

Suspension System



Specifications

Front Suspension

Item		Specification
Suspension type		Multi link
Shock absorber	Type	Gas
		Strut tower bar
Coil spring	Free Height [I.D. color]	319.0mm (12.5590 in) Green
Ride height		383±10mm (15.0787±0.3937 in)

Rear Suspension

Item		Specification
Suspension type		Multi link
Shock absorber	Type	Gas
Coil spring	Free Height [I.D. color]	302.4mm (11.9055 in) Cyan
Ride height		383±10mm (15.0787±0.3937 in)

Wheel & Tire

Item		Specification	
Wheel		7.5J x 18 : 8.0J x 18 8.0J x 19 : 8.5J x 19	
Temporary Spare Wheel	Aluminum	4.0T x 18	
	Steel	4.0T x 17	
Tire		225/45 R18 : 245/45 R18 225/40 R19 : 245/40 R19	
Temporary Spare Tire	Aluminum	T135/80 R18	
	Steel	T135/90 D17	
Tire pressure	Front	P225/45R18	2.5+0.07kg/cm ² (35+1.0psi)
		P225/40R19	2.5+0.07kg/cm ² (35+1.0psi)
		T135/90D17	4.2+0.07kg/cm ² (60+1.0psi)
	Rear	P245/45R18	2.5+0.07kg/cm ² (35+1.0psi)
		P245/40R19	2.5+0.07kg/cm ² (35+1.0psi)

T135/80R18 | 4.2+0.07kg/cm² (60+1.0psi)

Wheel Alignment

Item		Specification	
		Front	Rear
Toe-in	Total	0.28°±0.2°	0.16°±0.2°
	Individual	0.14°±0.1°	0.08°±0.1°
Camber angle		-0.7°±0.5°	-1.5°±0.5°
Caster angle		7.45°±0.5°	-
King-pin angle		13.7°	-

Tightening Torques

Front Suspension

Item	Tightening torque		
	N.m	kgf.m	lb-ft
Wheel nuts	88.3 ~ 107.9	9.0 ~ 11.0	65.1 ~ 79.6
Tension arm to sub frame	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Tension arm to front axle	78.5 ~ 88.3	8.0 ~ 9.0	57.9 ~ 65.1
Tension arm to flexible hose	6.9 ~ 10.8	0.7 ~ 1.1	5.1 ~ 8.0
Lateral arm to sub frame	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Lateral arm to front axle	78.5 ~ 88.3	8.0 ~ 9.0	57.9 ~ 65.1
Front stabilizer bar to sub frame	49.0 ~ 63.7	5.0 ~ 6.5	36.2 ~ 47.0
Front stabilizer bar to stabilizer link	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Steering gear box to front axle	23.5 ~ 33.3	2.4 ~ 3.4	17.4 ~ 24.6

Rear Suspension


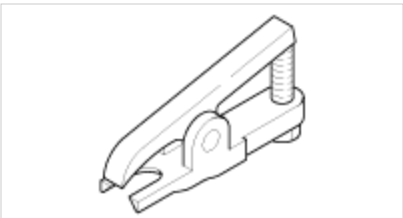

Item	Tightening torque		
	N.m	kgf.m	lb-ft
Wheel nuts	88.3 ~ 107.9	9.0 ~ 11.0	65.1 ~ 79.6
Rear shock absorber to frame	44.1 ~ 58.8	4.5 ~ 6.0	32.5 ~ 43.4
Rear shock absorber to lower arm	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Front upper arm to sub frame	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Front upper arm to rear axle	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Rear upper arm to sub frame	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Rear upper arm to rear axle	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7

Rear stabilizer bar to sub frame	49.0 ~ 63.7	5.0 ~ 6.5	36.2 ~ 47.0
Rear stabilizer link to lower arm	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Rear stabilizer bar to stabilizer link	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Rear lower arm to sub frame	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Rear lower arm to rear axle	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Assist arm to sub frame	137.3 ~ 156.9	14.0 ~ 16.0	101.3 ~ 115.7
Assist arm to rear axle	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Trailing arm to sub frame	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8
Trailing arm to rear axle	98.1 ~ 117.7	10.0 ~ 12.0	72.3 ~ 86.8

Suspension System



Special Service Tools

Tool (Number and Name)	Illustration	Use
09546-26000 Strut spring compressor		Compression of coil spring
09568-34000 Ball joint remover		Removal of Ball joint
09568-2J100 Ball joint remover		Removal of Ball joint


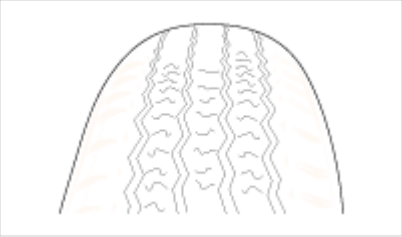
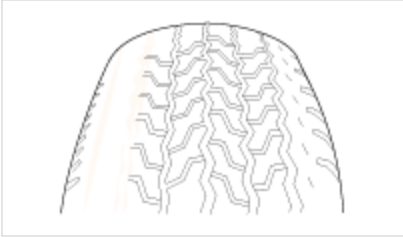

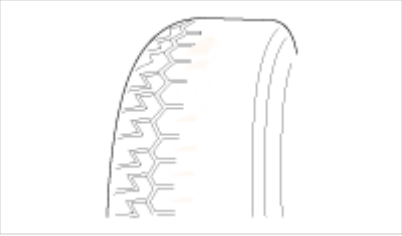

Suspension System



Troubleshooting

Trouble symptom	Probable cause	Remedy
Hard steering	Improper front wheel alignment	Repair
	Excessive turning resistance of lower arm ball joint	Replace
	Flat tire	Adjust
	No power assist	Repair or Replace
Poor return of steering wheel to center	Improper front wheel alignment	Repair
Poor ride quality	Improper front wheel alignment	Repair
	Damaged shock absorber	Repair or Replace
	Varied or damaged stabilizer	Replace
	Varied or damaged coil spring	Replace
	Worn lower arm bushing	Replace
Abnormal tire wear	Improper front wheel alignment	Repair
	Improper tire inflation pressure	Adjust
	Worn of shock absorber	Replace
Wandering	Improper front wheel alignment	Repair
	Poor turning resistance of lower arm ball joint	Repair
	Loose or worn lower arm bushing	Re-tighten or Replace
Vehicle pulls to one side	Improper front wheel alignment	Repair
	Excessive turning resistance of lower arm ball joint	Replace
	Varied or damaged coil spring	Replace
	Bent lower arm	Replace
	Tire pressure	Adjust
	Tire lateral pull	Adjust
	Front camber/caster	Adjust
	Perform correct road test on flat, no-crown road	Adjust
Steering wheel shimmy	Improper front wheel alignment	Repair
	Excessive turning resistance of lower arm ball joint	Replace
	Varied or damaged stabilizer	Replace
	Worn lower arm bushing	Replace
	Worn of shock absorber	Replace
	Varied or damaged coil spring	Replace
Bottoming	Broken or worn spring	Replace
	Malfunction of shock absorber	Replace

Wheel And Tire Diagnosis

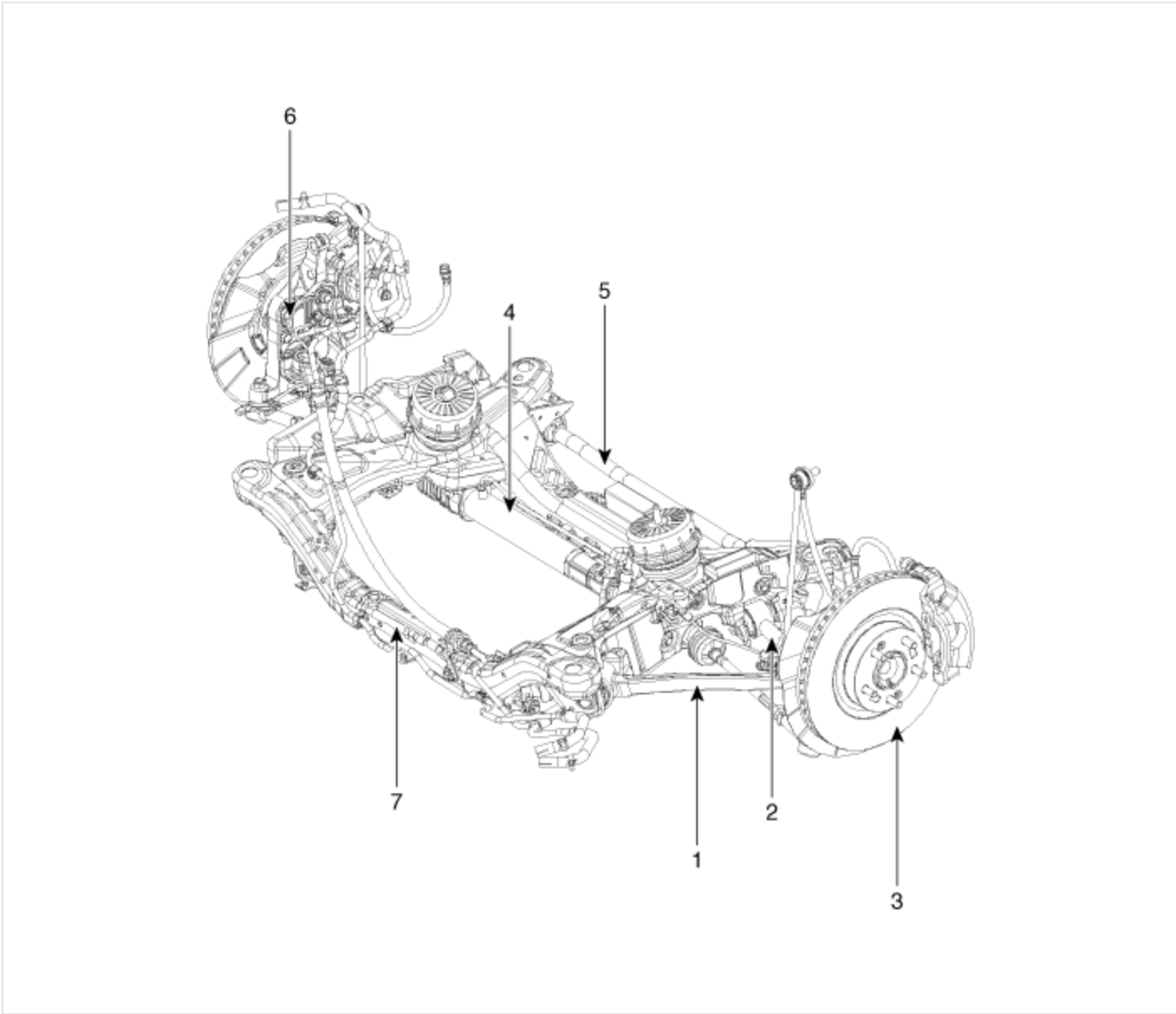
<p>Rapid wear at the center</p>	<p>Rapid wear at both shoulders</p>	<p>Wear at one shoulder</p>
		
<ul style="list-style-type: none"> • Center-tread down to fabric due to excessive over inflated tires • Lack of rotation • Excessive toe on drive wheels • Heavy acceleration on drive 	<ul style="list-style-type: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

Suspension System



Components

[Theta]

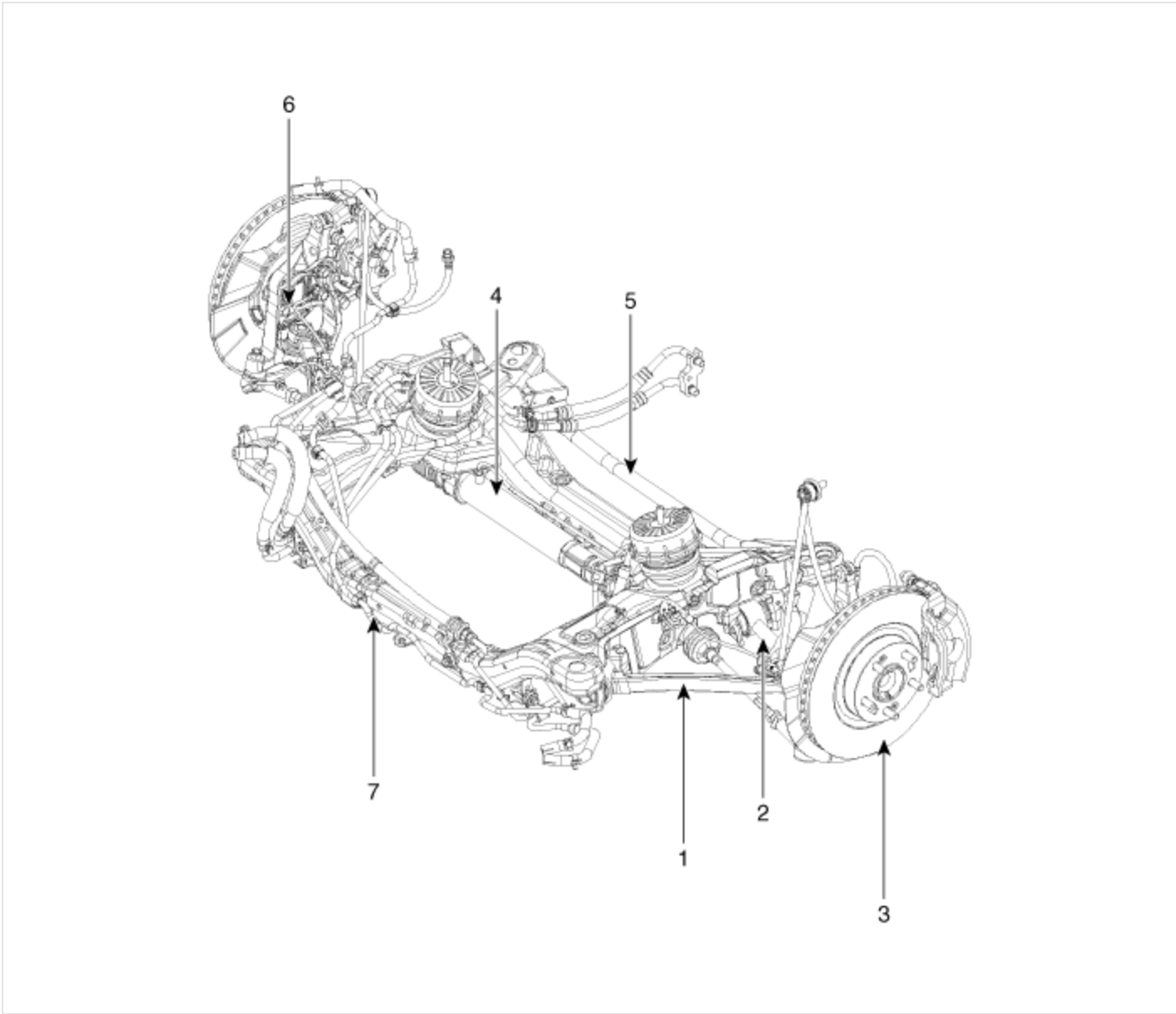


1. Tension arm
2. Lateral arm

5. Stabilizer bar
6. Front axle
7. Sub frame

- 3. Front disk
- 4. Steering gearbox

[Lamda]



1. Tension arm
2. Lateral arm

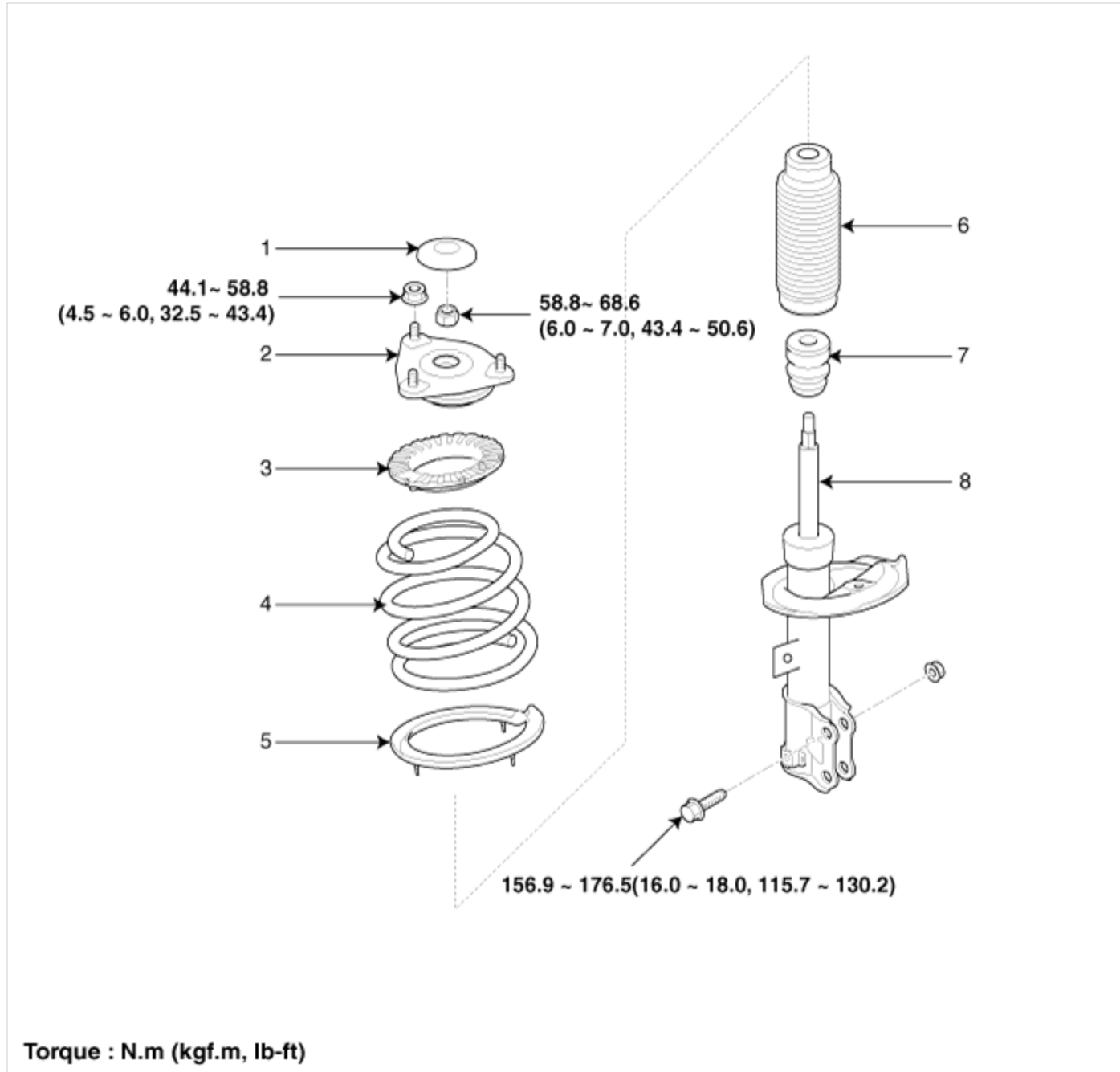
5. Stabilizer bar
6. Front axle
7. Sub frame

- 3. Front disk
- 4. Steering gearbox

Suspension System



Components



1. Insulator cap
2. Insulator assembly
3. Spring upper pad
4. Coil spring

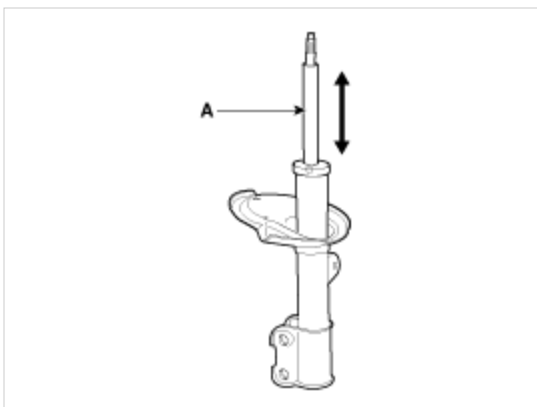
5. Spring lower pad
6. Dust cover
7. Bumper rubber
8. Shock absorber

Suspension System



Inspection

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



Suspension System

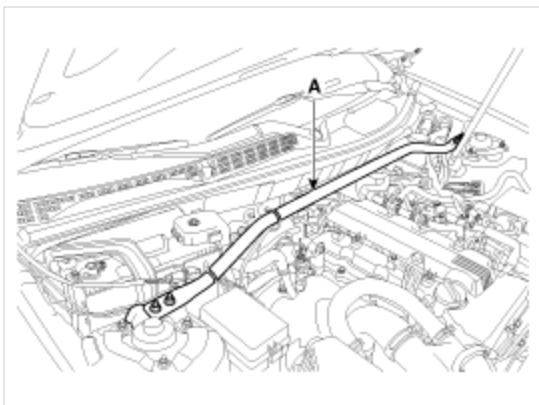


Replacement

1. Loosen the strut bar nuts.

Tightening torque :

26.5 ~ 40.2 N.m(2.7 ~ 4.1 kgf.m, 19.5 ~ 29.7 lb-ft)



2. Installation is the reverse of removal.

Suspension System



Replacement

Tension arm

1. Remove the front wheel & tire.

Tightening torque :

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

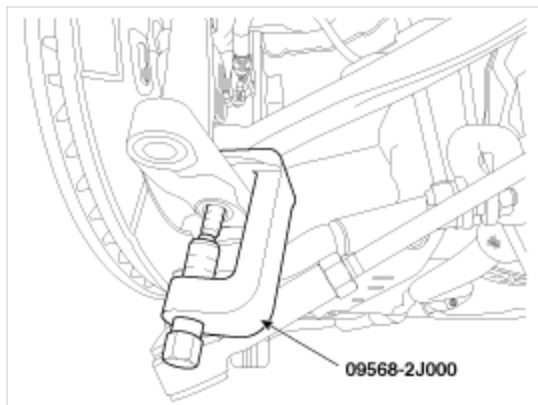
2. Remove the split pin and the castle nut (A).

Tightening torque :

78.5 ~ 88.3 N.m(8.0 ~ 9.0 kgf.m, 57.9 ~ 65.1 lb-ft)



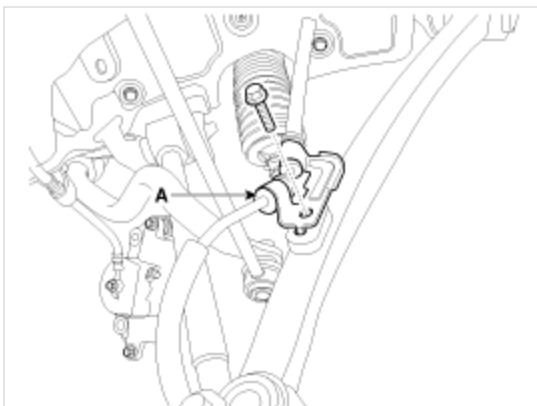
3. Separate the tension arm from the front axle ball joint by using SST (09568-2J000).



4. Remove the flexible hose (A).

Tightening torque :

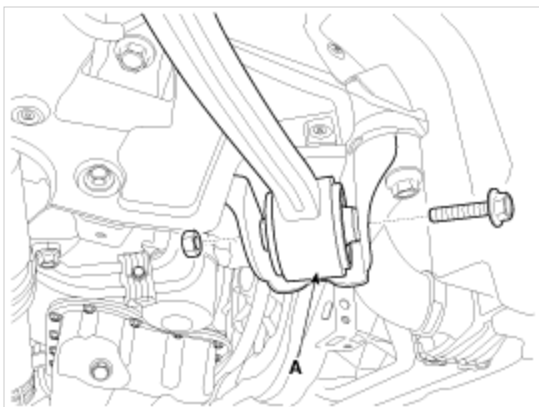
6.9 ~ 10.8 N.m(0.7 ~ 1.1 kgf.m, 5.1 ~ 8.0 lb-ft)



5. Loosen the bolts and nuts and then remove the tension arm (A) from the sub frame.

Tightening torque :

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



6. Installation is the reverse of removal.

Lateral arm

1. Remove the front wheel & tire.

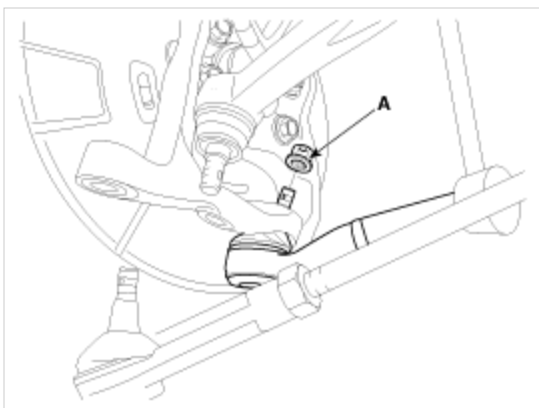
Tightening torque :

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

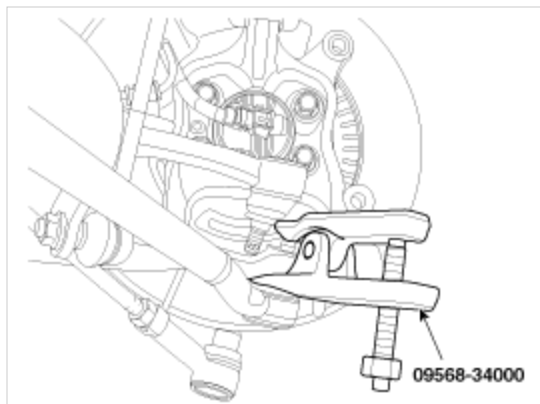
2. Remove the split pin and the castle nut (A).

Tightening torque :

78.5 ~ 88.3 N.m(9.0 ~ 11.0 kgf.m, 57.9 ~ 65.1 lb-ft)



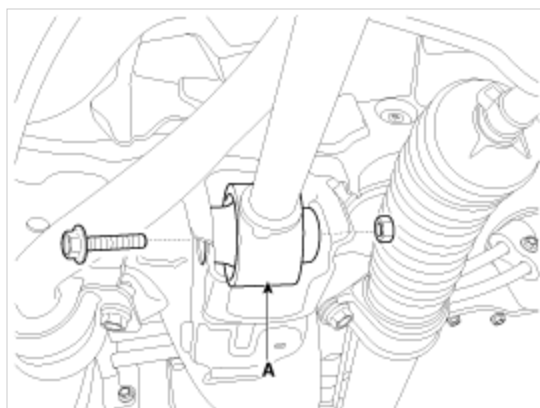
3. Separate the lateral arm from the front axle ball joint by using SST (09568-34000).



4. Loosen the bolts and nuts and then remove the lateral arm (A) from the sub frame.

Tightening torque :

137.3 ~ 156.9 N.m(16.0~18.0 kgf.m, 101.3 ~ 115.7 lb-ft)



5. Installation is the reverse of removal.

Suspension System



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.

Suspension System



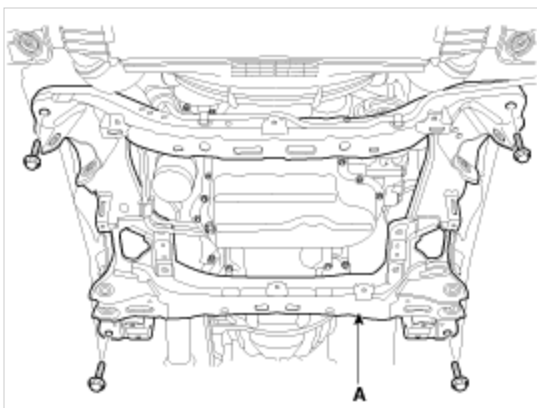
Replacement

1. Remove the front wheel & tire.

Tightening torque :

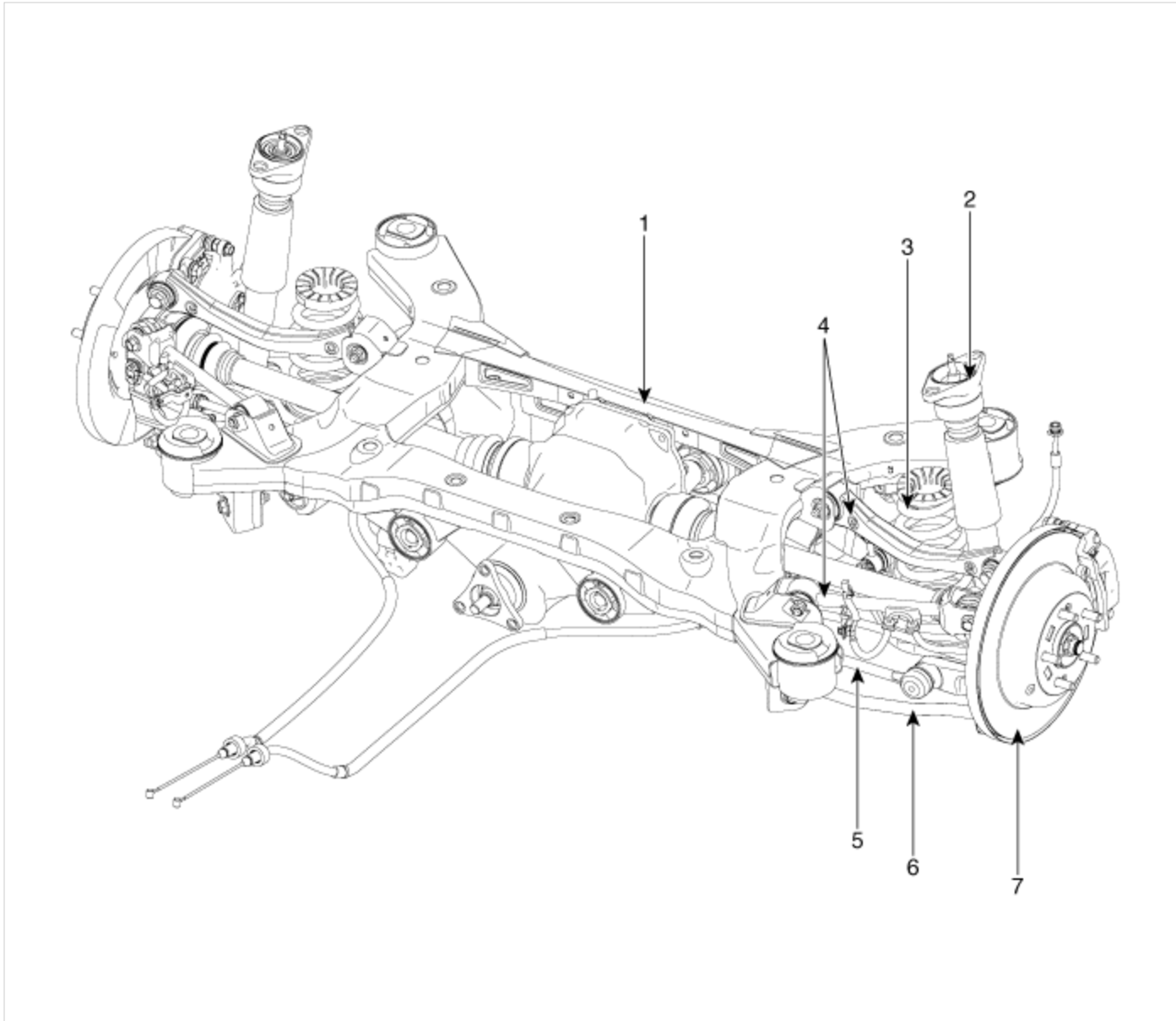
88.3 ~ 107.9 N.m(9.0 ~ 11.0 kgf.m, 65.1 ~ 79.6 lb-ft)

2. Remove the lower arm.
(Refer to SS group - "Front Lower Arm")
3. Remove the front strut assembly.
(Refer to SS group - "Front Strut Assembly")
4. Remove the front stabilizer bar.
(Refer to SS group - "Front Stabilizer Bar")
5. Remove the steering gear box.
(Refer to ST group - "Steering Gear Box")
6. Remove the cross member (A) from the body by loosening the mounting bolts and nuts.



7. Installation is the reverse of removal.

Suspension System**Components**



- 1. Sub frame
- 2. Rear shock absorber

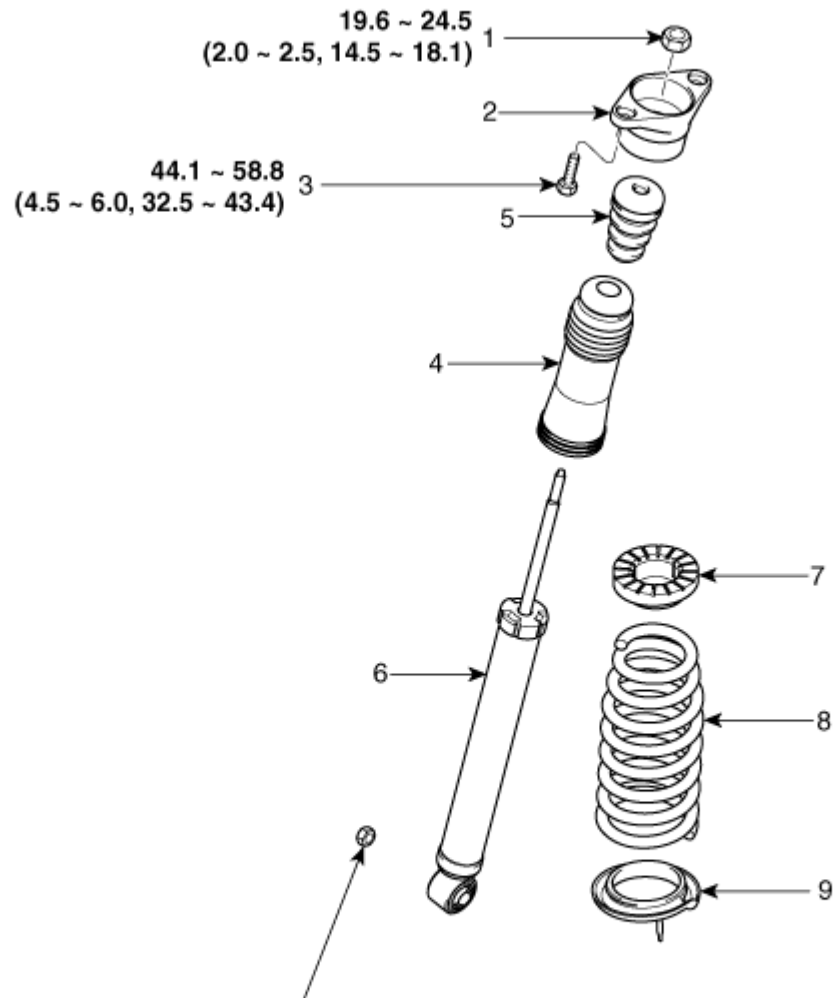
- 5. Assist arm
- 6. Trailing arm
- 7. Rear disc

- 3. Spring
- 4. Rear upper arm

Suspension System



Components



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10

137.3 ~ 156.9
(14.0 ~ 16.0, 101.3 ~ 115.7)

Torque : N.m (kgf.m, lb-ft)

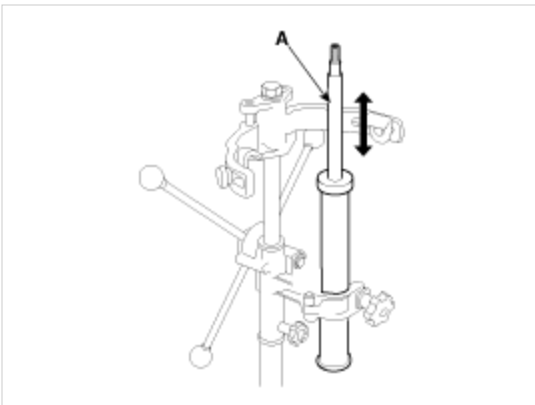
1. Lock nut 2. Bracket 3. Bolt 4. Dust cover	5. Urethan bumper 6. Shock absorber 7. Upper pad	8. Spring 9. Lower pad 10. Nut
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Suspension System



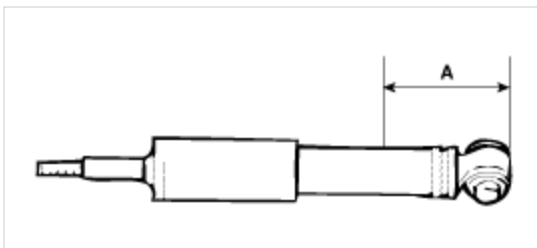
Inspection

1. Check the components for damage or deformation.
2. Compress and extend the piston rod (A) and check that there is no abnormal resistance or unusual sound during operation.



Disposal

1. Fully extend the piston rod.
2. Drill a hole on the (A) section to discharge gas from the cylinder.



CAUTION

The gas coming out is harmless, but be careful of chips that may fly when drilling. Be sure to wear safety goggles or eye protection when performing this task.

Suspension System



Replacement

Front Upper Arm

1. Remove the rear wheel & tire.

Tightening torque :

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

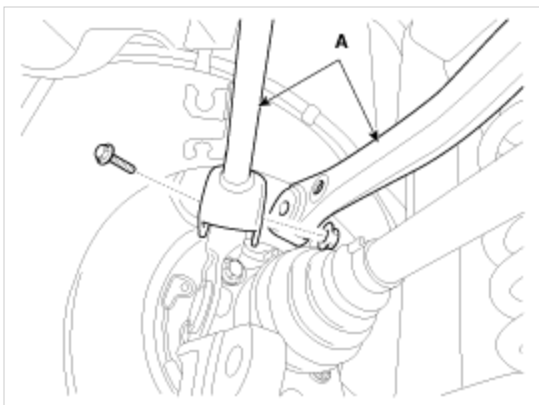
2. Remove the brake hose bracket.



3. Loosen the bolts and nuts and then remove the front upper arm (A) from rear axle.

Tightening torque :

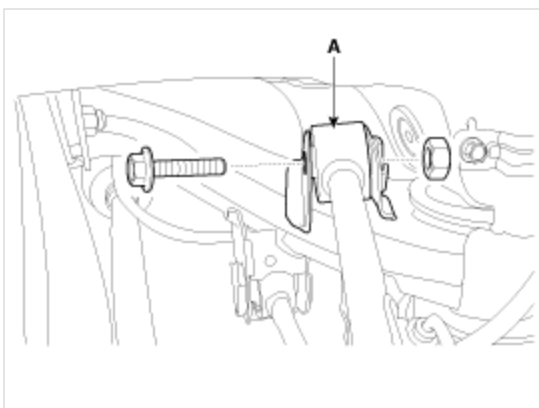
98.1 ~ 117.7 N.m(10.0 ~ 12.0 kgf.m, 72.3 ~ 86.8 lb-ft)



4. Loosen the bolts and nuts and then remove the front upper arm (A) from sub frame.

Tightening torque :

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



5. Installation is the reverse of removal.

Rear Upper Arm

1. Remove the rear wheel & tire.

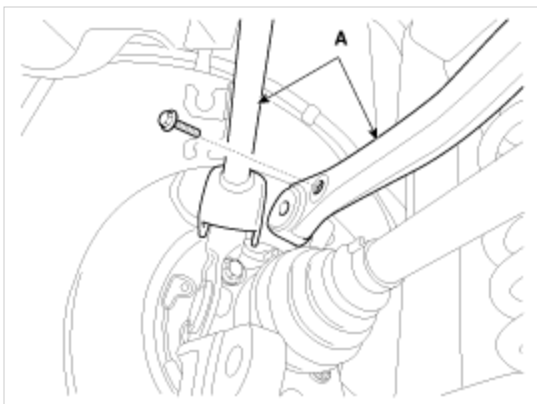
Tightening torque :

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

2. Loosen the bolts and nuts and then remove the rear upper arm (A) from rear axle.

Tightening torque :

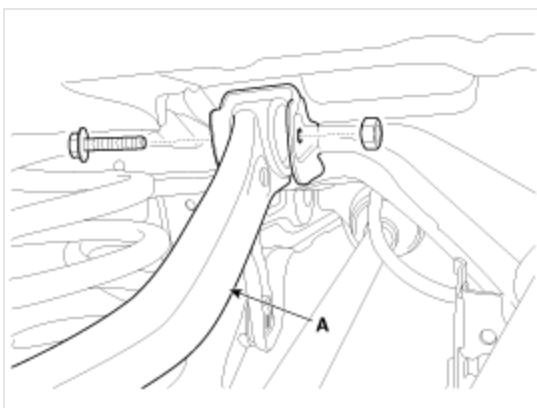
137.3 ~ 156.9 N.m(14.0~16.0 kgf.m, 101.3 ~ 115.7 lb-ft)



3. Loosen the bolts and nuts and then remove the rear upper arm (A) from sub frame.

Tightening torque :

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



4. Installation is the reverse of removal.

Suspension System



Inspection

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

Suspension System



Inspection

1. Check the bushing for wear deterioration.
2. Check the all bolts.
3. Check the stabilizer bar for deformation.
4. Check the stabilizer link ball joint for damage.

Suspension System



Replacement

1. Remove the rear wheel & tire.

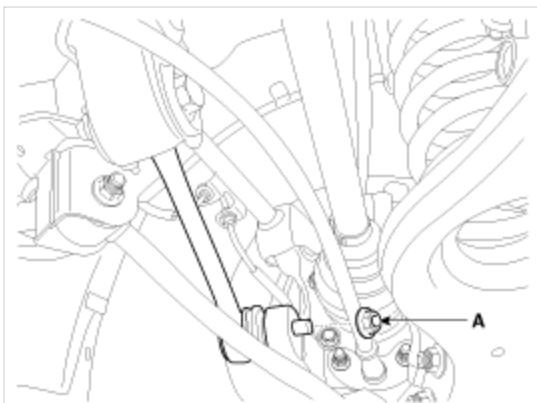
Tightening torque :

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

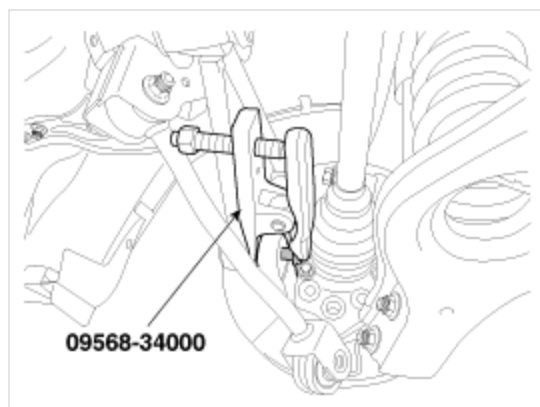
2. Loosen the nuts (A).

Tightening torque :

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



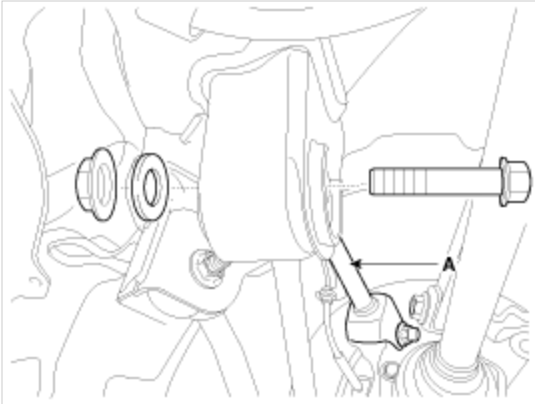
3. Separate the assist arm from the rear axle ball joint by using SST (09568-34000).



4. Loosen the bolts and nuts and then remove the assist arm (A) from sub frame.

Tightening torque :

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



5. Installation is the reverse of removal.

Suspension System



Replacement

1. Remove the rear wheel & tire.

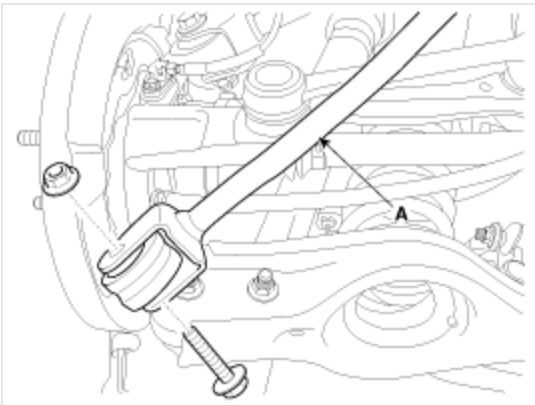
Tightening torque :

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

2. Loosen the bolts and nuts and then remove the trailing arm (A) from rear axle.

Tightening torque :

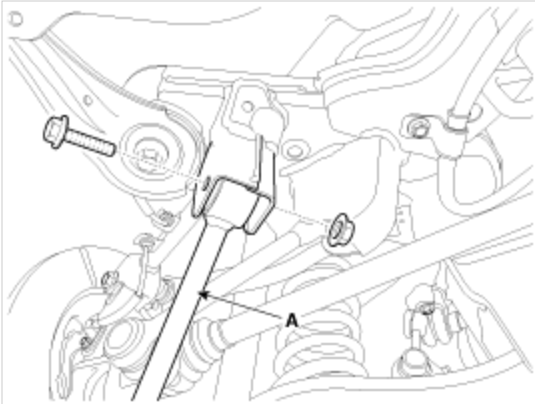
98.1 ~ 117.7 N.m(10.0 ~ 12.0 kgf.m, 72.3 ~ 86.8 lb-ft)



- Loosen the bolts and nuts and then remove the assist arm (A) from sub frame.

Tightening torque :

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



- Installation is the reverse of removal.

Suspension System

Replacement

- Remove the rear wheel & tire.

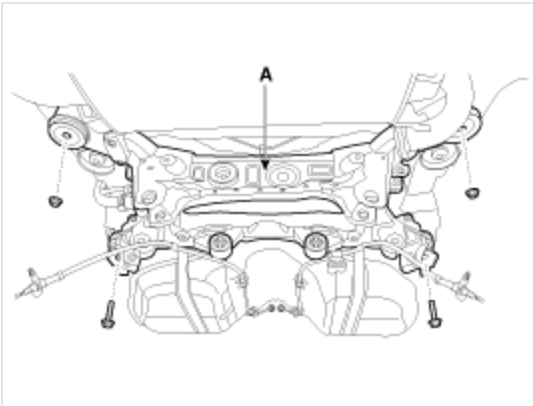
Tightening torque :

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

- Remove the rear lower arm.
(Refer to SS group - "Rear Lower Arm")
- Remove the rear shock absorber.
(Refer to SS group - "Rear Shock Absorber")
- Remove the rear upper arm.
(Refer to SS group - "Rear Upper Arm")
- Remove the trailing arm.
(Refer to SS group - "Trailing Arm")
- Remove the assist arm.
(Refer to SS group - "Rear Assist Arm")
- Remove the differential carrier.
(Refer to DS group - "Differential Carrier Assembly")
- Loosen the bolts and nuts and then remove the sub frame (A).

Tightening torque :

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



9. Installation is the reverse of removal.

Suspension System

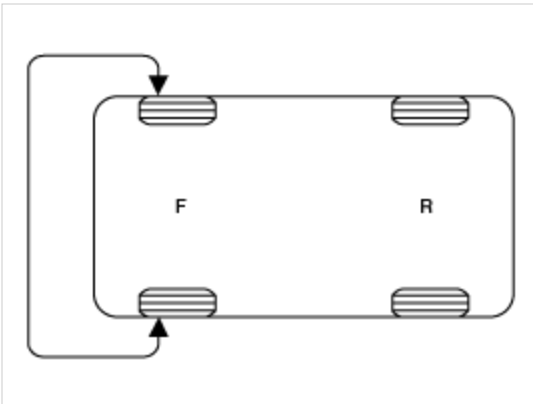


Tire Rotation

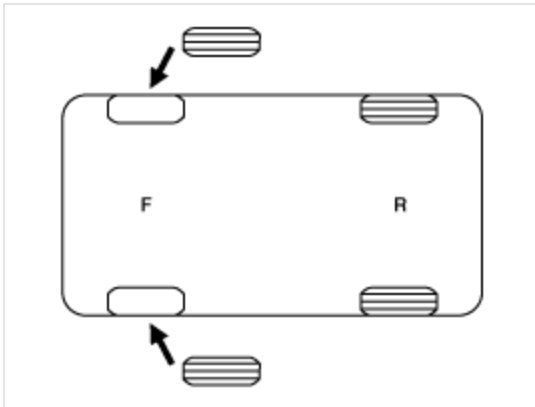
Checking For Pull And Wander

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



Suspension System



Wheel Nut Tightening

1. Tightening torque.

Tightening torque :

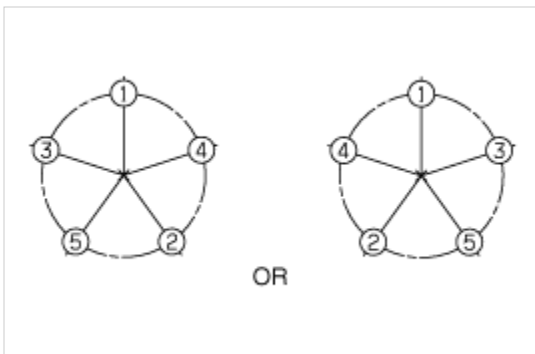
88.3 ~ 107.9 N.m(9.0 ~ 11.0 kgf.m, 65.1 ~ 79.6 lb-ft)

CAUTION

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

2. Tightening order.

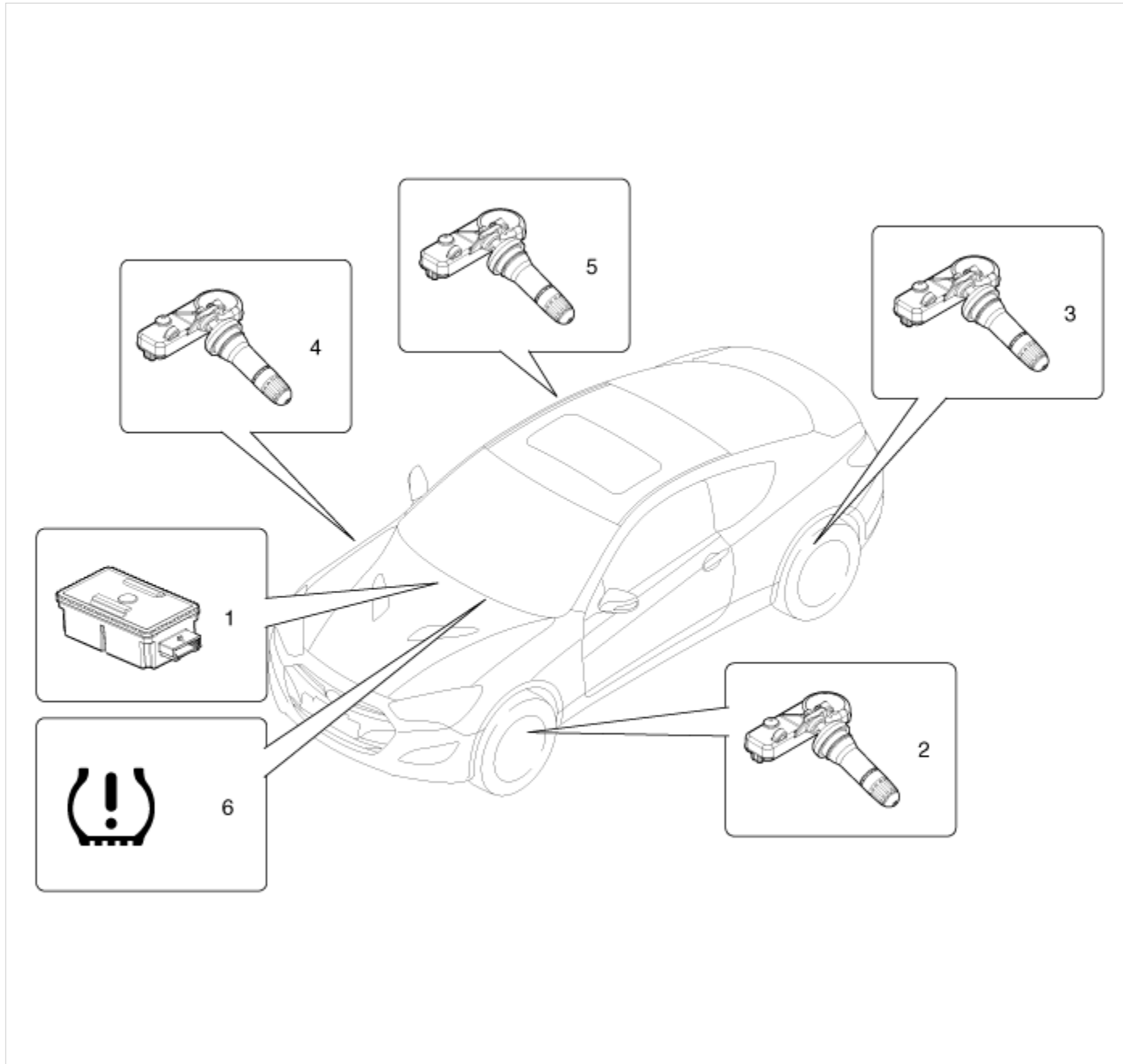
Check the torque again after tightening the wheel nuts diagonally.



Suspension System



Components



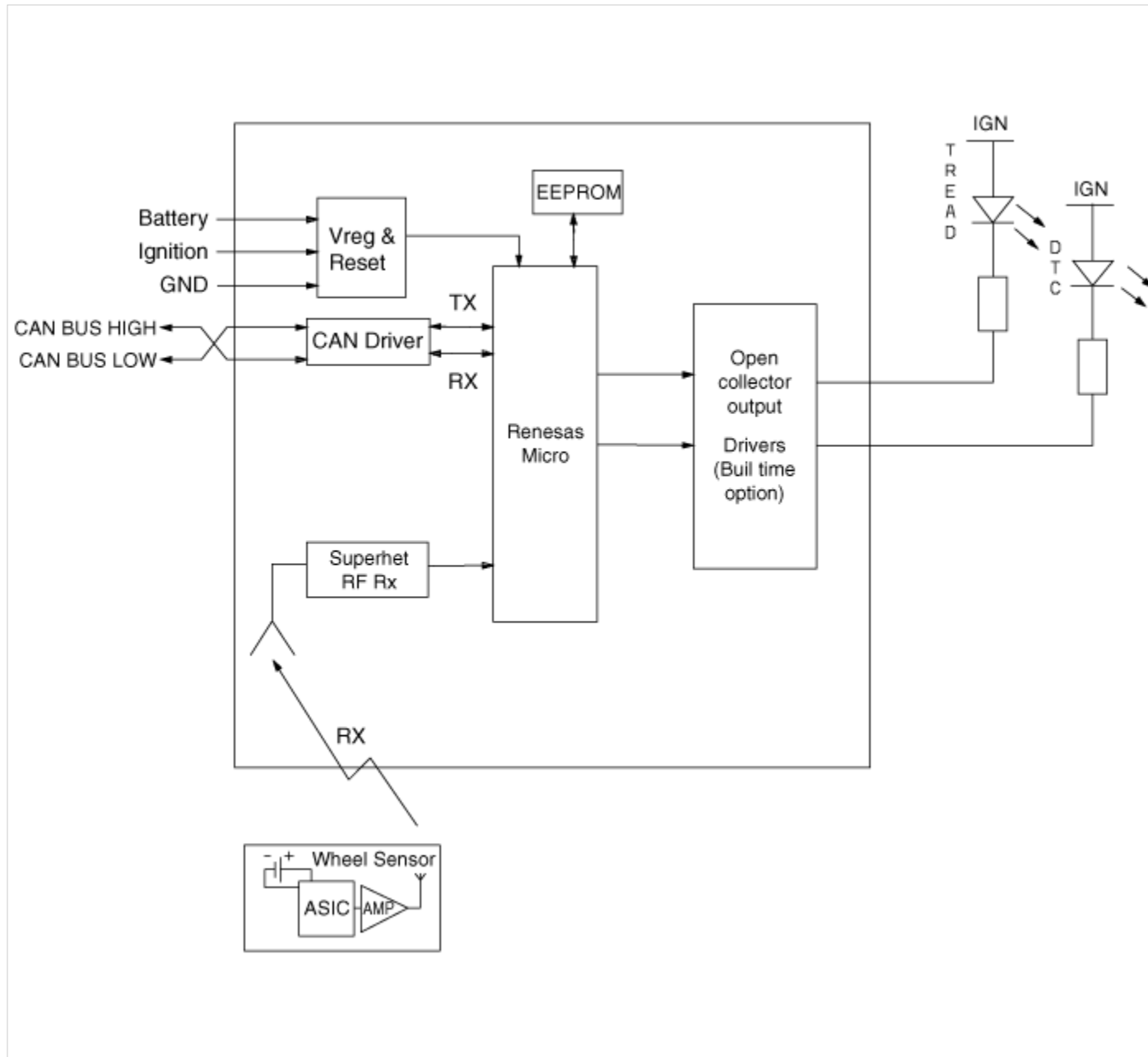
- 1. Receiver
- 2. TPMS Sensor (S1)
- 3. TPMS Sensor (S4)

- 4. TPMS Sensor (S2)
- 5. TPMS Sensor (S3)
- 6. Tread Lamp

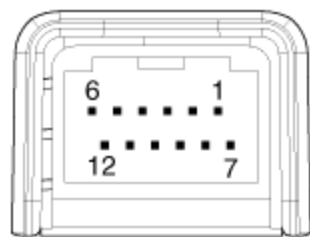
Suspension System



Circuit Diagram



Harness Connector



Pin No.	Discription	Remark
1	-	
2	-	
3	-	
4	Vehicle Ground	
5	CAN_HIGH	
6	Battery	
7	-	
8	-	
9	-	
10	-	
11	CAN_LOW	
12	Ignition	

Suspension System



Description

TREAD Lamp

- Tire Under Inflation / Leak Warning.



1. Turn on condition
 - A. When tire pressure is below allowed threshold
 - B. When rapid leak is detected by the sensor.
 - C. Indicates that tire needs to be re-inflated to placard pressure / repaired.
2. Turn off condition

- A. Under-inflation ; When tire pressure is above (warning threshold + hysteresis).
- B. Rapid Leak ; When tire pressure is above (leak warning threshold).

DTC Warning

1. Turn on condition
 - A. When the system detects a fault that is external to the receiver/ sensor.
 - B. When the system detects a receiver fault.
 - C. When the system detects a sensor fault.
2. Turn off condition
 - A. If the fault is considered as 'critical', then the lamp is held on throughout the current Ignition cycle (even if the DTC has been demoted). This is because it is important to bring the problem to the drivers attention. On the following Ignition cycle, the demotion conditions will be re-checked. If the demotion conditions occur, the lamp will be turned off. It will be held on until DTC demotion checking is completed.
 - B. 'Non critical' faults are those that can occur temporarily e.g. vehicle battery under voltage. The lamp is therefore turned off when the DTC demotion condition occurs.

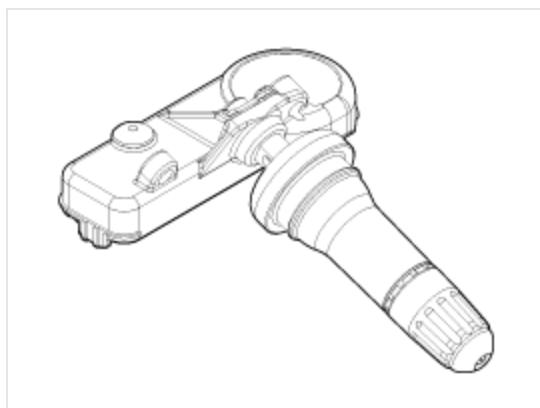
System Fault

1. General Function
 - A. The system monitors a number of inputs across time in order to determine that a fault exists.
 - B. Faults are prioritized according to which has the most likely cause.
 - C. Maximum fault store is equal to 15.
 - D. Certain faults are not covered through DTC. The main ones are:
 - 1) Sensor thermal shutdown (over 257°F/125°C).
 - 2) Ignition Line stuck ; requires observation of lamps at Ignition ON to diagnose.

Suspension System



Description



1. Mode

(1) Configuration State

- A. All sensors should be in the Low Line (Base) state.
- B. In Low Line (Base) configuration, sensor transmissions occur every 3 minutes 20 seconds (nominal) and pressure is measured every 20 seconds.

(2) Normal Fixed Base State

- A. Sensor transmissions continue at the Low Line (Base) configuration defined rates until the state is either changed by LF command or by the sensor detecting a condition that requires a temporary change to another state.
- B. The LF command to this state must contain the sensors ID.

(3) Storage Auto State:

- A. This state is a Low current consumption state.
- B. Sensors are in this state when they first arrive at the dealership (either on the vehicle or as replacement spares).
- C. In this state, the sensor does not measure pressure / temperature / battery level.
- D. The sensor will not transmit in this state unless requested to do so by the initiate command.

(4) Alert State:

- A. The sensor automatically enters this state if the measured temperature exceeds 230 °F(110 °C) and over temperature shutdown is likely.
- B. In this state, pressure is measured every 4 seconds and RF data transmitted every 4 seconds.
- C. The state lasts for 1 minute if it is pressure triggered.
- D. This state is also entered when a 3 psi change in pressure from the last RF transmission occurs.

NOTICE

Sensor mode is used to configure sensor between high line and low line system. TPMS sensor for UB should be set to low line.

Suspension System



Installation

Sensor Fit

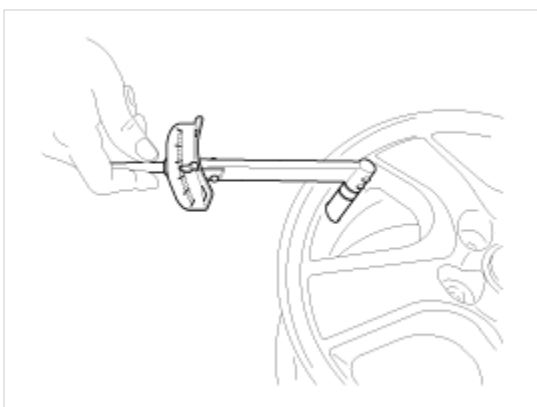
CAUTION

- Handle the sensor with care.
- Avoid lubricant contact.
- Ensure that the wheel to be fitted is designed for sensor mount. There should normally be a mark to indicate this.
- Ensure that the valve hole and mating face of the wheel are clean.

1. Slide the sensor-valve unit through the valve hole of the rim. Hold the sensor against the rim and the rubber grommet against the sealing surface.
2. Insert the nut over the valve stem and then tighten the nut.



3. Continue to tightening the nut until contact with the rim and then tighten to 3.5 ~ 4.5Nm.



CAUTION

- Tighten slowly with quarter turn steps until the final torque is reached.
- Do not exceed allowed torque.
- Do not use electric or pneumatic tools.

4. Check that the sensor is firmly attached to the rim.

CAUTION

Risk of damage during the tire installation/ removal if the sensor is not firmly attached to the rim.

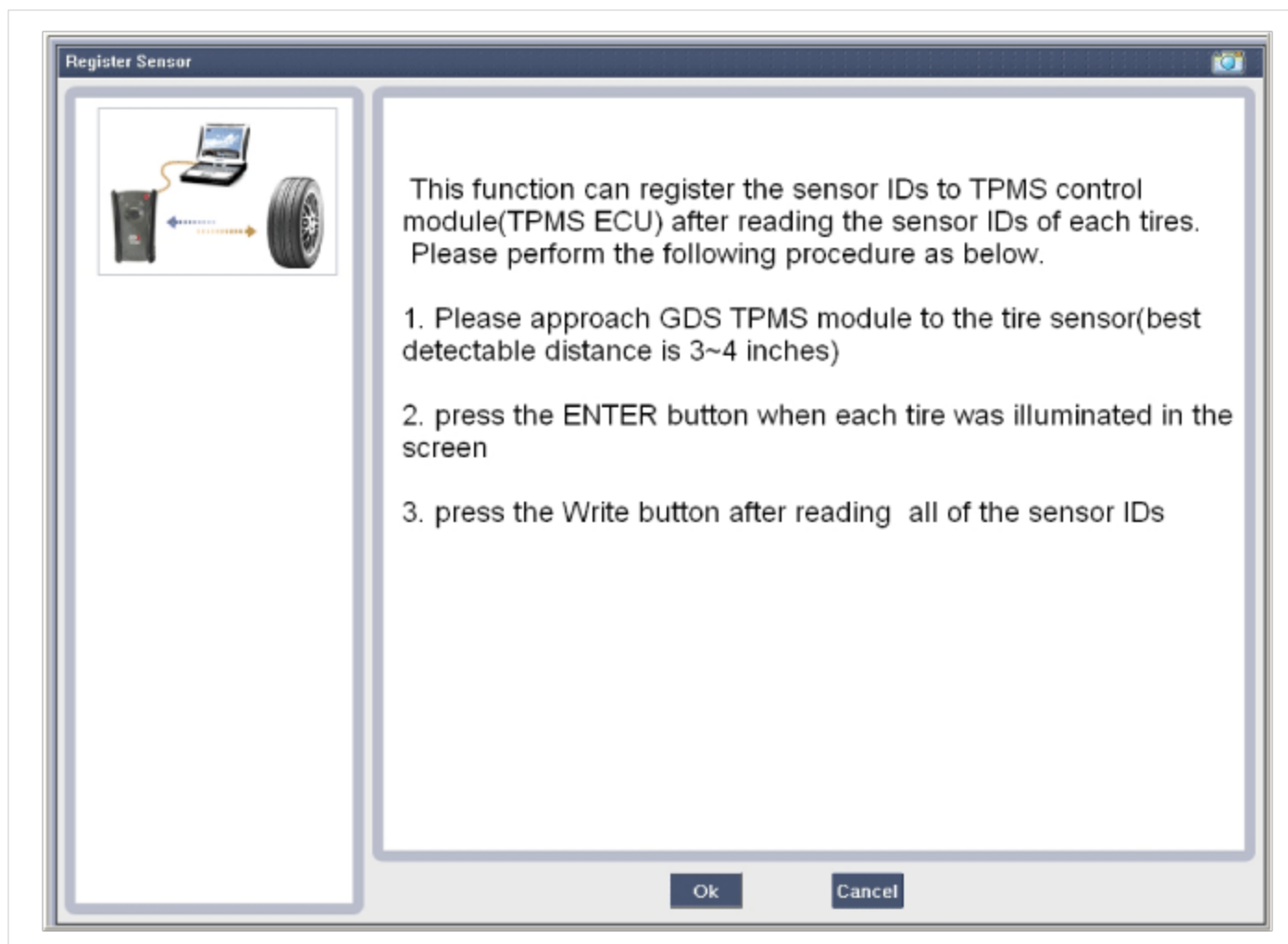
5. Carry out inflation / pressure correction and then fit valve cap.

CAUTION


Change the newly installed sensor mode to Normal Fixed Base(Low Line) with the 'GDS'.
Mode (Status / option) of the sensor installed to the vehicle should be Normal Fixed Base (Low).

6. Install the tire. (Refer to "Tire Installation")

Sensor ID Writing (Wireless)

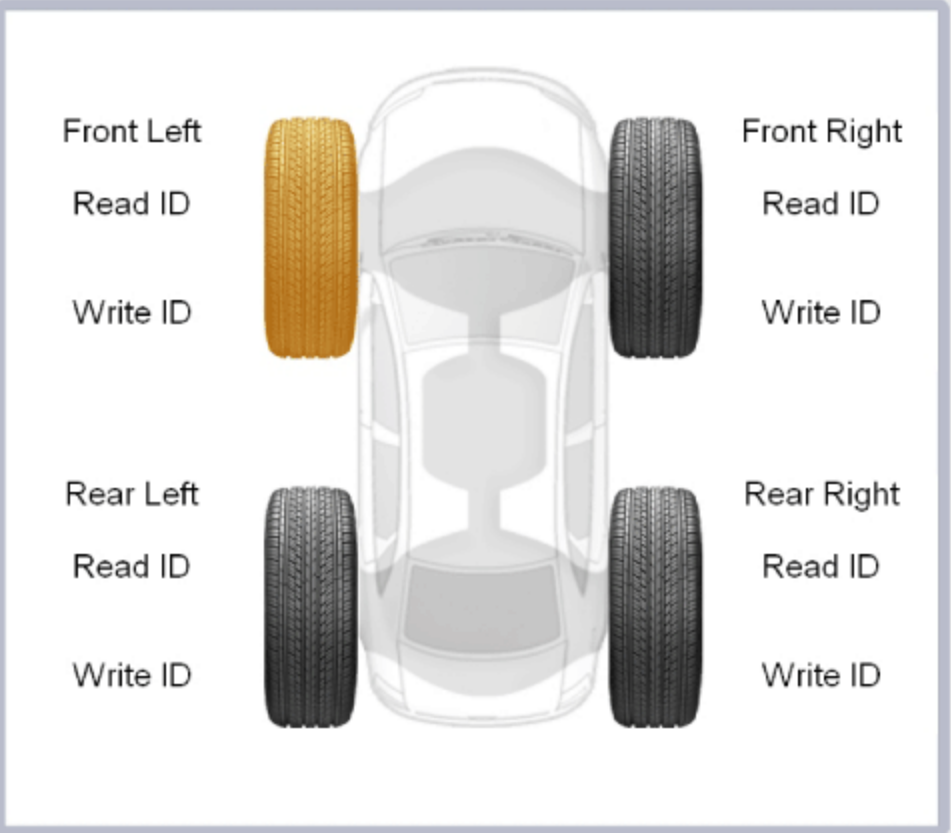






Register Sensor



Please perform the following procedure as below.

1. locate the GDS TPMS module to the tire sensor within 3 inches.
2. press the GDS TPMS module's ENTER button when each tire was illuminated in the screen.
3. press the Write button after reading all of the sensor IDs.



Front Left		Front Right	
Read ID		Read ID	
Write ID		Write ID	
Rear Left		Rear Right	
Read ID		Read ID	
Write ID		Write ID	


CLR Write Cancel

Register Sensor
🔍



Please perform the following procedure as below.

1. locate the GDS TPMS module to the tire sensor within 3 inches.
2. press the GDS TPMS module's ENTER button when each tire was illuminated in the screen.
3. press the Write button after reading all of the sensor IDs.



Front Left			Front Right
Read ID			Read ID
Write ID			Write ID
			Rear Right
			Read ID
Write ID			Write ID

GDS TPMS




It takes Max 30 Sec. Please, wait.....

Cancel






CLR
Write
Cancel

Register Sensor



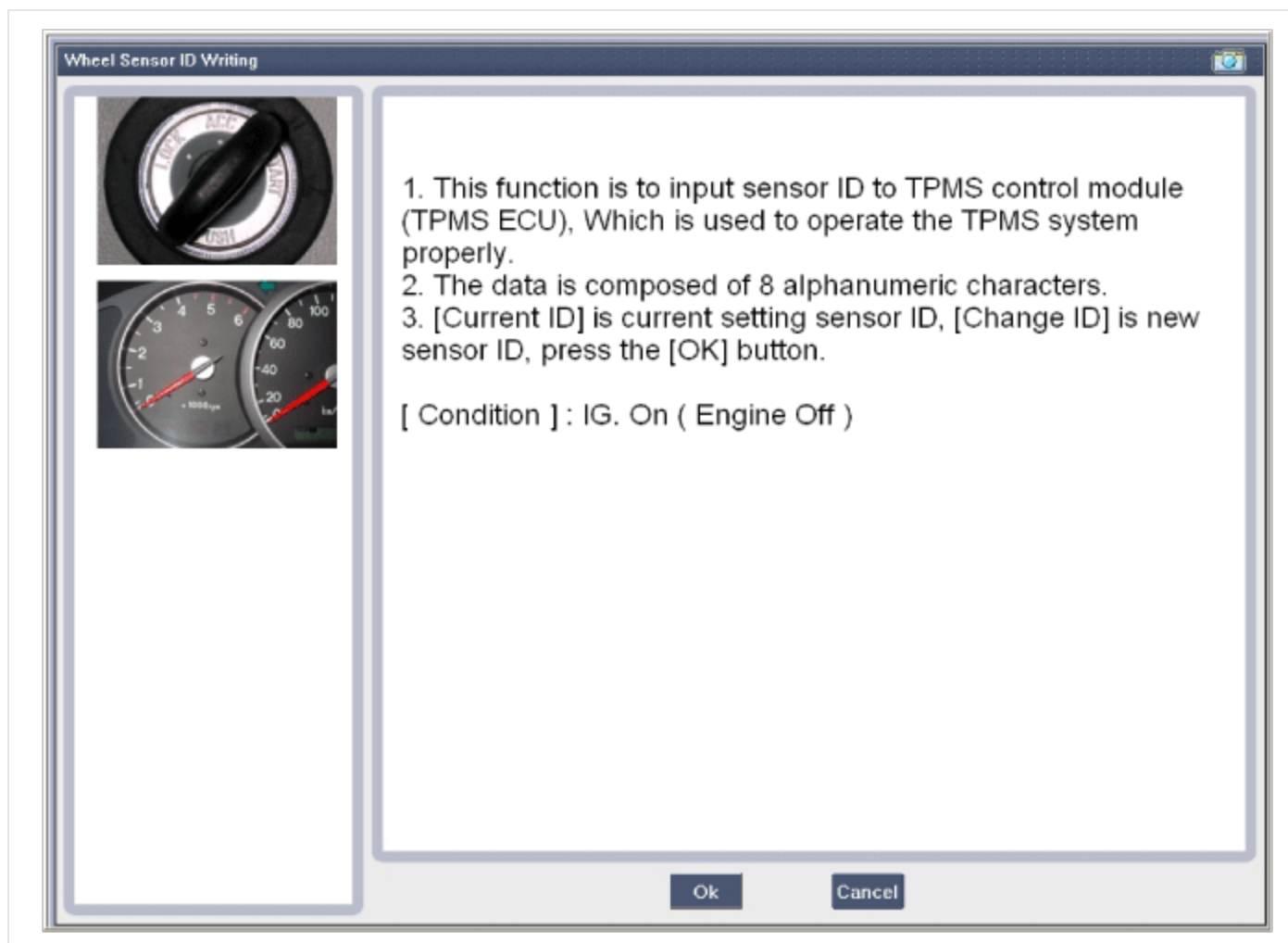
Please perform the following procedure as below.

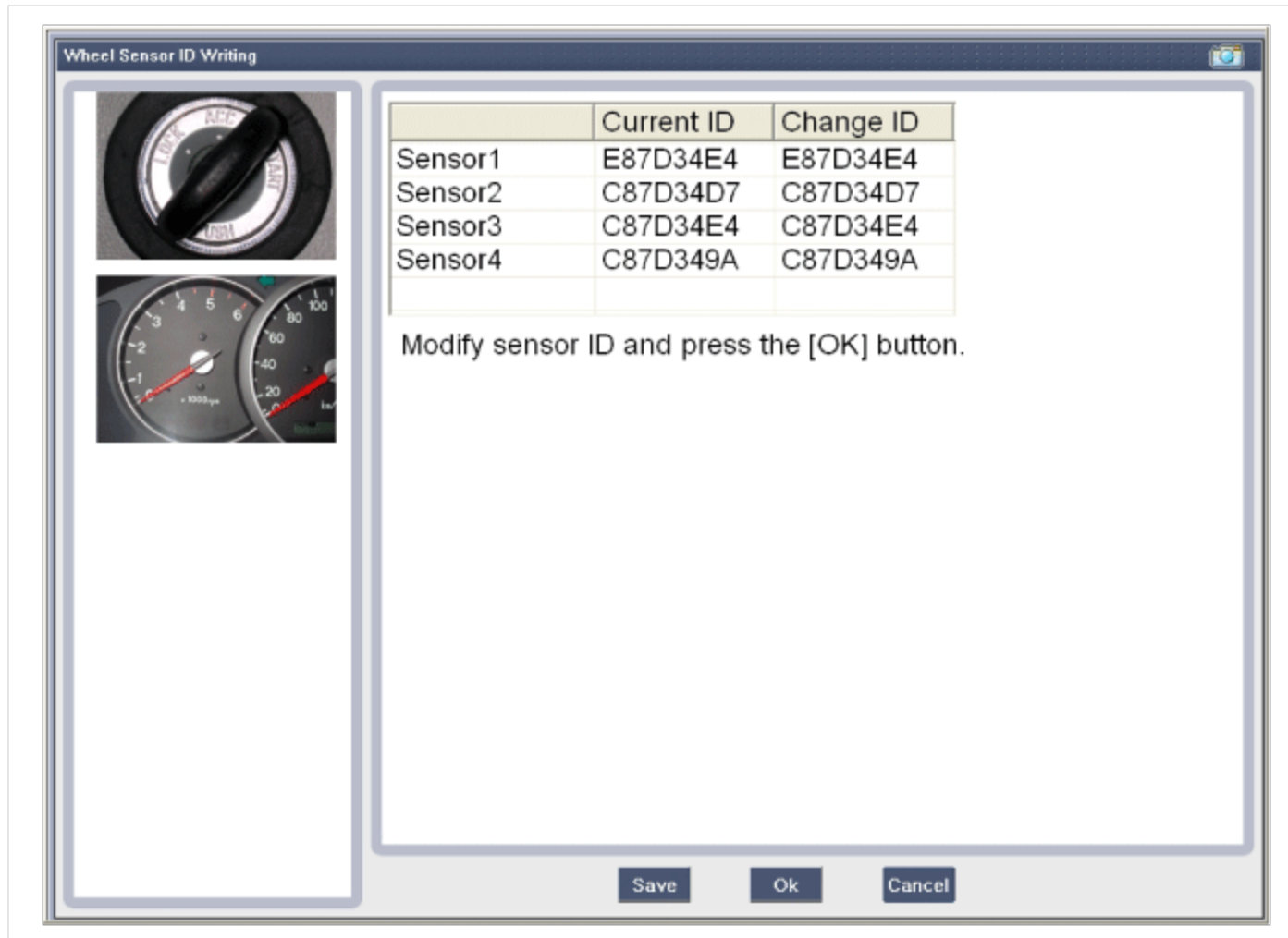
1. locate the GDS TPMS module to the tire sensor within 3 inches.
2. press the GDS TPMS module's ENTER button when each tire was illuminated in the screen.
3. press the Write button after reading all of the sensor IDs.

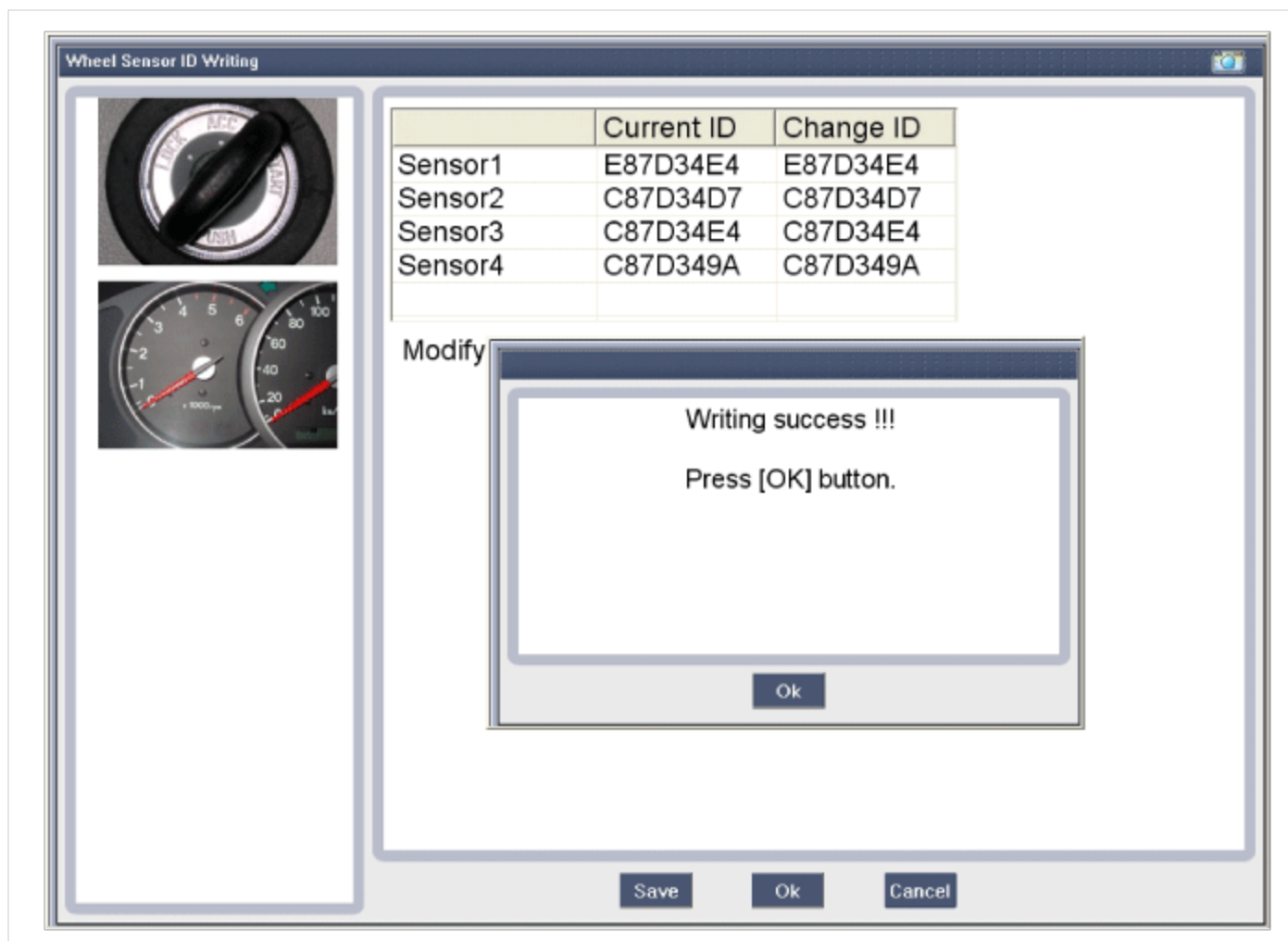
Front Left				Front Right
Read ID C82B1724				Read ID
Write ID				Write ID
Rear Left				Rear Right
Read ID				Read ID
Write ID				Write ID

CLR Write Cancel

Sensor ID Writing







Suspension System



Operation

1. General Function
 - A. Auto-learn takes place only once per Ignition cycle.
 - B. On successful completion, 4 road wheel sensor ID's are latched into memory for monitoring.
 - C. Until Auto-learn completes, previously learned sensors are monitored for under inflation / leak warnings.
2. General Conditions to Learn New Sensors:

- A. Receiver must determine that it is confident that sensor is not temporary:
 - 1) Uses vehicle speed.
 - 2) Uses confidence reduction of previously learned sensors.
- B. Typical time at driving continuously over 12.4 mph(20 kph) to learn a new sensor is up to 20 minutes.
- 3. General Conditions to Un-Learn a sensor that is removed:
 - A. It takes less than 20 minutes at 12.4 ~ 18.6 mph(20 ~ 30kph).
 - B. Confidence reduction is dependent on time which vehicle is driven at speed greater than or equal to 12.4 mph(20 kph).

Suspension System



Replacement

NOTICE

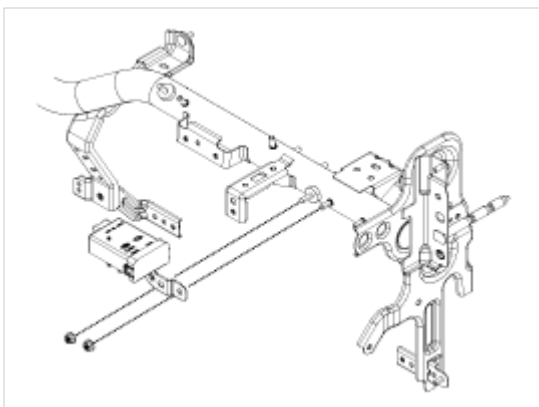
When the receiver first arrives for replacement:

- 1) It will be in Virgin State.
- 2) It will not be configured for any specific platform.
- 3) It will not have any sensor ID's memorized.

CAUTION

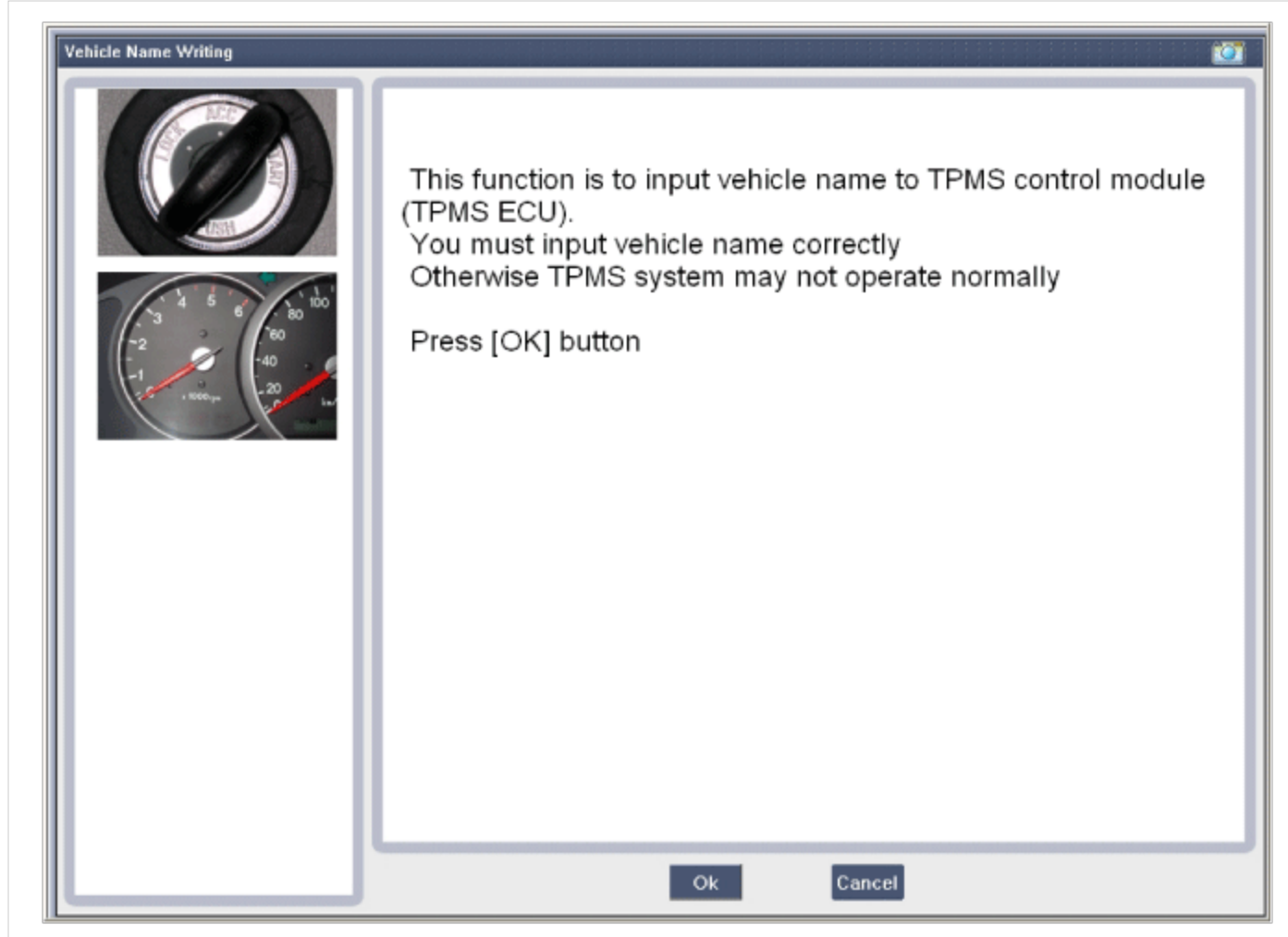
It is important to make sure that the correct receiver is used to replace the faulty part i.e. it must be Low Line and not High Line in order to have the correct inflation warning thresholds set.

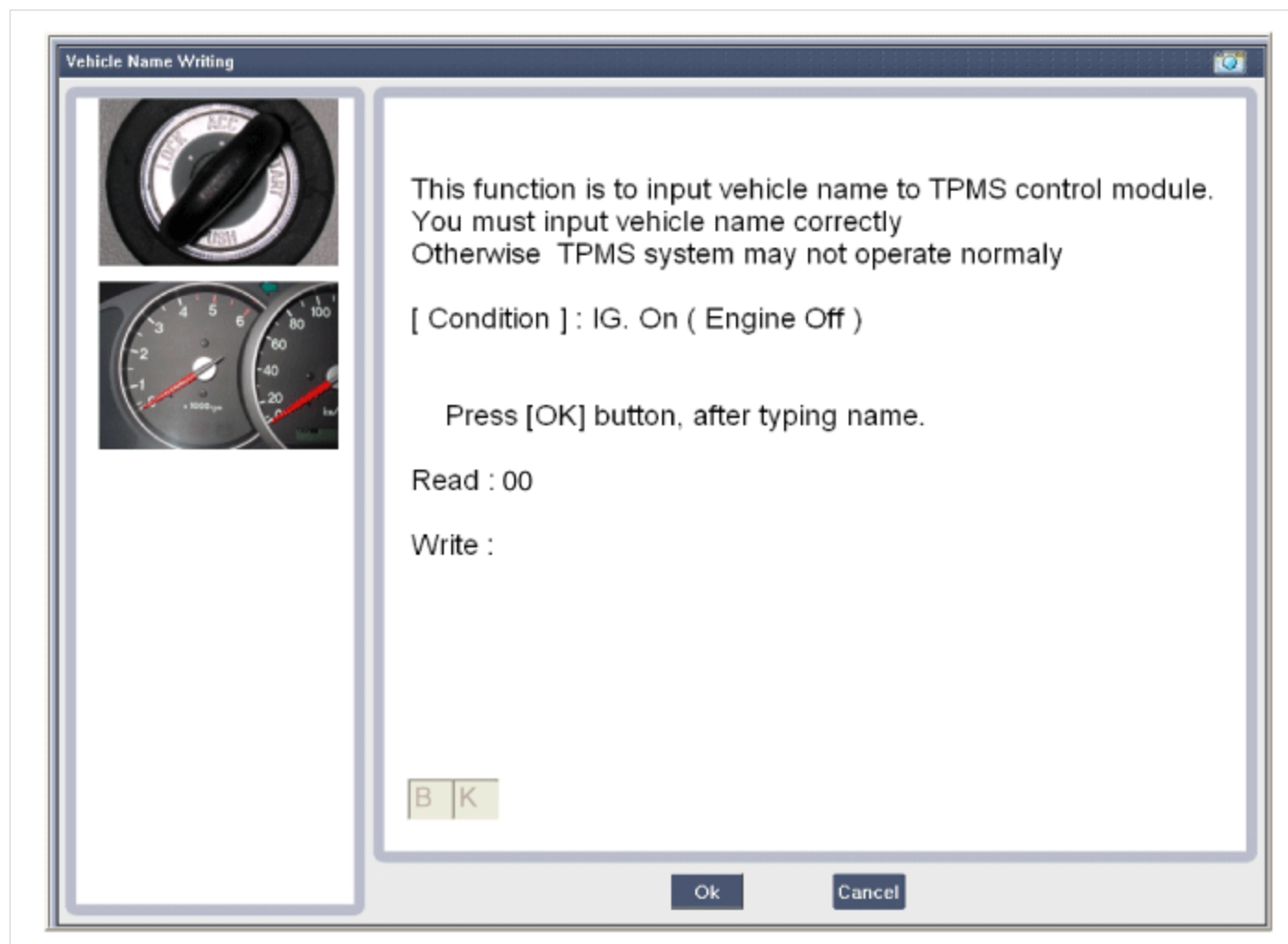
- 1. Disconnect vehicle battery.
- 2. Remove the glove box.
(Refer to BD group - "Crash Pad")
- 3. Remove the receiver (A) and fit bracket assembly to new part.




- 4. Secure new part to vehicle and fit connector.
- 5. Re-connect battery and turn Ignition on.
- 6. Check that TREAD Lamp flash rate matches Virgin State indication.

Vehicle Name Writing





Vehicle Name Writing



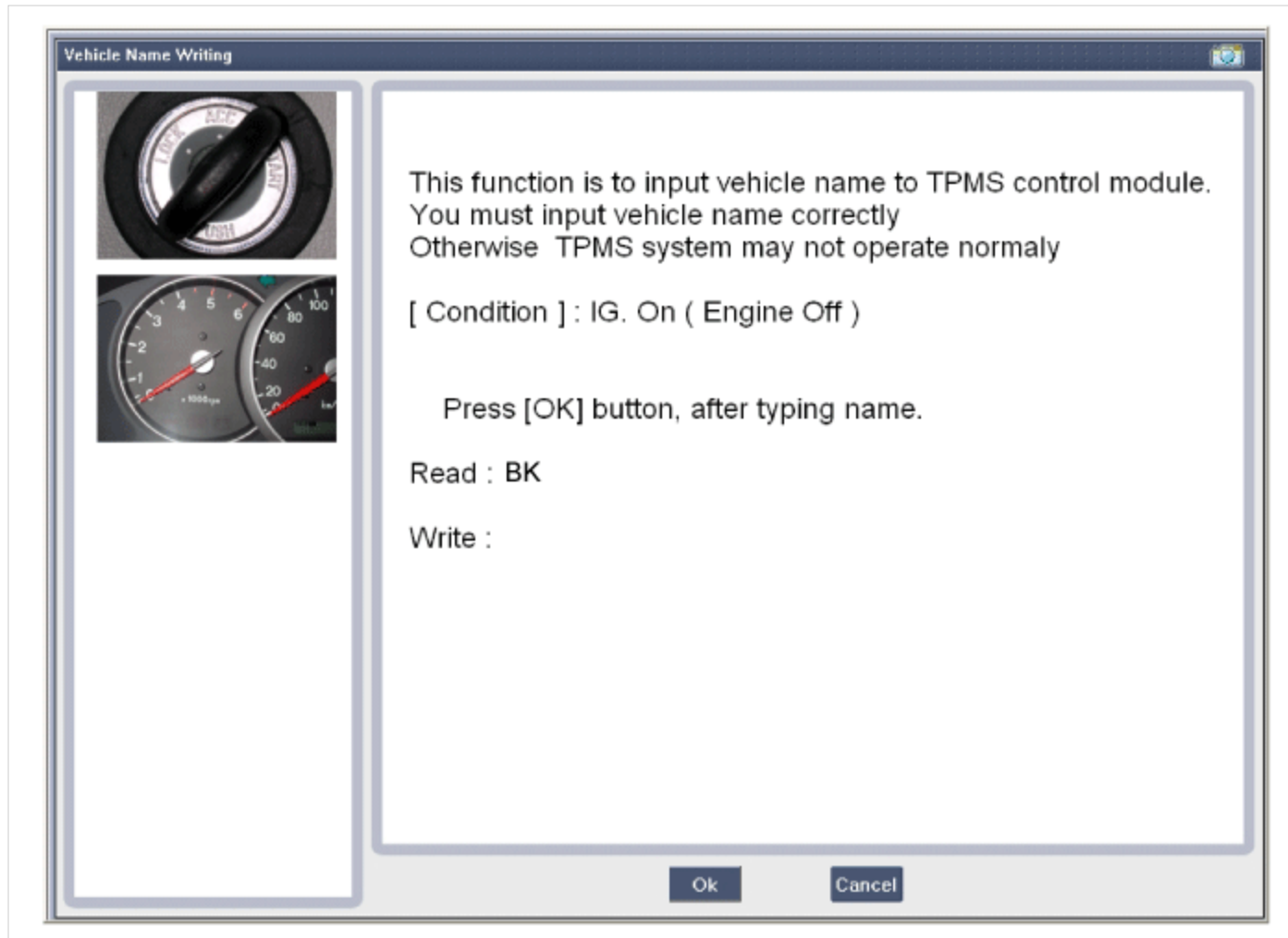
This function is to input vehicle name to TPMS control module.
You must input vehicle name correctly
Otherwise TPMS system may not operate normaly

[Condition] : IG. On (Engine Off)

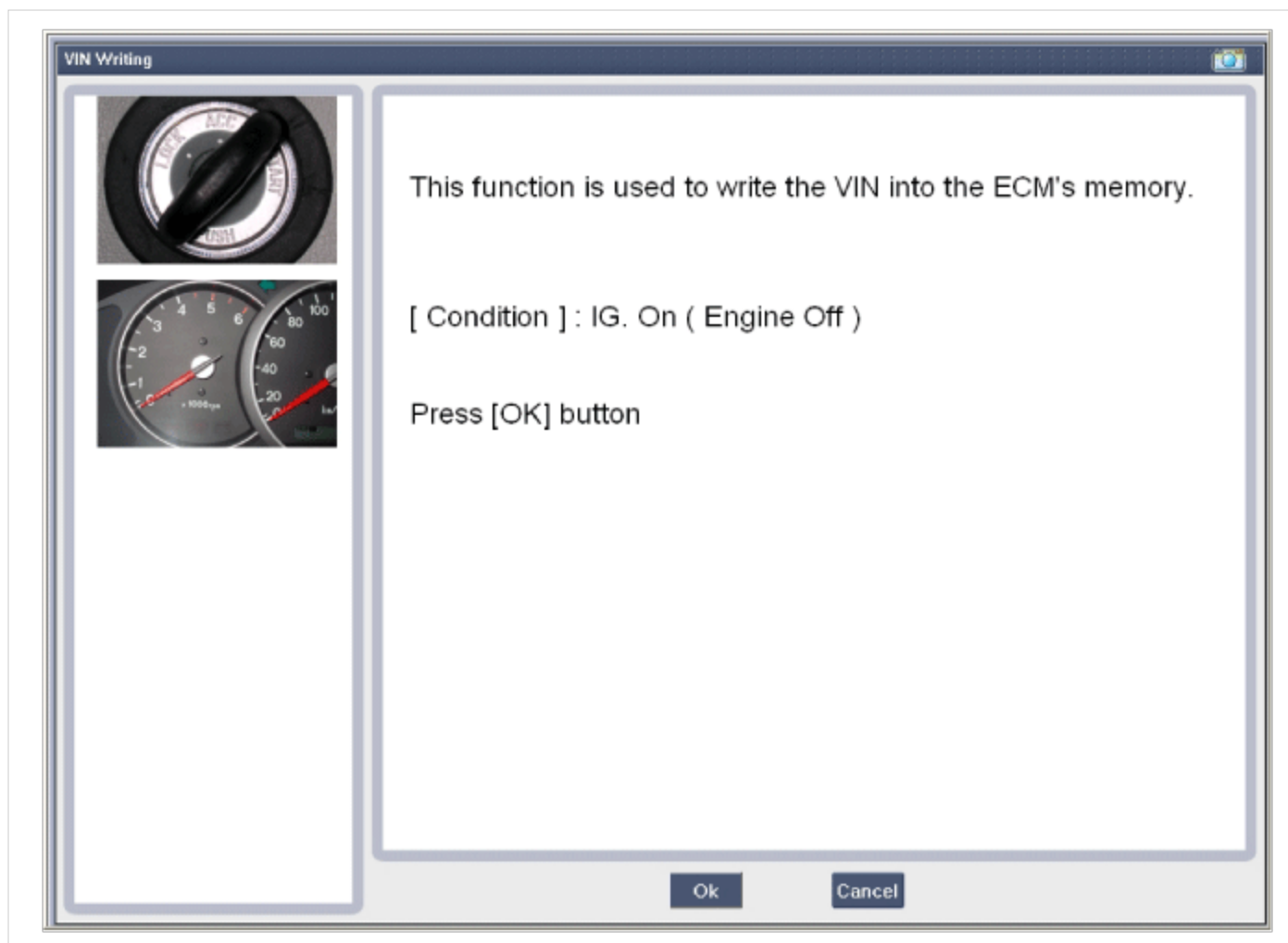
Writing success !!!
Press [OK] button.

B K


Ok Cancel



VIN Writing



VIN Writing



This function is used to write the VIN into the ECM's memory.

[Condition] : IG. On (Engine Off)

Press [OK] button, after typing the number.


Read : 000000000000000000

Write :

G	N	E	1	2	3	A	V	R	1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Ok Cancel

VIN Writing



This function is used to write the VIN into the ECM's memory.

[Condition] : IG. On (Engine Off)

Pre
Re
Wr

Writing success !!!
Press [OK] button.

Ok

G	N	E	1	2	3	A	V	R	1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Ok Cancel