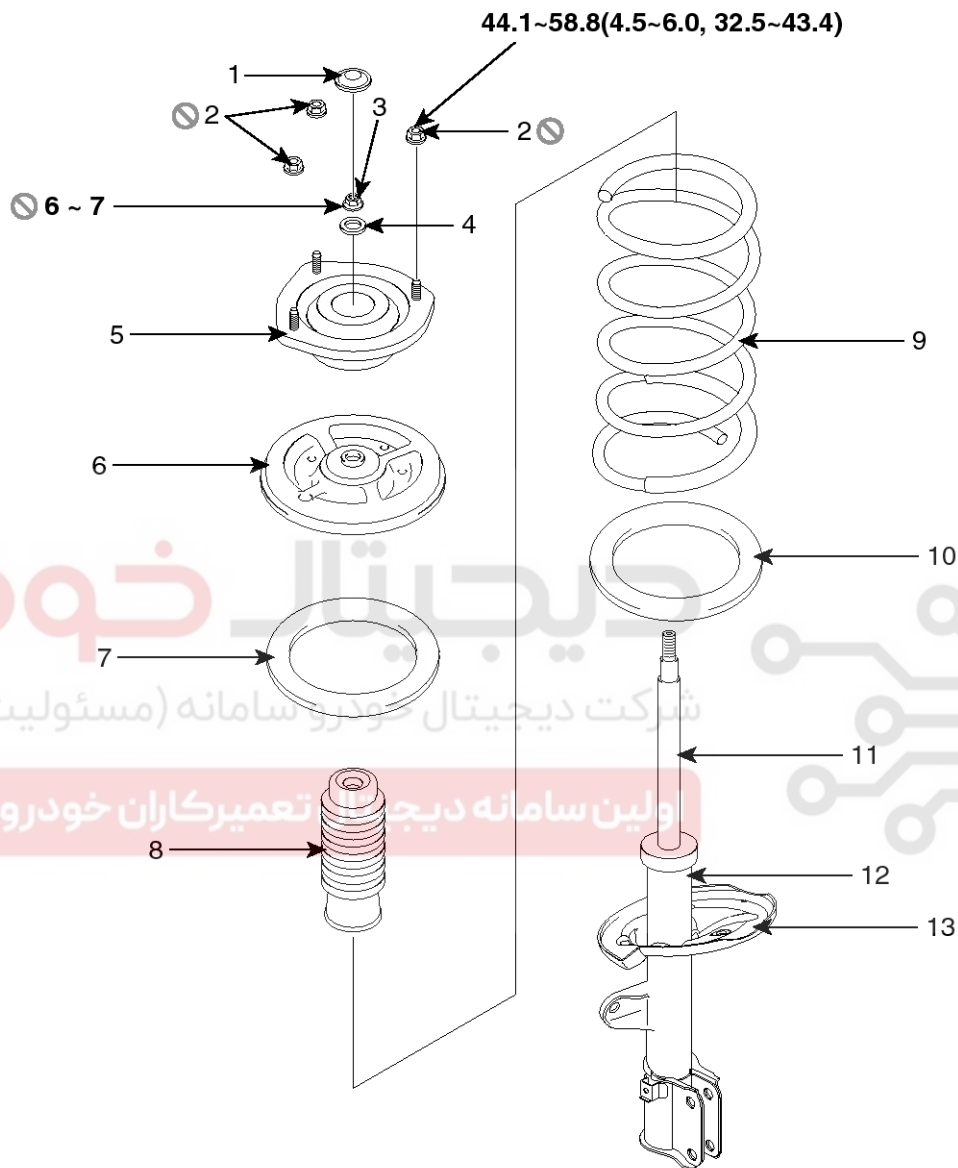
5. Steering gearbox
6. Front stabilizer bar
7. Front strut assembly

Front Suspension System

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Front Strut Assembly

Components



Tightening torque :
N.m (kgf.m, lb-ft)

SVGSS0110D

1. Dust cover
2. Upper locking nut
3. Self locking nut
4. Space
5. Insulator
6. Spring upper seat
7. Spring upper pad

8. Strut dust cover & Bumper rubber
9. Coil spring
10. Spring lower pad
11. Piston rod
12. Strut assembly
13. Spring lower seat

SS-10

Suspension System

Replacement

1. Remove the front wheel & tire.

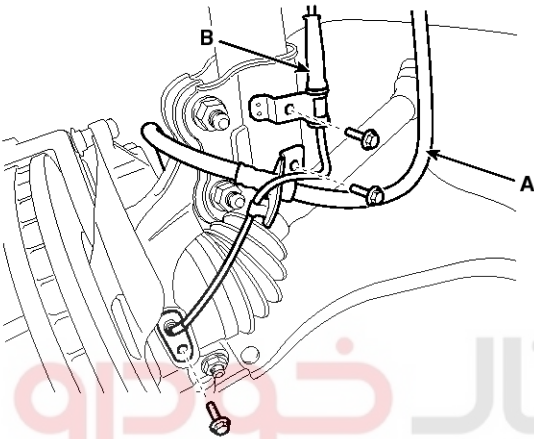
Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

⚠ CAUTION

Be careful not to damage to the hub bolts when removing the front wheel & tire.

2. Remove the brake hose (A) & wheel speed sensor bracket (B) from the front strut assembly by loosening mounting bolts.

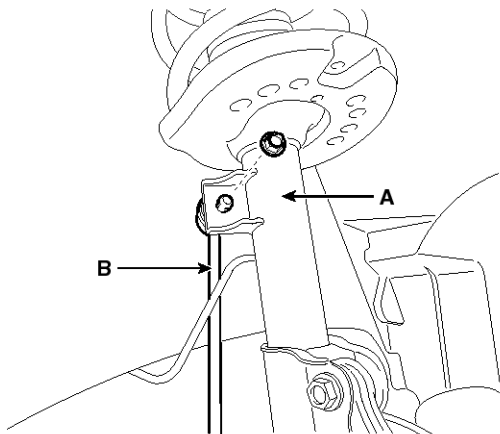


SVGSS0011D

3. Disconnect the stabilizer link (B) with the front strut assembly (A) after loosening the nut.

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

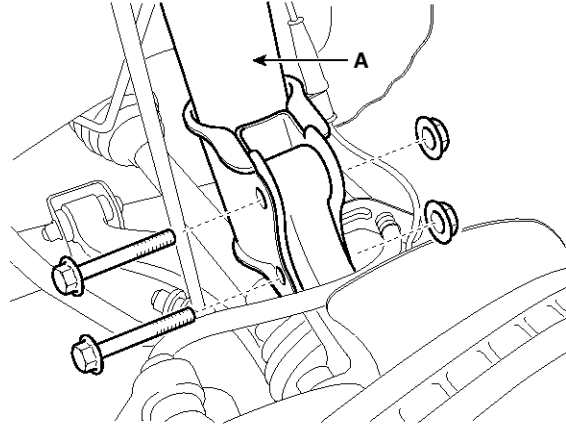


SVGSS0014D

4. Disconnect the front strut assembly (A) with the knuckle by loosening the bolt & nut.

Tightening torque:

137.3 ~ 156.9N.m (14.0 ~ 16.0kgf.m, 101.3 ~ 115.7lb-ft)

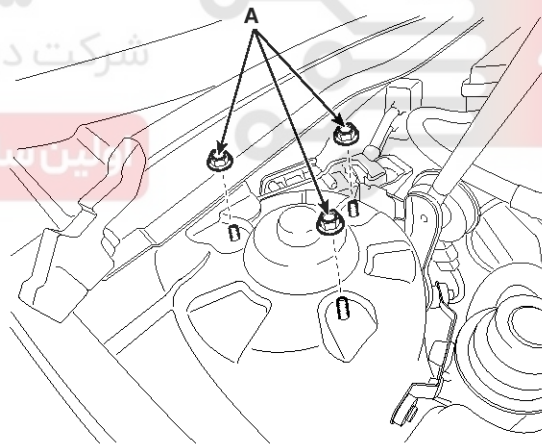


SVGSS0012D

5. Remove the front strut assembly and then loosen the strut mounting nuts (A).

Tightening torque:

44.1~58.8N.m (4.5 ~ 6.0kgf.m, 32.5 ~ 43.4lb-ft)



SVGSS0021D

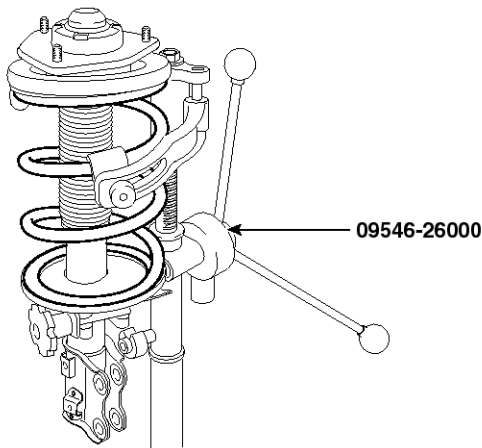
6. Installation is the reverse of removal.

Front Suspension System

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Disassembly

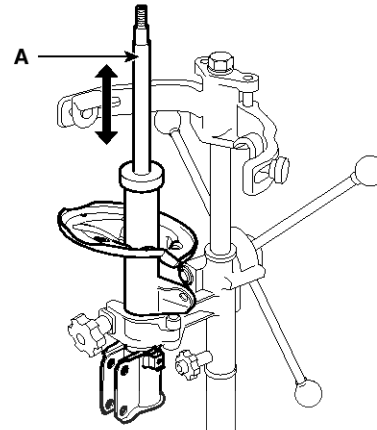
1. Compress the coil spring with a SST (09546-26000).
Do not compress the spring more than necessary.
2. Loosen the self-locking nut.



SUNSS6006D

Inspection

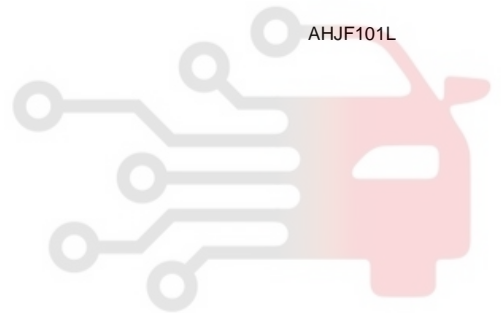
1. Check the strut bearing for wear and damage.
2. Check the spring upper and lower seat for damage and deterioration.
3. Compress and extend the piston rod (A) and check that there is no abnormal resistance or unusual sound during operation.



AHJF101L

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Suspension System

Front Lower Arm

Replacement

1. Remove the front wheel & tire.

Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

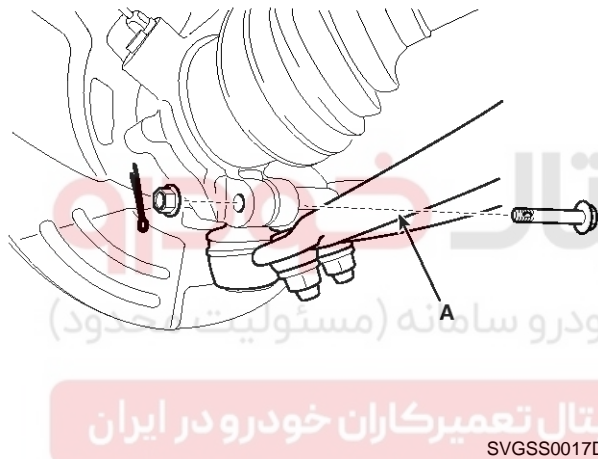
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the front wheel & tire.

2. Loosen the bolt & nut and then remove the lower arm (A).

Tightening torque:

98.1~117.7N.m (10.0~12.0kgf.m, 72.3 ~ 86.6lb-ft)



3. Remove the front lower arm (A) and then loosen the bolts & nuts.

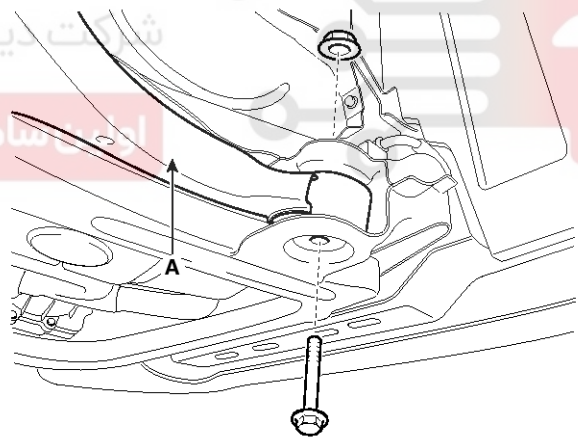
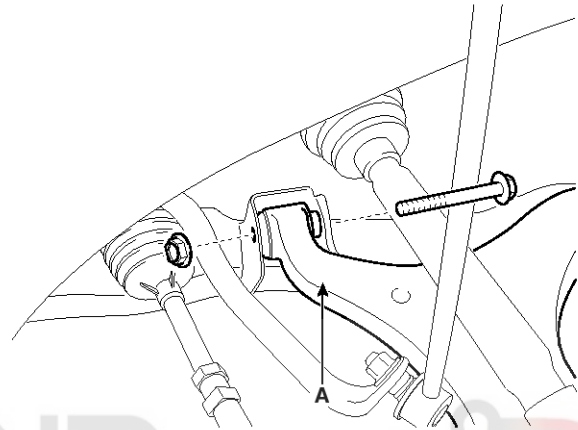
Tightening torque

Front:

137.3 ~ 156.9N.m (14.0 ~ 16.0kgf.m, 101.3 ~ 115.7lb-ft)

Rear:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.6lb-ft)



4. Installation is the reverse of removal.

Inspection

1. Check the bushing for wear and deterioration.
2. Check the front stabilizer bar for deformation.
3. Check the all bolts and nuts.

Front Suspension System

SS-13

Front Stabilizer Bar

Replacement

1. Remove the front wheel & tire.

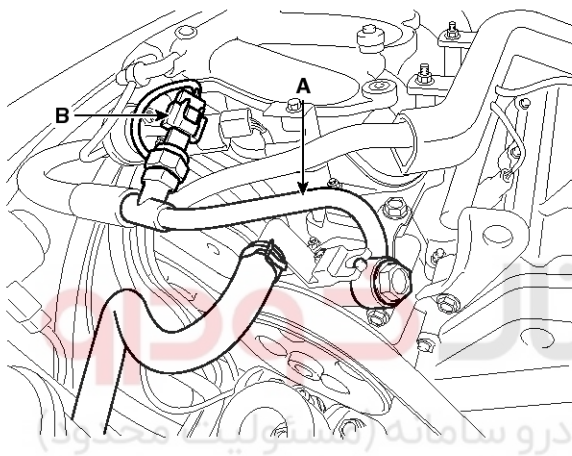
Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

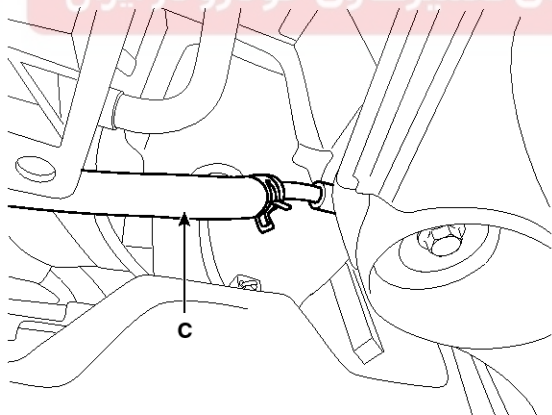
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the front wheel & tire.

2. Disconnect the pressure hose (A), pressure sensor (B), return hose (C) and then drain the power steering fluid.

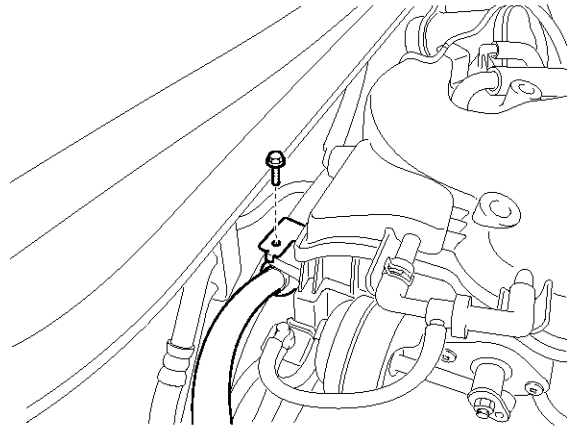


SVGST0025D

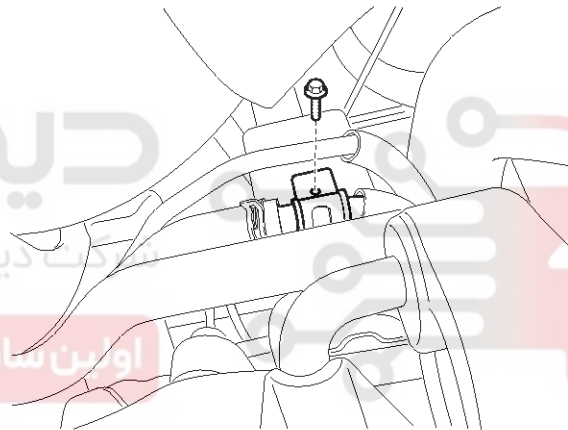


SYFST0003D

3. Loosen the power steering hose mounting bolt.



SVGST0026D



SVGST0024D

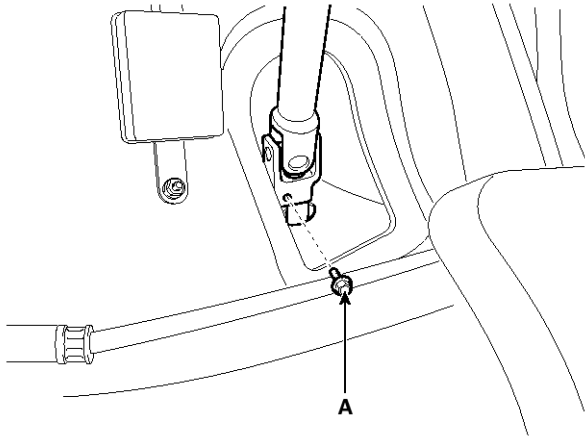
SS-14

Suspension System

- Loosen the bolt (A) and then disconnect the universal joint assembly from the pinion of the steering gear box.

Tightening torque:

29.4 ~ 34.3N.m (3.0 ~ 3.5kgf.m, 21.7 ~ 25.3lb-ft)



SVGST0017D

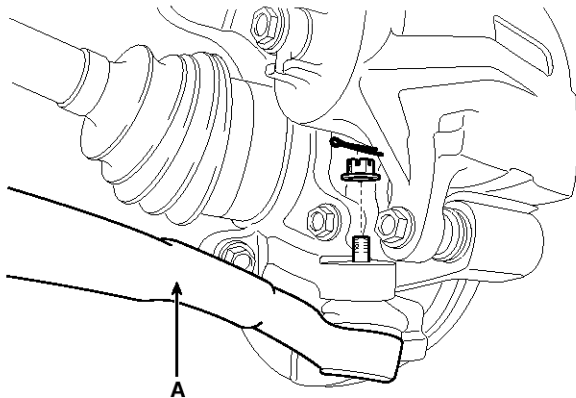
⚠ CAUTION

Lock the steering wheel in the straight ahead position to prevent the damage of the clock spring inner cable when you handle the steering wheel.

- Remove the sprit pin and castle nut and then disconnect the tie-rod end (A) from the front knuckle.

Tightening torque:

34.3 ~ 44.1N.m (3.5 ~ 4.5kgf.m, 25.3 ~ 32.5lb-ft)

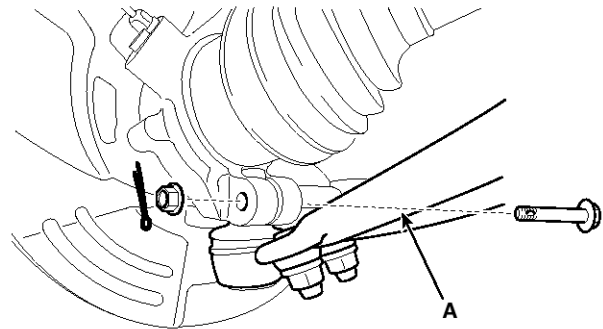


SVGSS0013D

- Loosen the bolt & nut and then remove the lower arm (A).

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

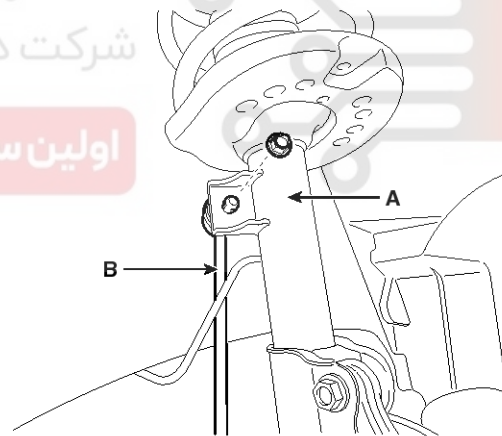


SVGSS0017D

- Disconnect the stabilizer link (B) with the front strut assembly (A) after loosening the nut.

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

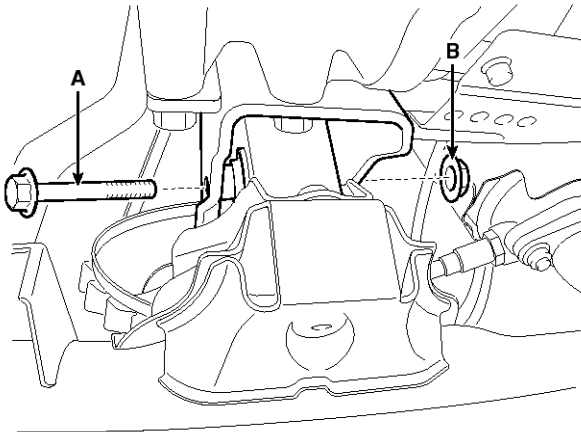


SVGSS0014D

Front Suspension System

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8. Loosen the bolt (A) & nut (B) and then remove the front roll stopper.

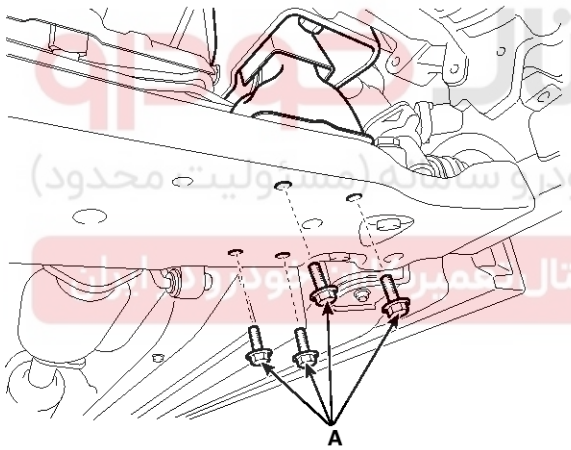


SVGSS0020D

9. Loosen the rear roll stopper mounting bolts (A).

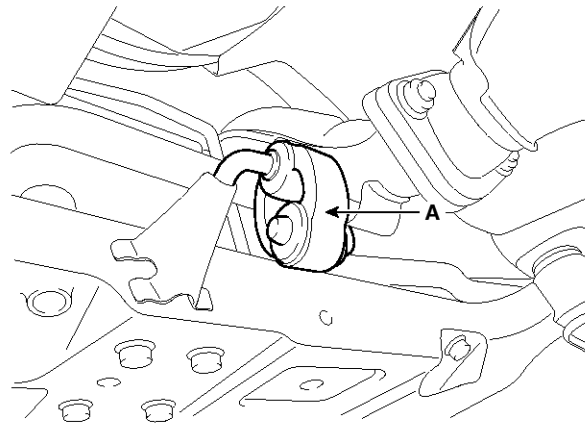
Tightening torque:

49.0 ~ 63.7N.m (5.0 ~ 6.5kgf.m, 36.2 ~ 47.0lb-ft)



SVGSS0018D

10. Disconnect the muffler rubber hanger (A).



SVGSS0019D

11. Loosen the bolts & nuts and then remove the under cover & sub frame.

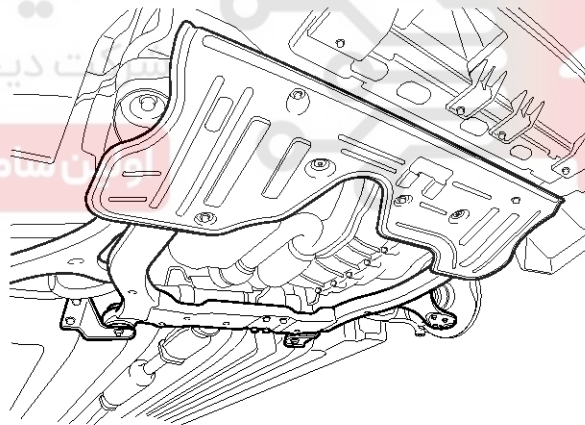
Tightening torque

Sub frame mounting bolts & nuts:

156.9 ~ 176.5N.m (16.0 ~ 18.0kgf.m, 115.7 ~ 130.2lb-ft)

Sub frame bracket bolts & nuts:

44.1 ~ 58.8N.m (4.5 ~ 6.0kgf.m, 32.5 ~ 43.4lb-ft)



SVGSS0023D

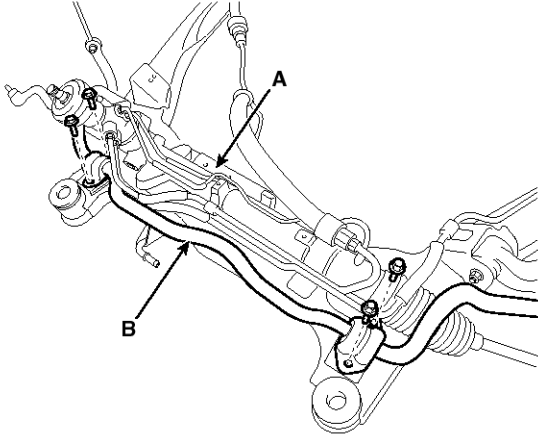
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Suspension System

12. Loosen the mounting bolt and then remove the stabilizer bar (B) from the sub frame (A).

Tightening torque:

49.0~63.7N.m (5.0~6.5kgf.m, 36.2~47.0lb-ft)



SVGSS0022D

13. Loosen the nut and then remove the stabilizer link (A) from the stabilizer bar.

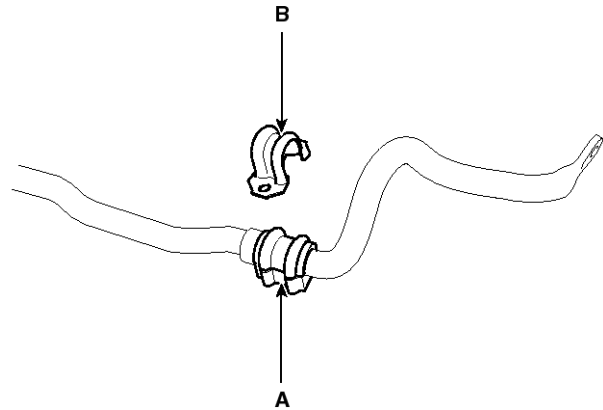
Tightening torque:

98.1~117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)



SHDSS6002D

14. Remove the bushing (A) and the bracket (B) from the stabilizer bar.



SHDSS6003D

15. Installation is the reverse of removal.

16. Refill the power steering fluid and bleed the air.

(Refer to the "ST" group)

Inspection

1. Check the bushing for wear and deterioration.
2. Check the front stabilizer bar for deformation.
3. Check the front stabilizer link ball joint for damage.

Front Suspension System

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Front Cross Member

Replacement

1. Remove the front wheel & tire.

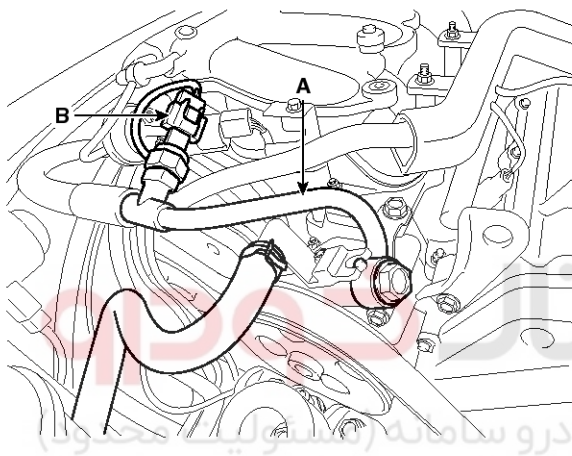
Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

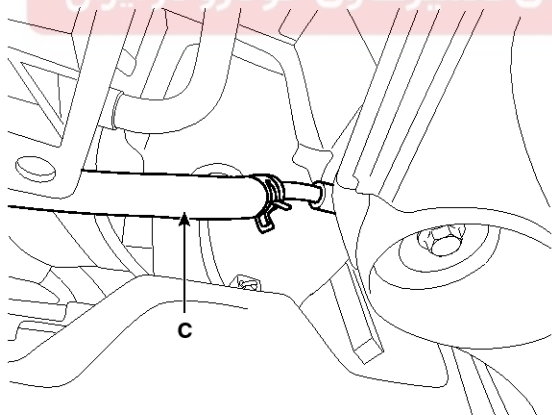
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the front wheel & tire.

2. Disconnect the pressure hose (A), pressure sensor (B), return hose (C) and then drain the power steering fluid.

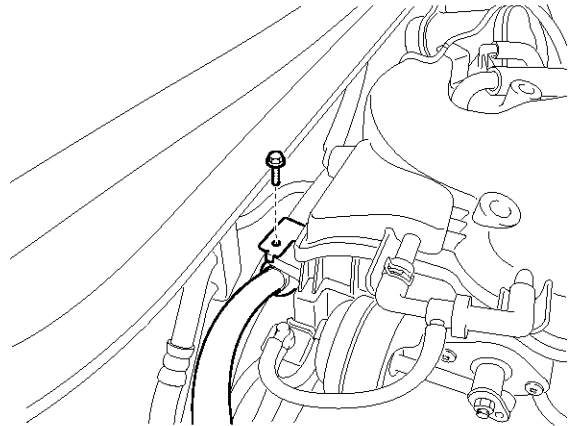


SVGST0025D

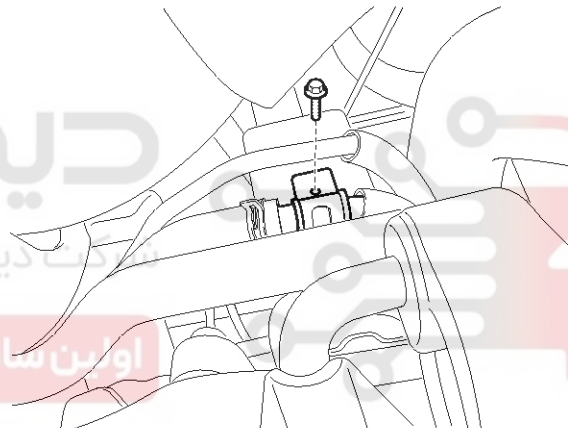


SYFST0003D

3. Loosen the power steering hose mounting bolt.



SVGST0026D



SVGST0024D

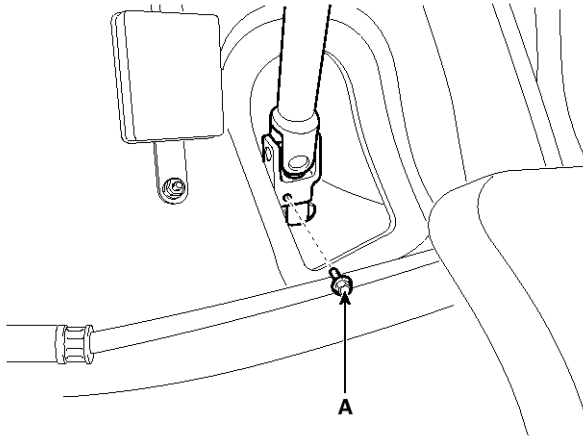
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Suspension System

- Loosen the bolt (A) and then disconnect the universal joint assembly from the pinion of the steering gear box.

Tightening torque:

29.4 ~ 34.3N.m (3.0 ~ 3.5kgf.m, 21.7 ~ 25.3lb-ft)



SVGST0017D

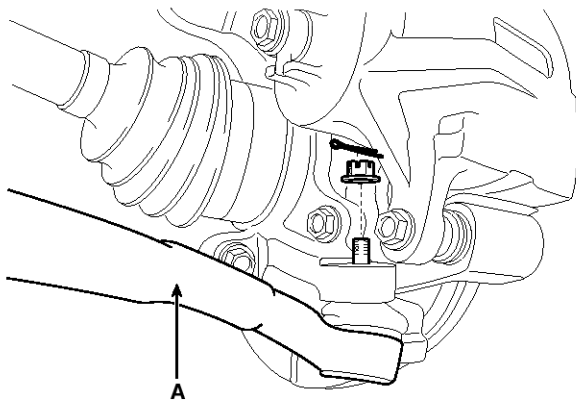
⚠ CAUTION

Lock the steering wheel in the straight ahead position to prevent the damage of the clock spring inner cable when you handle the steering wheel.

- Remove the sprit pin and castle nut and then disconnect the tie-rod end (A) from the front knuckle.

Tightening torque:

34.3 ~ 44.1N.m (3.5 ~ 4.5kgf.m, 25.3 ~ 32.5lb-ft)

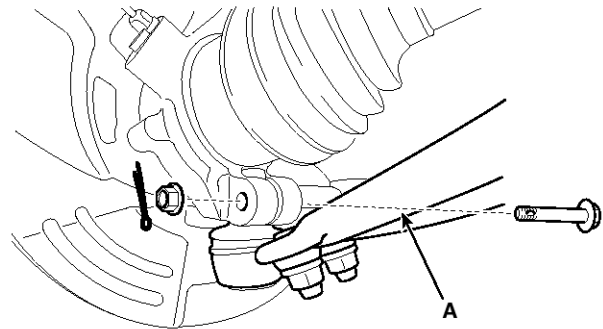


SVGSS0013D

- Loosen the bolt & nut and then remove the lower arm (A).

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

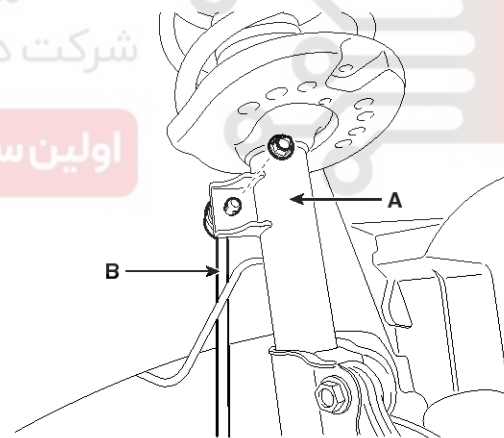


SVGSS0017D

- Disconnect the stabilizer link (B) with the front strut assembly (A) after loosening the nut.

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

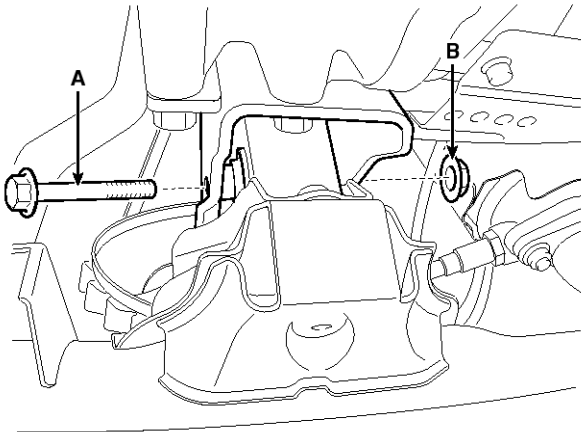


SVGSS0014D

Front Suspension System

SS-19

8. Loosen the bolt (A) & nut (B) and then remove the front roll stopper.

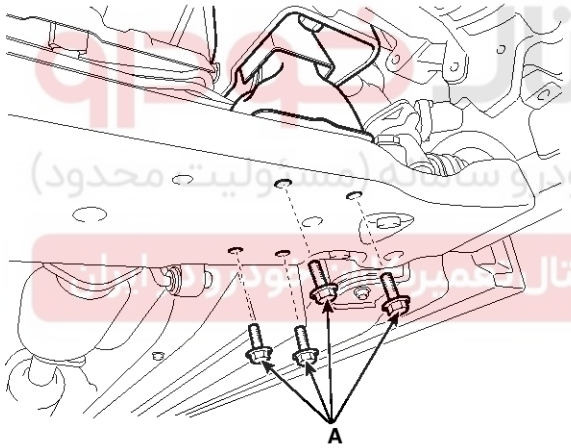


SVGSS0020D

9. Loosen the rear roll stopper mounting bolts (A).

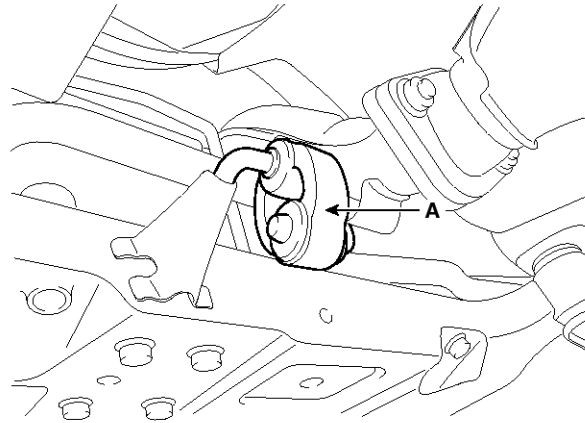
Tightening torque:

49.0 ~ 63.7N.m (5.0 ~ 6.5kgf.m, 36.2 ~ 47.0lb-ft)



SVGSS0018D

10. Disconnect the muffler rubber hanger (A).



SVGSS0019D

11. Loosen the bolts & nuts and then remove the under cover & sub frame.

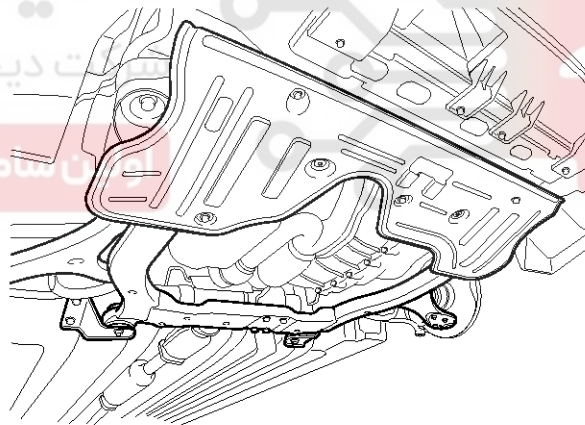
Tightening torque

Sub frame mounting bolts & nuts:

156.9 ~ 176.5N.m (16.0 ~ 18.0kgf.m, 115.7 ~ 130.2lb-ft)

Sub frame bracket bolts & nuts:

44.1 ~ 58.8N.m (4.5 ~ 6.0kgf.m, 32.5 ~ 43.4lb-ft)



SVGSS0023D

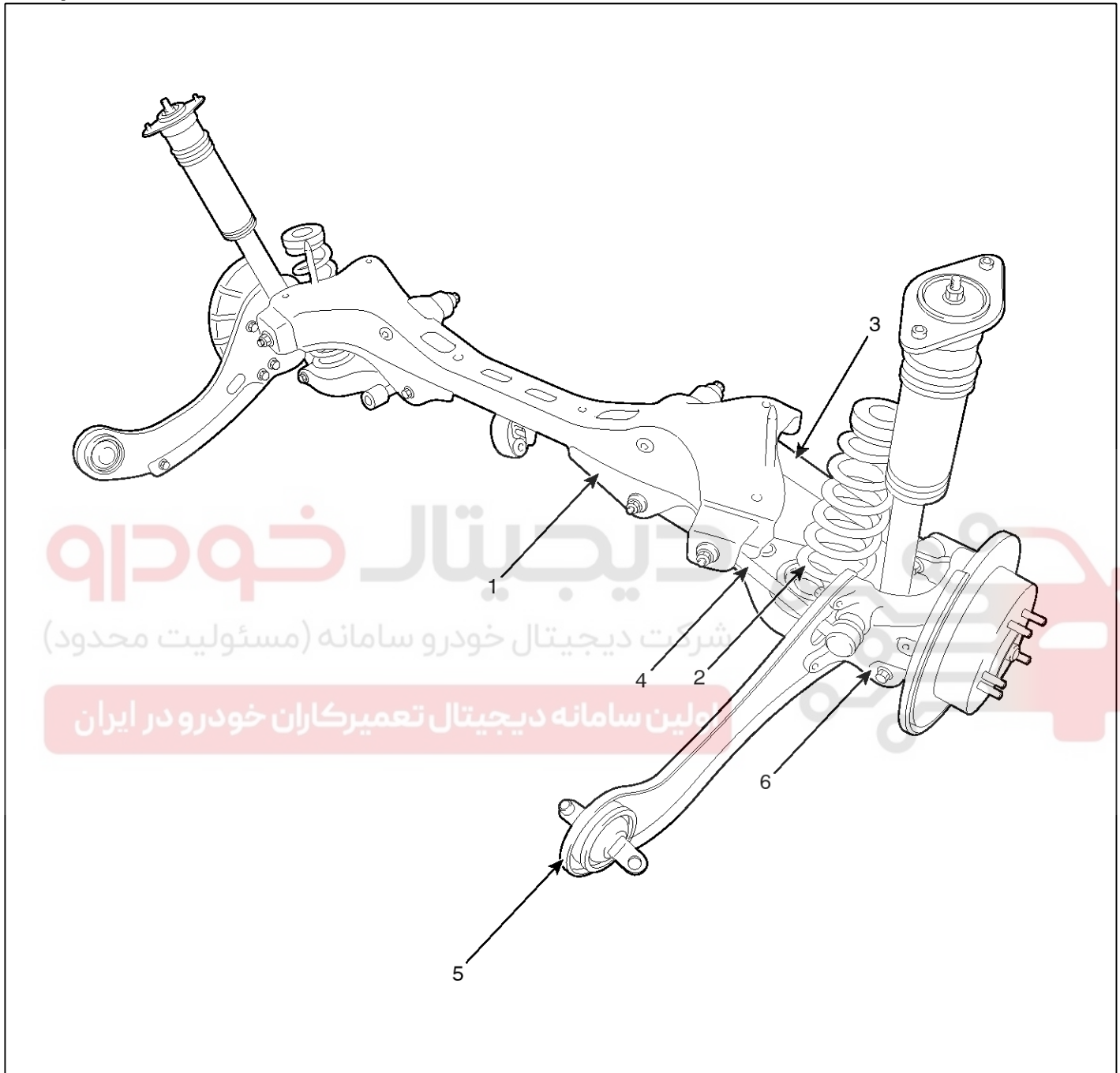
12. Remove the front lower arm. (Refer to the Front lower arm)
13. Remove the front stabilizer. (Refer to the Front stabilizer)
14. Remove the steering gearbox. (Refer to the "ST" group steering gearbox)
15. Installation is the reverse of removal.
16. Refill the power steering fluid and bleed the air. (Refer to the "ST" group)

SS-20

Suspension System

Rear Suspension System

Components



SVGSS0025D

- 1. Sub frame
- 2. Coil spring
- 3. Upper arm

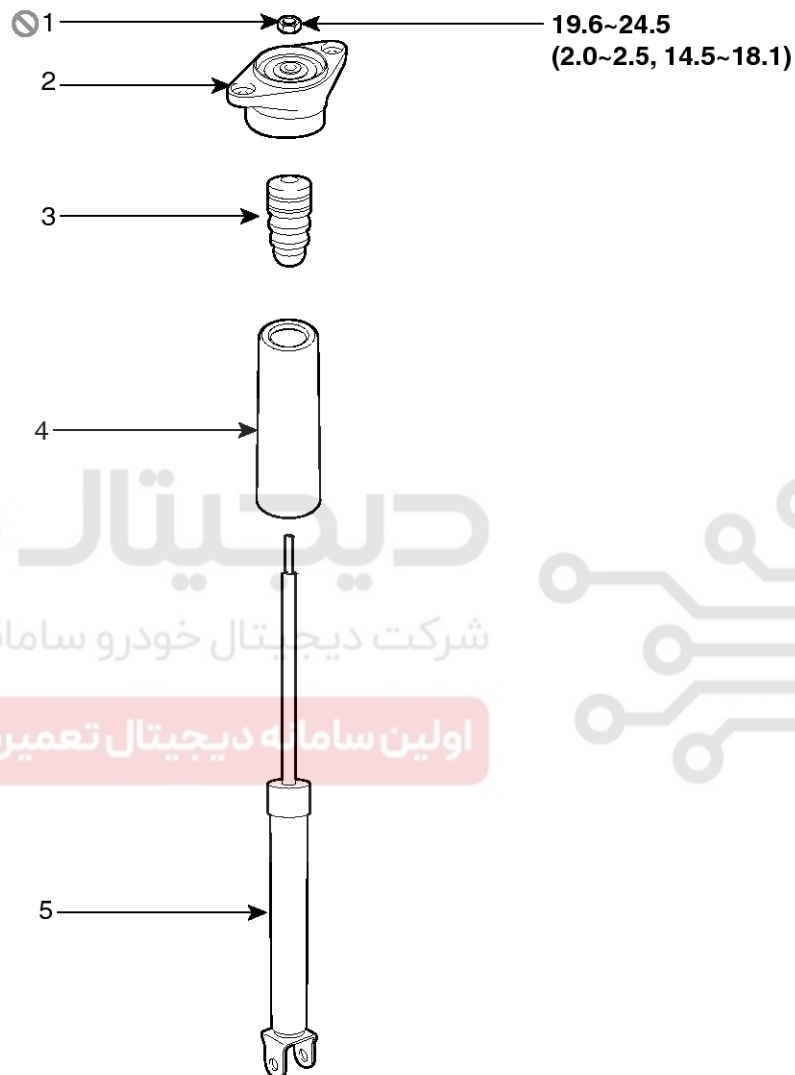
- 4. Assist arm
- 5. Trailing arm
- 6. Rear axle

Rear Suspension System

SS-21

Rear Shock Absorber

Components



Tightening torque :
N.m (kgf.m, lb-ft)

SVGSS0111D

1. Self locking nut
2. Bracket assembly
3. Bumper rubber

4. Dust cover
5. Shock absorber

SS-22

Suspension System

Replacement

1. Remove the rear wheel & tire.

Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

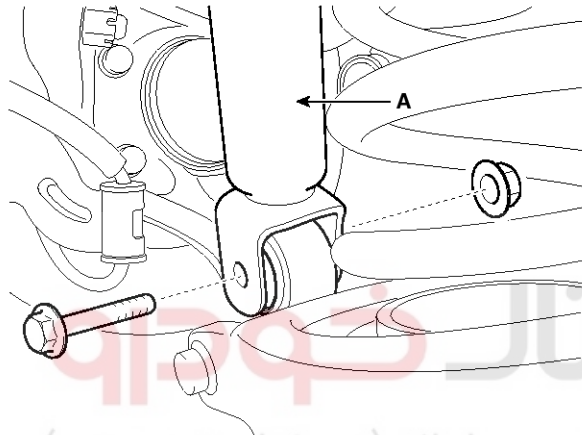
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the rear wheel & tire.

2. Loosen the bolt & nut and then disconnect the shock absorber (A) with the rear axle.

Tightening torque:

137.3 ~ 156.9N.m (14.0 ~ 16.0kgf.m, 101.3 ~ 115.7lb-ft)

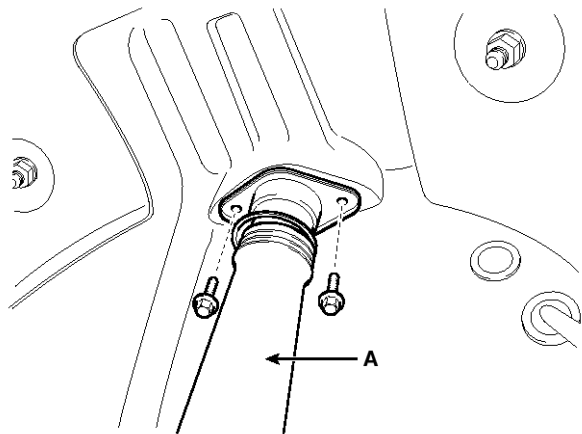


SVGSS0039D

3. Loosen the shock absorber (A) mounting bolts.

Tightening torque:

49.0 ~ 63.7N.m (5.0 ~ 6.5kgf.m, 36.2 ~ 47.0lb-ft)

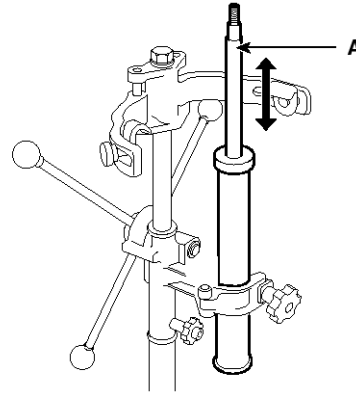


SVGSS0037D

4. Installation is the reverse of removal.

Inspection

1. Check the rubber parts for wear and deterioration.
2. Compress and extend the piston rod (A) and check that there is no abnormal resistance or unusual sound during operation.



KHRE112A

Rear Suspension System

SS-23

Rear Upper Arm

Replacement

1. Remove the rear wheel & tire.

Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

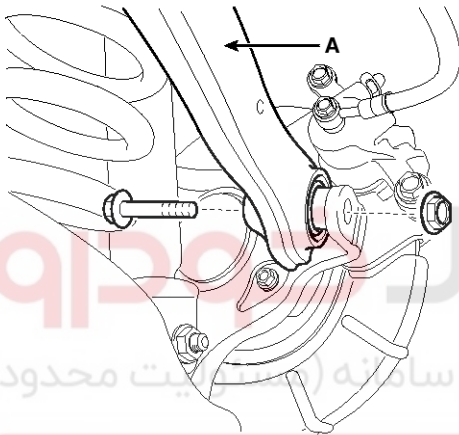
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the rear wheel & tire.

2. Loosen the bolt & nut and then remove the rear upper arm (A) with the rear axle.

Tightening torque:

137.3 ~ 156.9N.m (14.0 ~ 16.0kgf.m, 101.3 ~ 115.7lb-ft)

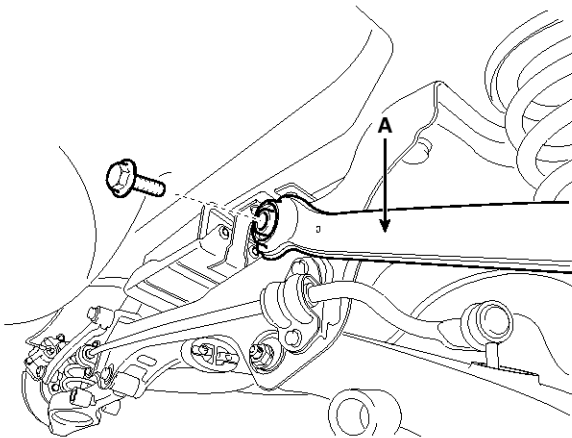


SVGSS0038D

3. Loosen the bolt & nut and then remove the rear upper arm (A) with the sub frame.

Tightening torque:

137.3 ~ 156.9N.m (14.0 ~ 16.0kgf.m, 101.3 ~ 115.7lb-ft)



SVGSS0036D

4. Installation is the reverse of removal.

⚠ CAUTION

Install the rear upper arm so that the letter "R" can face the rear of vehicle.

Inspection

1. Check the bushing for wear and deterioration.
2. Check the rear lower arm for deformation.
3. Check the coil spring and spring pad for deterioration and deformation.
4. Check for all bolts and nut.

SS-24

Suspension System

Rear Lower Arm

Replacement

1. Remove the rear wheel & tire.

Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

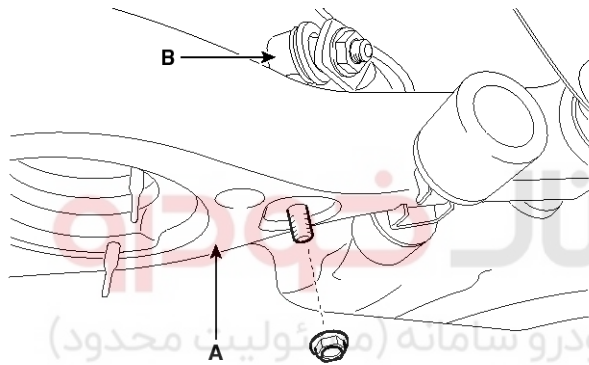
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the rear wheel & tire.

2. Loosen the nut and then remove the rear stabilizer link (B) with the rear lower arm (A).

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

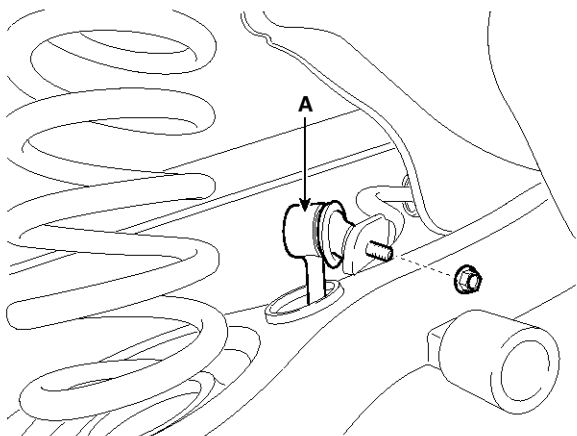


SVGSS0033D

3. Loosen the nut and then remove the stabilizer link (A) from the stabilizer bar.

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

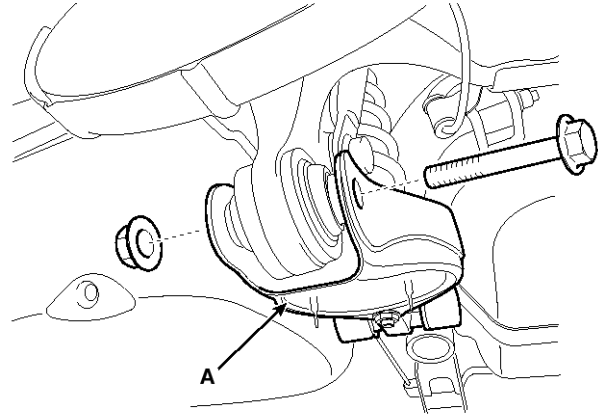


SVGSS0032D

4. Loosen the bolt & nut and then remove the rear lower arm (A) with the rear axle.

Tightening torque:

137.3 ~ 156.9N.m (14.0 ~ 16.0kgf.m, 101.3 ~ 115.7lb-ft)

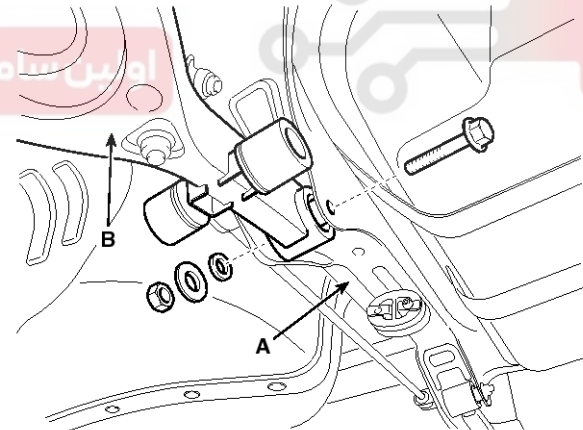


SVGSS0028D

5. Loosen the bolt & nut and then remove the rear lower arm (B) with the sub frame (A).

Tightening torque:

107.9 ~ 117.7N.m (11.0 ~ 12.0kgf.m, 79.6 ~ 86.8lb-ft)



SVGSS0027D

6. Installation is the reverse of removal.

Inspection

1. Check the bushing for wear and deterioration.
2. Check the rear lower arm for deformation.
3. Check the coil spring and spring pad for deterioration and deformation.
4. Check for all bolts and nut.

Rear Suspension System

SS-25

Rear Stabilizer Bar

Replacement

1. Remove the rear wheel & tire.

Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

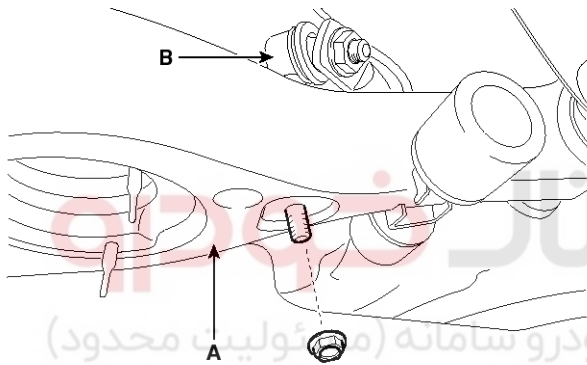
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the rear wheel & tire.

2. Loosen the nut and then remove the rear stabilizer link (B) with the rear lower arm (A).

Tightening torque:

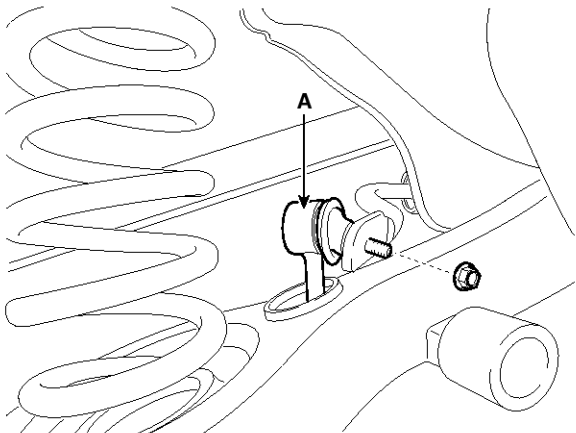
98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)



3. Loosen the nut and then remove the stabilizer link (A) with the rear stabilizer bar.

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)

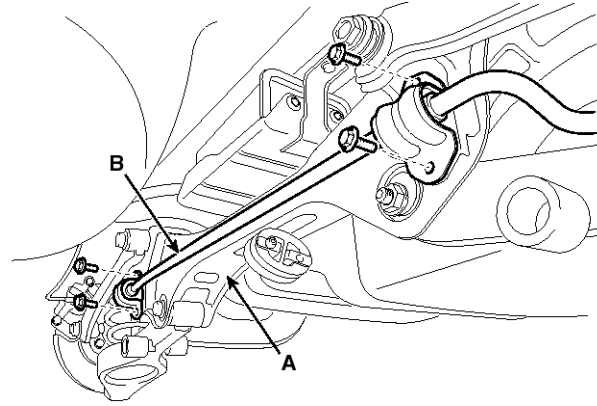


SVGSS0032D

4. Loosen the mounting bolt and then remove the stabilizer bar (B) with the sub frame (A).

Tightening torque:

44.1 ~ 53.9N.m (4.5 ~ 5.5kgf.m, 32.5 ~ 39.8lb-ft)



SVGSS0034D

5. Installation is the reverse of removal.

Inspection

1. Check the rear stabilizer bar for deformation.
2. Check the rear stabilizer link ball joint for damage.

SS-26

Suspension System

Rear Assist Arm

Replacement

1. Remove the rear wheel & tire.

Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

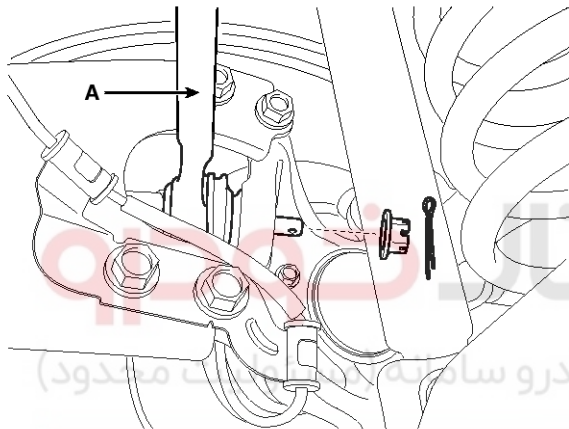
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the rear wheel & tire.

2. Remove the sprit pin and castle nut and then disconnect the rear assist arm (A) from the rear axle.

Tightening torque:

44.1 ~ 53.9N.m (4.5 ~ 5.5kgf.m, 32.5 ~ 39.8lb-ft)

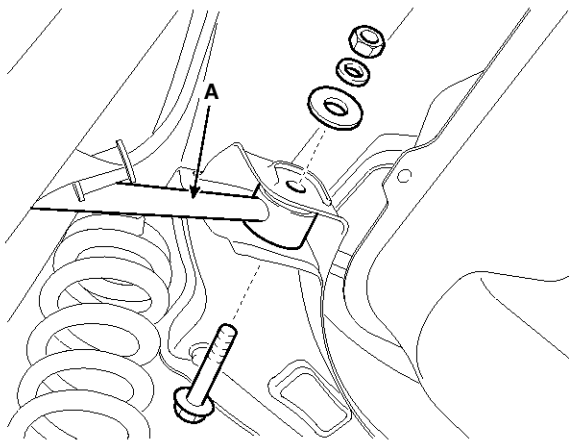


SVGSS0031D

3. Loosen the bolt & nut and then remove the rear assist arm (A) with the sub frame.

Tightening torque:

107.9 ~ 117.7N.m (11.0 ~ 12.0kgf.m, 79.6 ~ 86.8lb-ft)



SVGSS0040D

4. Installation is the reverse of removal.

Inspection

1. Check the bushing for wear and deterioration.
2. Check the rear lower arm for deformation.
3. Check the coil spring and spring pad for deterioration and deformation.
4. Check for all bolts and nut.

Rear Suspension System

SS-27

Trailing Arm

Replacement

1. Remove the rear wheel & tire.

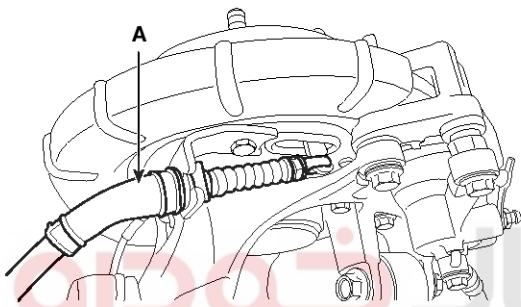
Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

⚠ CAUTION

Be careful not to damage to the hub bolts when removing the rear wheel & tire.

2. Disconnect the parking brake cable (A) with the rear brake assembly.

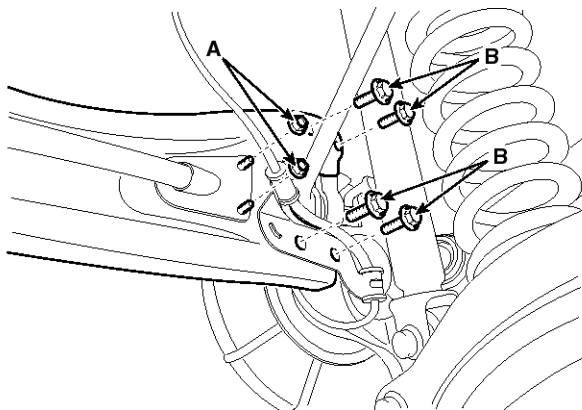


SYFSS0026D

3. Loosen the parking brake cable bracket nuts (A) & trailing arm mounting bolts (B) and then remove the trailing arm with the rear axle.

Tightening torque:

34.3 ~ 53.9N.m (3.5 ~ 5.5kgf.m, 25.3 ~ 39.8lb-ft)



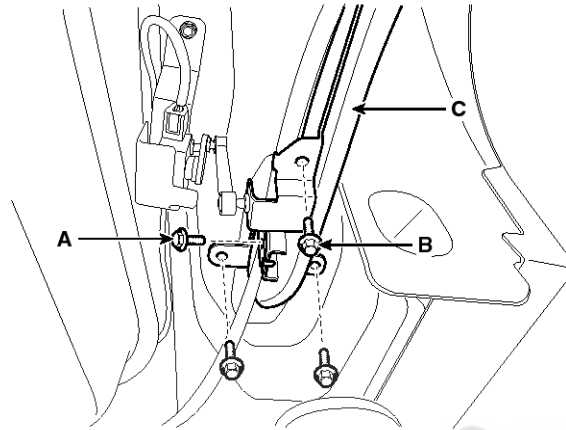
SVGSS0029D

4. Loosen the parking brake cable bracket bolt (A) & height sensor bracket bolt (B).

5. Loosen the mounting bolt and then remove the trailing arm (C) from the body.

Tightening torque:

98.1 ~ 117.7N.m (10.0 ~ 12.0kgf.m, 72.3 ~ 86.8lb-ft)



SVGSS0030D

6. Installation is the reverse of removal.

SS-28

Suspension System

Rear Cross Member

Replacement

1. Remove the rear wheel & tire.

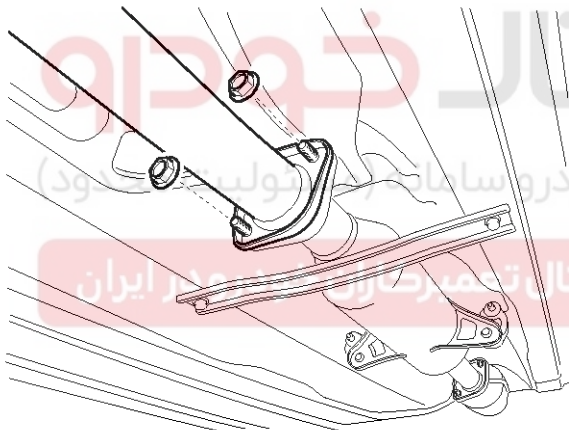
Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)

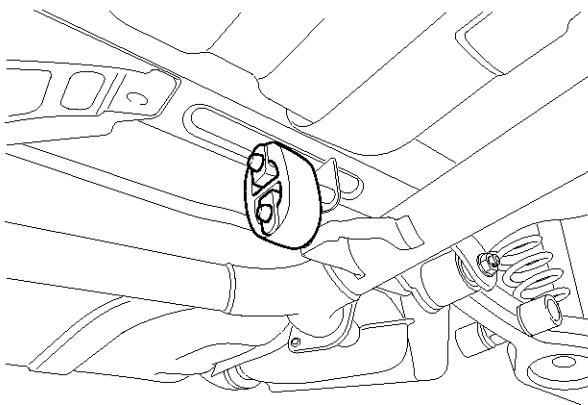
⚠ CAUTION

Be careful not to damage to the hub bolts when removing the rear wheel & tire.

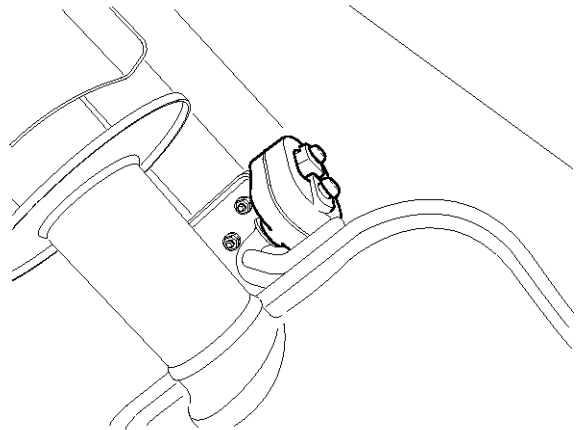
2. Remove the rear lower arm. (Refer to the lower arm)
3. Remove the rear shock absorber. (Refer to the rear shock absorber)
4. Remove the rear upper arm. (Refer to the rear upper arm)
5. Remove the trailing arm. (Refer to the trailing arm)
6. Remove the rear assist arm. (Refer to the rear assist arm)
7. Remove the rear muffler.



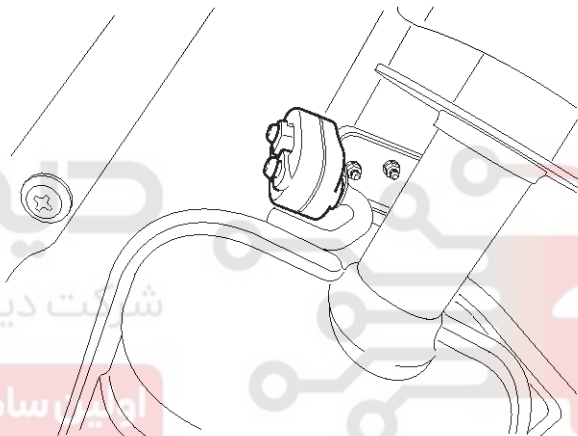
SVGSS0041D



SVGSS0042D



SVGSS0043D



SVGSS0035D

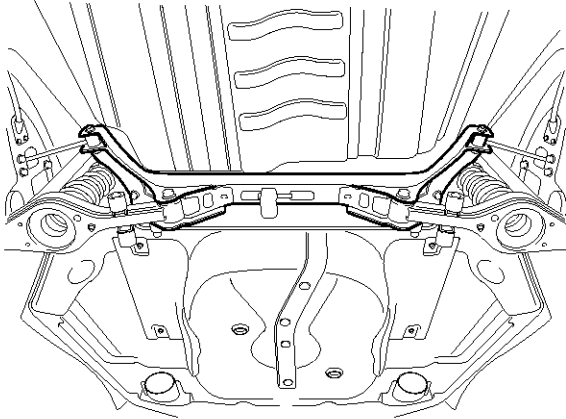
Rear Suspension System

SS-29

8. Loosen the mounting bolts and then remove the rear cross member with the frame.

Tightening torque:

156.9 ~ 176.5N.m (16.0 ~ 18.0kgf.m, 115.7~130.2lb-ft)



SVGSS0026D

9. Installation is the reverse of removal.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



SS-30

Suspension System

Tires/Wheels

Tire

Tire wear

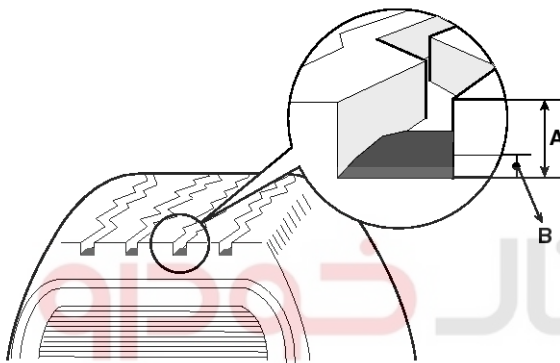
1. Measure the tread depth of the tires.

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

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

NOTICE

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



شرکت دیجیتال خودرو (مسئولیت محدود)

KHRE404A

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



Tires/Wheels

SS-31

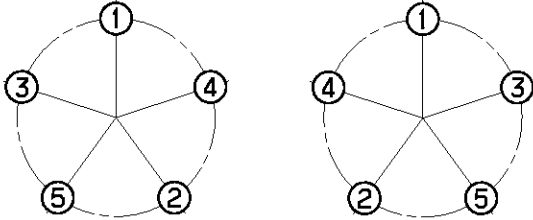
Wheel

Hub nut tightening sequence

Tighten the hub nuts as follows.

Tightening torque:

88.3 ~ 107.9N.m (9.0 ~ 11.0kgf.m, 65.1 ~ 79.6lb-ft)



SUNSS6551D

⚠ CAUTION

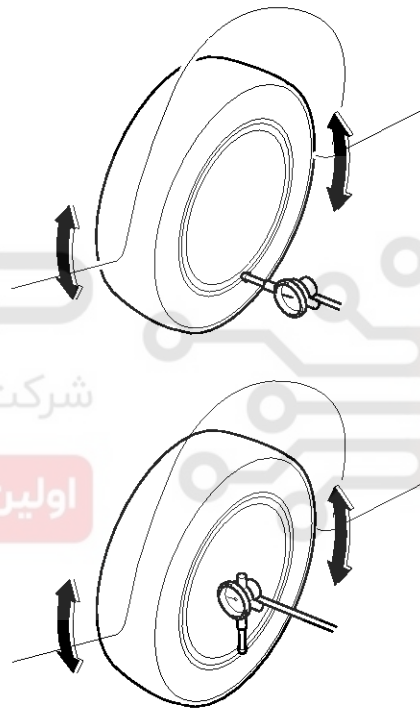
When using an impact gun, final tightening torque should be checked using a torque wrench.

Run out inspection

1. Jack up the vehicle.
2. Measure the wheel Run-out by using a dial indicator as illustration below.

Run-out	Aluminum
Radial mm(in.)	Below 0.3(0.012)
Lateral mm(in.)	Below 0.3(0.012)

3. If measured value exceeds the standard value, replace the wheel.



KHRE402A

SS-32

Suspension System

Alignment

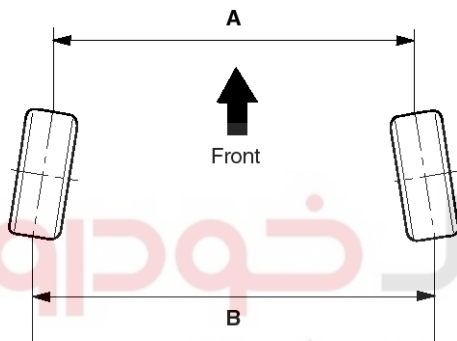
Front wheel alignment

⚠CAUTION

When using a commercially available computerized wheel alignment equipment to inspect the front wheel alignment, always position the vehicle 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 tires are inflated to the specified pressure.

Toe



SHDSS6512L

$B - A > 0$: Toe in (+)

$B - A < 0$: Toe out (-)

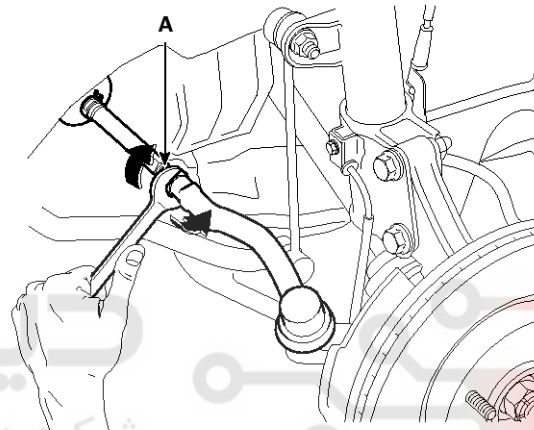
Toe adjustment

1. Loosen the tie rod end lock nut.
2. Remove the bellows clip to prevent the bellows from being twisted.
3. Adjust the toe by screwing or unscrewing the tie rod. Toe adjustment should be made by turning the right and left tie rods by the same amount.

Toe

Total : $0^\circ \pm 0.2^\circ$

Individual : $0^\circ \pm 0.08^\circ$



AHIE107B

4. When completing the toe adjustment, install the bellows clip and tighten the tie rod end lock nut to specified torque.

Tightening torque:

49.0 ~ 53.9N.m (5.0 ~ 5.5kgf.m, 36.2 ~ 39.8lb-ft)

Camber and Caster

Camber and Caster are pre-set at the factory, so they do not need to be adjusted. If the camber and caster are not within the standard value, replace or repair the damaged parts and then inspect again.

Camber angle: $-0.5^\circ \pm 0.5^\circ$

Caster angle : $4.47^\circ \pm 0.5^\circ$

Tires/Wheels

SS-33

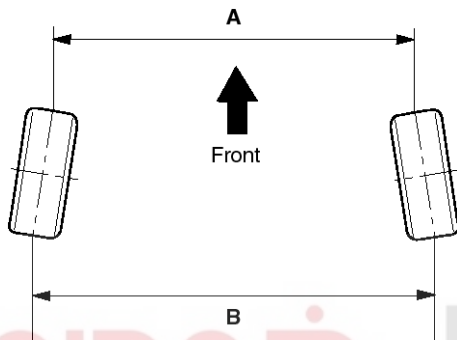
Rear wheel alignment

⚠ CAUTION

When using a commercially available computerized wheel alignment equipment to inspect the rear wheel alignment, always position the vehicle on a level surface.

Prior to inspection, make sure that the rear suspension system is in normal operating condition and that the tires are inflated to the specified pressure.

Toe



SHDSS6512L

$B - A > 0$: Toe in (+)

$B - A < 0$: Toe out (-)

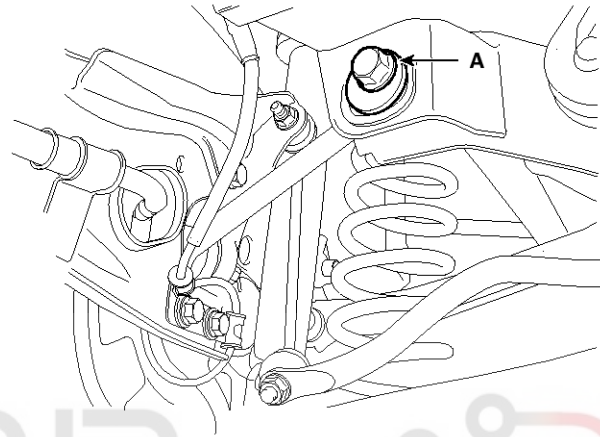
Toe adjustment

1. Loosen the nut holding the assist arm cam bolt (A).
2. Adjust rear toe by turning the rear assist arm cam bolt (A) clockwise or counter clockwise. Toe adjustment should be made by turning the right and left cam bolt by the same amount.

Toe

Total : $0.2^\circ \pm 0.2^\circ$

Individual : $0.08^\circ \pm 0.08^\circ$



SHDSS6014D

3. When completing the toe adjustment, tighten the nut to specified torque.

Tightening torque:

137.3 ~ 156.9N.m (14.0 ~ 16.0kgf.m, 101.3 ~ 115.7lb-ft)

Camber

Camber is pre-set at the factory, so it does not need to be adjusted. If the camber is not within the standard value, replace or repair the damaged parts and then inspect again.

Camber: $-1.0^\circ \pm 0.5^\circ$