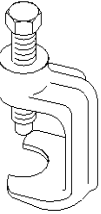
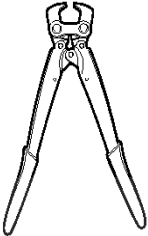



DS-2

Driveshaft and axle

General Information

SPECIAL TOOLS

Tool(Number and Name)	Illustration	Use
09568-4A000 Ball joint remover	 <p style="text-align: center;">KPRE103I</p>	Removal of the front lower arm and tie rod end ball joint
09495-3K000 Band installer	 <p style="text-align: center;">KINF500C</p>	Installation of ear type boot band
09495-39100 Band installer	 <p style="text-align: center;">AILG650A</p>	Installation of hook type boot band

General Information

DS-3

TROUBLESHOOTING

Trouble Symptom	Probable cause	Remedy
Vehicle pulls to one side	Scoring of driveshaft ball joint	Replace
	Wear, rattle or scoring of wheel bearing	Replace
	Defective front suspension and steering	Adjustment or Replace
Vibration	Wear, damage or bending of driveshaft	Replace
	Driveshaft rattle and hub serration	Replace
	Wear, rattle or scratching of wheel bearing	Replace
Shimmy	Defective wheel balance	Adjustment or Replace
	Defective front suspension and steering	Adjustment or Replace
Excessive noise	Wear, damage or bending of driveshaft	Replace
	Rattle of driveshaft and worn hub splines	Replace
	Wear, rattle or scoring of wheel bearing	Replace
	Loose hub nut	Adjustment or Replace
	Defective front suspension and steering	Adjustment or Replace

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



DS-4

Driveshaft and axle

SPECIFICATION
DRIVESHAFT

Engine	T/M		Joint type		Max. permissible angle	
			Outer	Inner	Outer	Inner
Diesel 2.0	M/T		BJ25	UTJ-II25	46°	23°
Diesel 1.6	M/T		BJ25	UTJ-II25	46°	23°
	A/T	Left	BJ24	UTJ-II22	46°	23°
Right		BJ24	TJ22	46°	23°	
Gasoline 2.0	M/T & A/T	Left	BJ22	UTJ-II22	46°	23°
		Right	BJ22	TJ22	46°	23°
Gasoline 1.6	M/T & A/T	Left	BJ22	UTJ-II22	46°	23°
		Right	BJ22	TJ22	46°	23°
Gasoline 1.4	M/T	Left	BJ22	UTJ-II22	46°	23°
		Right	BJ22	TJ22	46°	23°
Front wheel bearing						
Bearing type			Double row angular contact ball bearing			
Starting torque			1.8 Nm (18 kgf.cm, 1.31 lb-ft) or below			
Rear hub & bearing assembly						
Bearing type			Double row angular contact ball bearing			
Starting torque			1.0 Nm (10 kgf.cm, 0.7 lb-ft) or below			

BJ : Birfield Joint اولین سامانه دیجیتال تعمیرکاران خودرو

TJ : Journal Tri-pot Joint

SFJ : Shudderless Free-ring Joint

UTJ : U-TYPE Tripod Joint

Inner : On transaxle side

Outer : On tire side

General Information

DS-5

TIGHTENING TORQUE

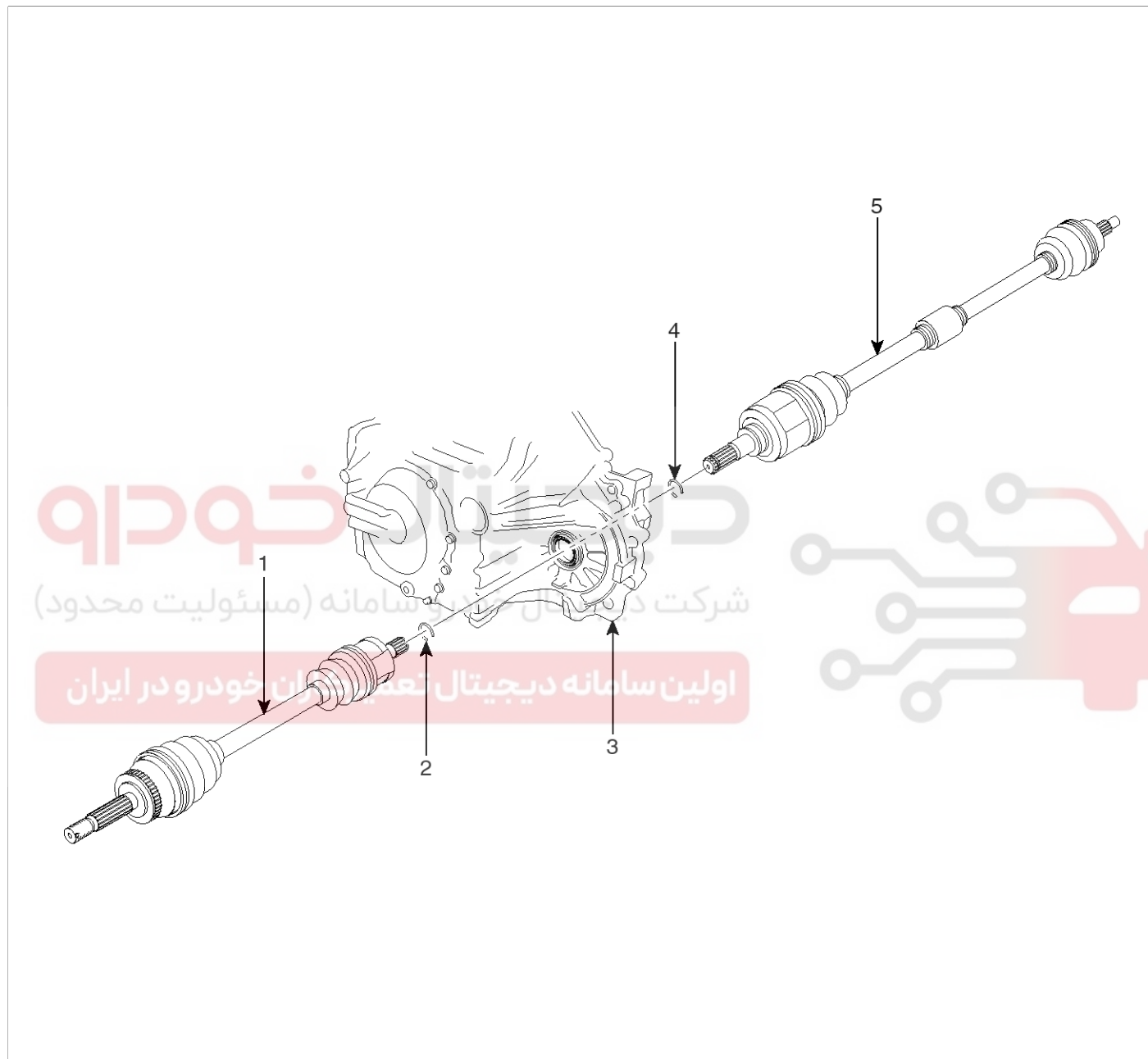
Items	Nm	Kgf-m	lb-ft
Wheel nut	88.3~107.9	9.0~11.0	65.1~79.6
Driveshaft nut (Castle nut)	196.1~274.6	20.0~28.0	144.7~202.5
Lower arm ball joint assembly to knuckle bolts	98.1~117.7	10.0~12.0	72.3~86.8
Wheel speed sensor bolt	6.9~9.8	0.7~1.0	5.1~7.96
Front caliper assembly to knuckle bolts	78.5~98.1	8.0~10.0	57.9~72.3
Tie rod end castle nut	23.5~33.3	2.4~3.4	17.4~24.6
Front strut assembly to knuckle bolts	137.3~156.9	14.0~16.0	101.3~115.7
Rear lower arm to carrier assembly bolts	137.3~156.9	14.0~16.0	101.3~115.7
Rear lower arm to cross member bolts	137.3~156.9	14.0~16.0	101.3~115.7
Rear upper arm to carrier assembly bolts	98.1~117.7	10.0~12.0	72.3~86.8
Rear caliper assembly to carrier assembly bolts	49.0~58.8	5.0~6.0	36.2~43.4
Rear shockabsorber assembly to carrier assembly bolts	137.3~156.9	14.0~16.0	101.3~115.7
Assist arm to carrier assembly bolts	44.1~53.9	4.5~5.5	32.5~39.8
Trailing arm to carrier assembly bolts	34.3~53.9	3.5~5.5	25.3~39.8
Carrier assembly to rear hub assembly bolts	68.6~88.3	7.0~9.0	50.6~65.1

CAUTION

Replace self-locking nuts with new ones after removal.

LUBRICANTS

Joint type	Recommended grease	Quantity
BJ22	RBA	100g
BJ24	RBA	130g
BJ25	RBA	160g
TJ22	CW-13TJ	125g
UTJ-II22	CW-13TJ	130g
UTJ-II25	CW-13TJ	200g

DS-6**Driveshaft and axle****Driveshaft Assembly****Front Driveshaft****COMPONENT**

1. Driveshaft (LH)

2. Circlip

3. Transaxle

4. Circlip

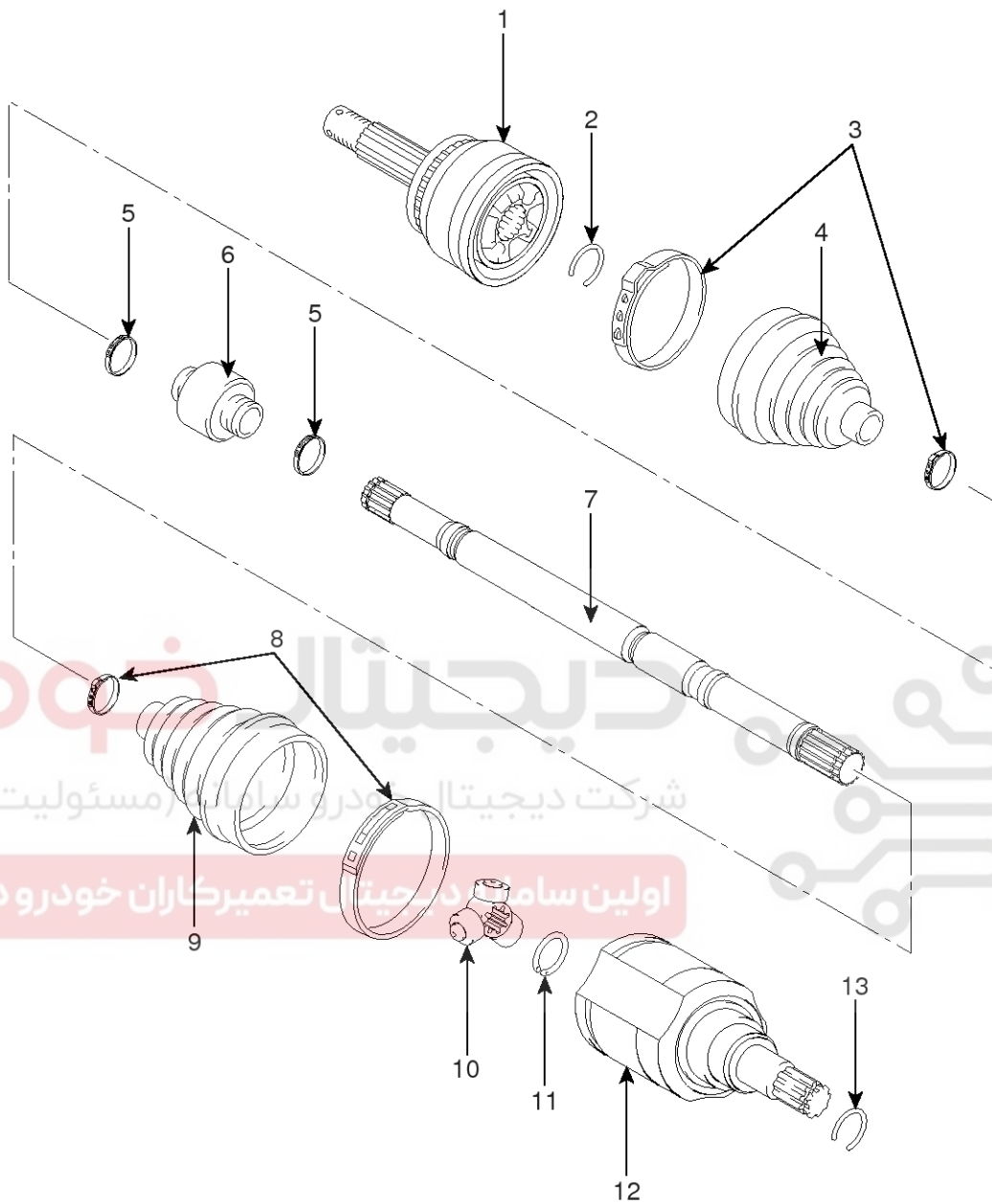
5. Driveshaft (RH)

SHDDS6500L

Driveshaft Assembly

DS-7

COMPONENT



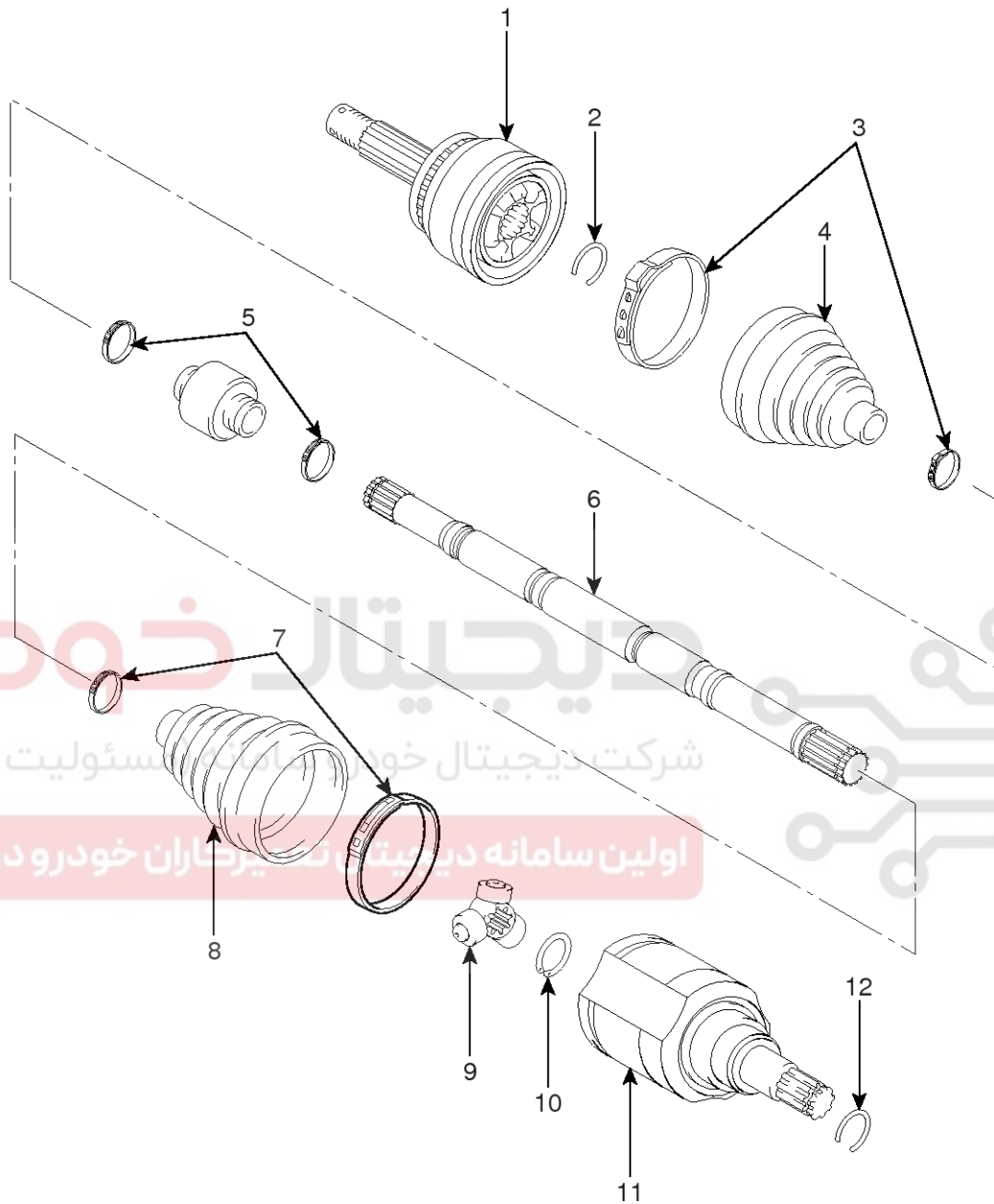
- | | |
|------------------------|---------------------|
| 1. BJ assembly | 8. TJ boot band |
| 2. Clip | 9. TJ boot |
| 3. BJ boot band | 10. Spider assembly |
| 4. BJ boot | 11. Circlip |
| 5. Dynamic damper band | 12. TJ case |
| 6. Dynamic damper | 13. CLIP |
| 7. Shaft | |

SFDDS8104L

DS-8

Driveshaft and axle

COMPONENTS



- | | |
|-------------------------|--------------------|
| 1. BJ assembly | 7. UTJ boot bands |
| 2. Circlip | 8. UTJ boot |
| 3. BJ boot bands | 9. Spider assembly |
| 4. BJ boot | 10. Circlip |
| 5. Dynamic damper bands | 11. UTJ case |
| 6. Shaft | 12. Clip |

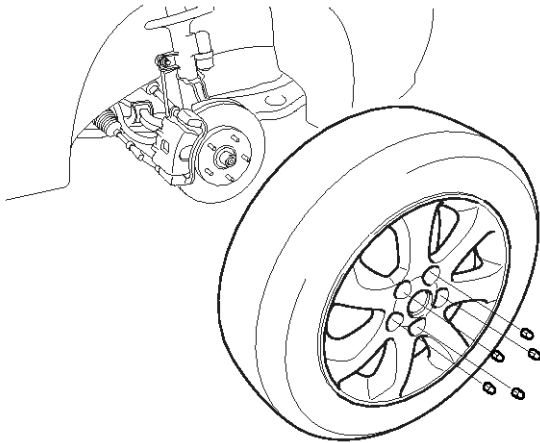
LILG500D

Driveshaft Assembly

DS-9

REMOVAL

- Loosen the wheel nuts slightly.
Raise the vehicle, and make sure it is securely supported.
- Remove the front wheel and tire from front hub.

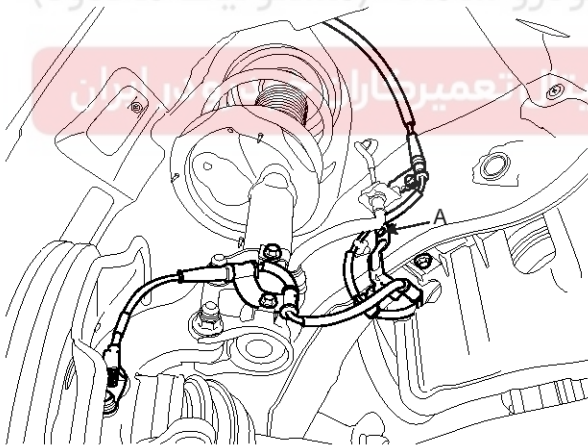


AILG001A

⚠ CAUTION

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

- Remove the front wheel speed sensor cable bracket mounting bolt (A).

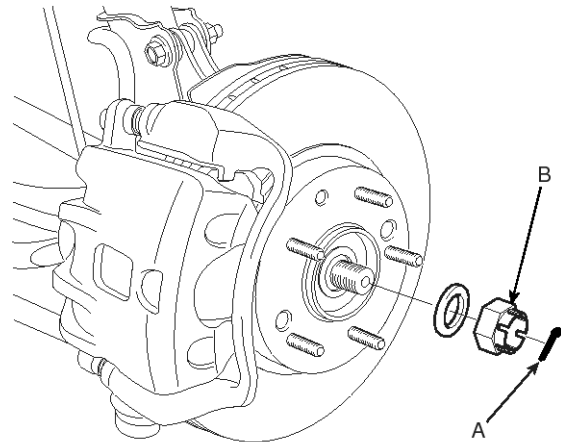


SHDDS6700D

⚠ CAUTION

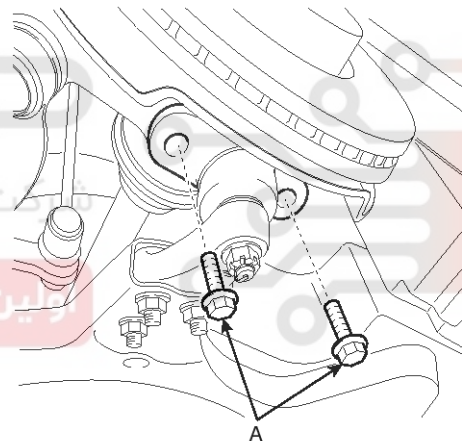
If the bracket mounting bolt (A) is not removed, the front wheel speed sensor cable may be damaged.

- Remove the split pin (A), then remove castle nut (B) and washer from the front hub under applying the break.



AILG002A

- Remove the ball joint assembly mounting bolt (A) from the knuckle.

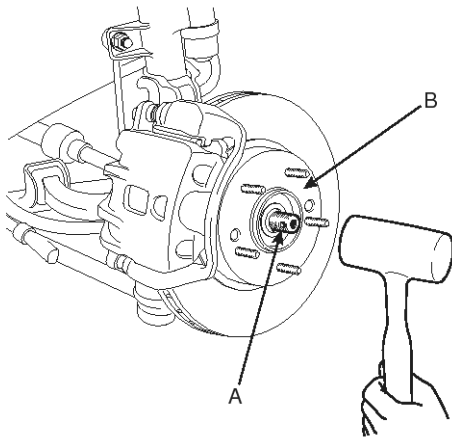


AILG005A

DS-10

Driveshaft and axle

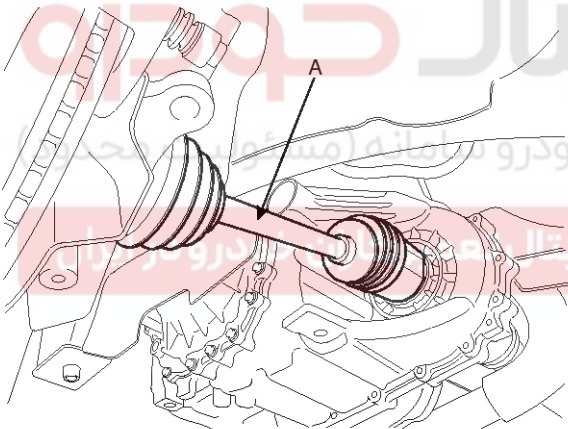
6. Using a plastic hammer, disconnect driveshaft (A) from the axle hub (B).



AILG006A

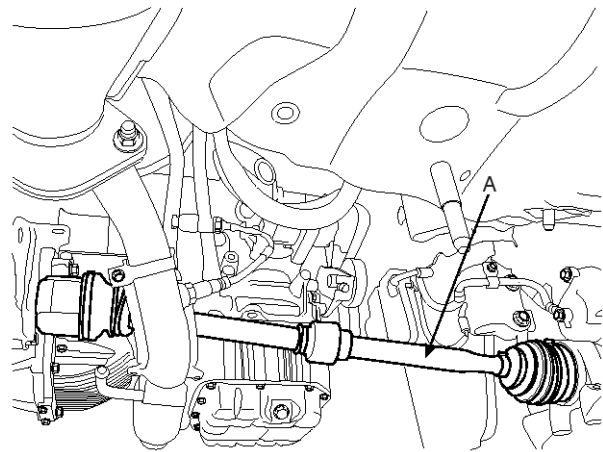
7. Insert a pry bar between the transaxle case and joint case, and separate the driveshaft (A) from the transaxle case.

[LH]



SUNDS6502D

[RH]

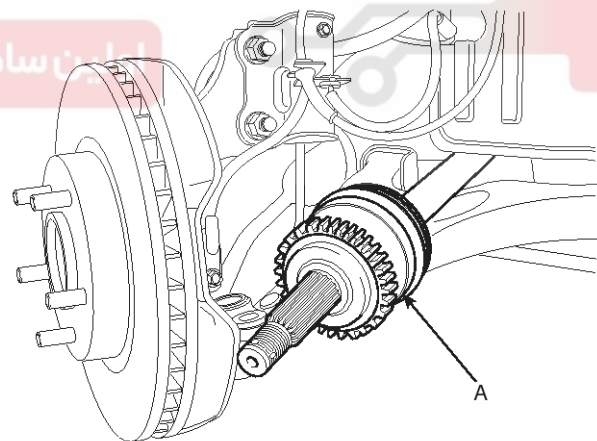


SHDDS6501L

CAUTION

- Use a pry bar being careful not to damage the transaxle and joint.
- Do not insert the pry bar too deep, as this may cause damage to the oil seal.
- Do not pull the driveshaft by excessive force it may cause components inside the joint kit to dislodge resulting in a torn boot or a damaged bearing.

8. Pull out the driveshaft (A) from the transaxle case.



AILG008A

CAUTION

- Plug the hole of the transaxle case with the oil seal cap to prevent contamination.
- Support the driveshaft properly.
- Replace the retainer ring whenever the driveshaft is removed from the transaxle case.

Driveshaft Assembly

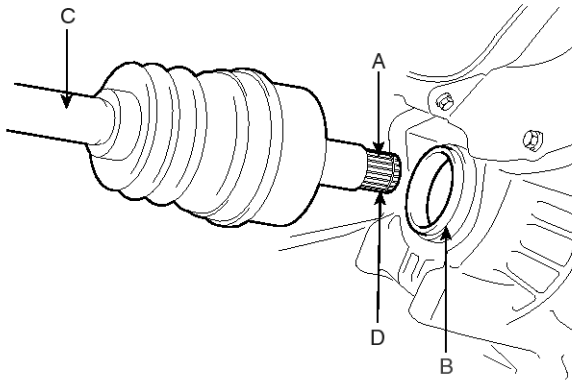
DS-11

INSTALLATION

1. Apply gear oil on the oil seal contacting surface (B) of transaxle case and the driveshaft splines (A).

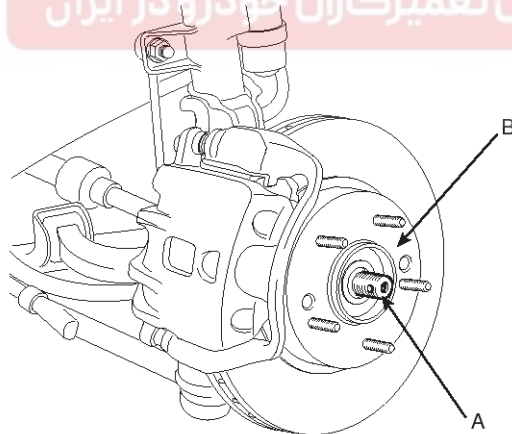
⚠ CAUTION

- Replace circlip with new one.
- Be careful not to install a different kind, when replacing the circlip.



SHDDS6536L

2. Before installing the driveshaft (C), set the opening side of the circlip (D) facing downward.
3. After installation, check that the driveshaft (C) cannot be removed by hand.
4. Install the driveshaft (A) to the axle hub (B).



AILG006B

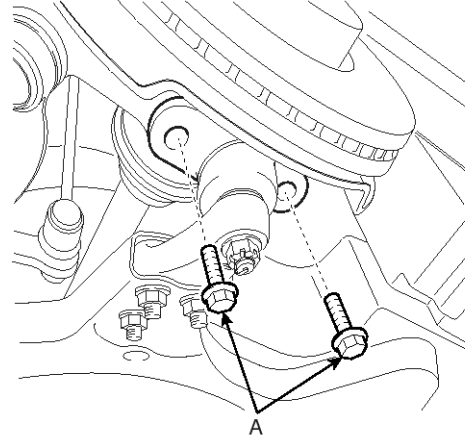
⚠ CAUTION

- Be careful not to damage the both boots.
- Keep clean without contamination on contacting point between the hub-bearing and BJ.
- Check again the both boots for depression.

5. Install the ball joint assembly mounting bolt (A) to the knuckle.

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

98.1~117.7 (10~12, 72.3~86.8)

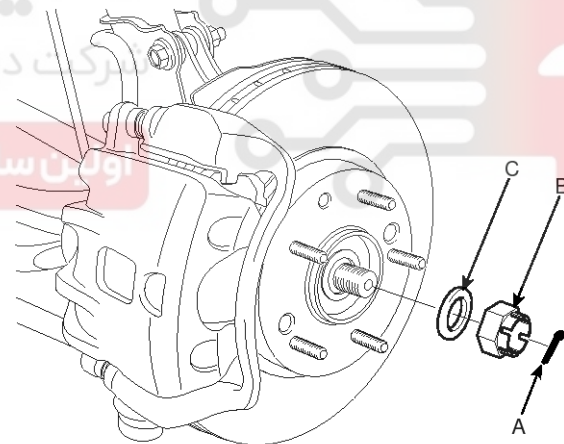


AILG005A

6. Install the washer (C), castle nut (B) and split pin (A) to the front hub assembly.

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

196.1~274.6 (20~28, 144.7~202.5)



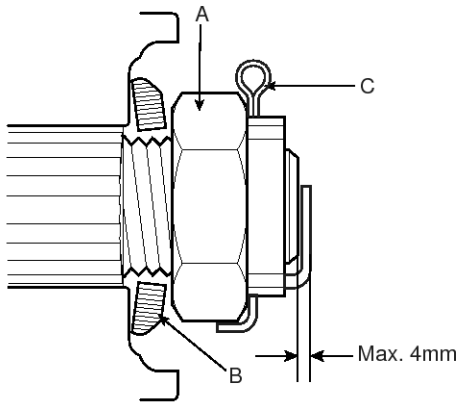
SHDDS6502L

DS-12

Driveshaft and axle

CAUTION

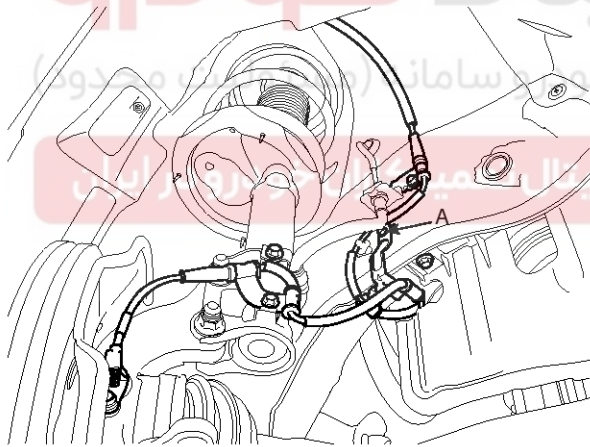
The washer (B) should be assembled with convex surface outward when installing the castle nut (A) and split pin (C).



SFDDS8102L

7. Install the front wheel speed sensor cable bracket mounting bolt (A).

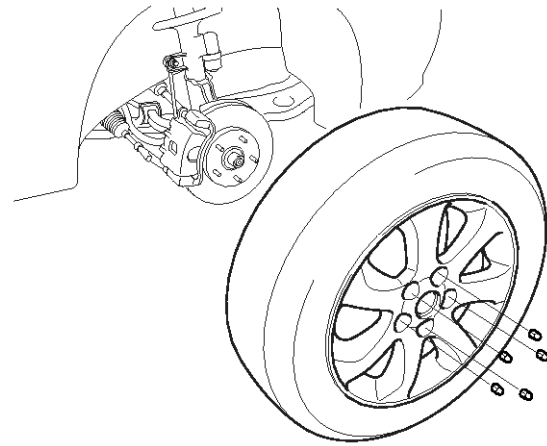
Tightening torque Nm (kgf.m, lb-ft) :
6.9~10.8 (0.7~1.1, 5.1~8.0)



SHDDS6700D

8. Install the wheel and the tire to the front hub.

Tightening torque Nm (kgf.m, lb-ft) :
88.3~107.9 (9~11, 65.1~79.6)



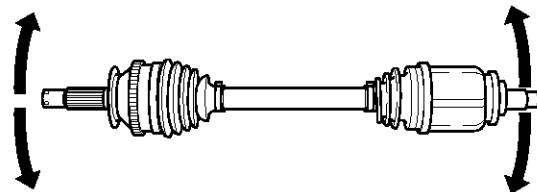
AILG001A

CAUTION

Be careful not to damage the hub bolts when installing the front wheel and tire.

INSPECTION

1. Check the driveshaft boots for damage and deterioration.
2. Check the boots for grease leak.
3. Check the ball joint for wear and damage.
4. Check the splines for wear and damage.
5. Check the dynamic damper for cracks, wear and position.



EIRF002D

6. Check the driveshaft for cracks and wears.

Driveshaft Assembly

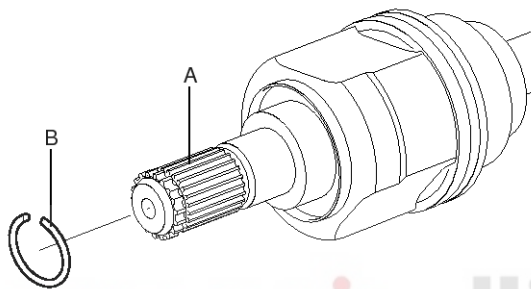
DS-13

DISASSEMBLY

⚠ CAUTION

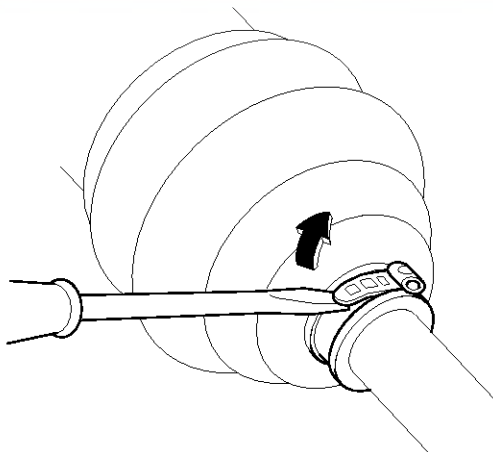
- Do not disassemble the BJ assembly.
- Special grease must be applied to the driveshaft joint. Do not substitute with another type of grease.
- The boot and Dynamic damper band should be replaced with a new one.

1. Remove the circlip (B) from driveshaft splines (A) of the transaxle side TJ case.

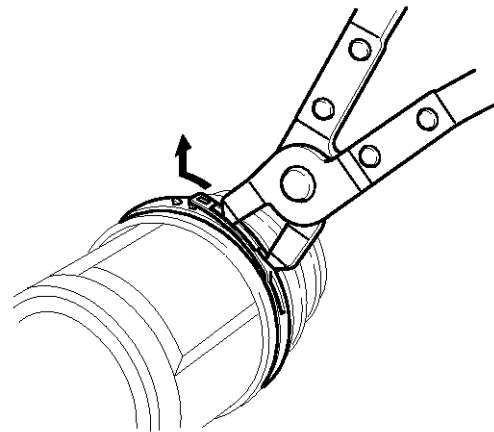


2. Remove the both boot clamps from the transaxle side TJ case.

- 1) Using a flat-tipped (-) screwdriver, remove the both clamps of the transaxle side.

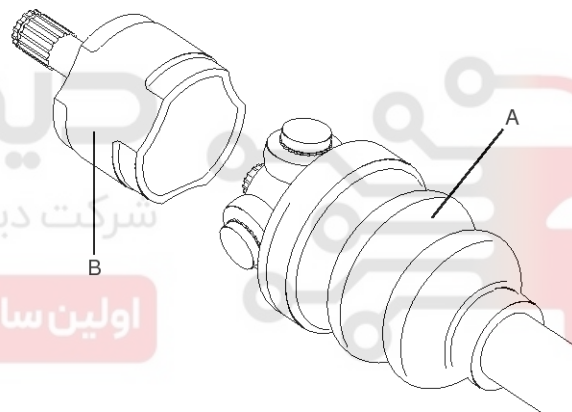


KIQE160A



AIGE004A

3. Pull out the boot from the transaxle side joint(TJ).
4. While dividing joint(TJ) boot (A) of the transaxle side, wipe the grease in TJ case (B) and collect them respectively.



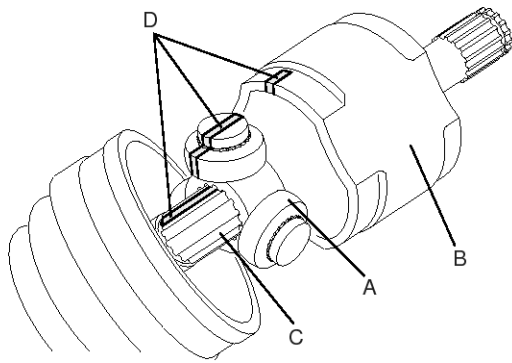
AIGE004B

⚠ CAUTION

- Be careful not to damage the boot.
- According to illustration below, put alignment marks (D) across spider roller assembly (A), TJ case (B), shaft splines (C) to aid in reassembly.

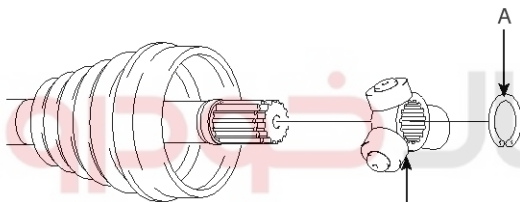
DS-14

Driveshaft and axle



KXDDE11A

- Using a snap ring plier or flat-tipped (-) screwdriver, remove the circlip (A).



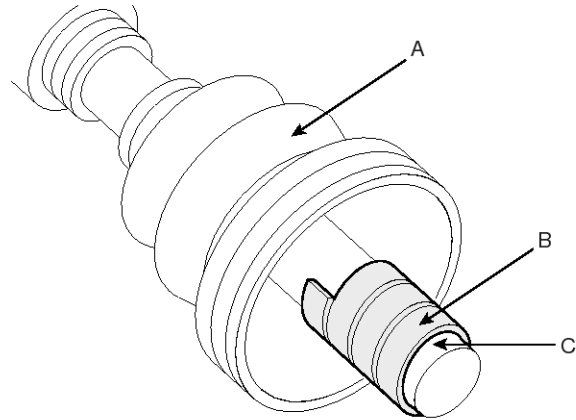
SFDDS8105L

- Remove the spider assembly (B) from the driveshaft (A).
- Clean the spider assembly.

- Remove the boot (A) of the transaxle side joint(TJ).

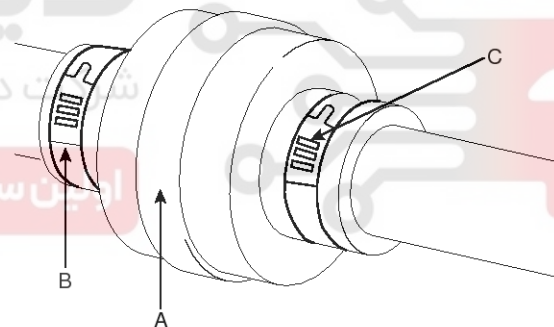
CAUTION

For reusing the boot (A), wrap tape (B) around the driveshaft splines (C) to protect the boot (A).



KXDDE14A

- Remove both side of bands (B,C) of dynamic damper (A).

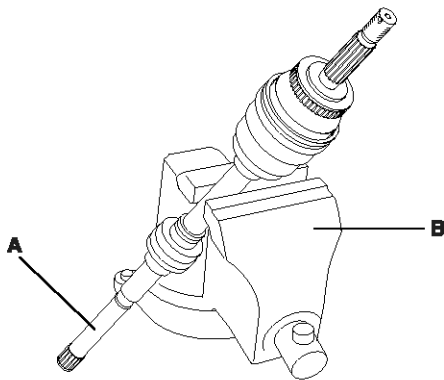


AIGE004C

Driveshaft Assembly

DS-15

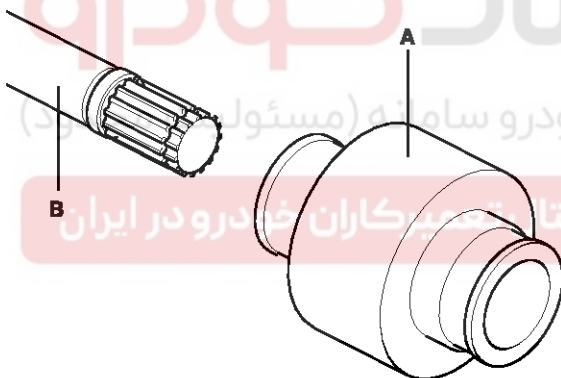
10. Fix the driveshaft (A) with a vice (B) as illustrated.



KXDDE16A

11. Apply soap powder on the shaft to prevent being damaged between the shaft spline and the dynamic damper when the dynamic damper is removed.

12. Separate the dynamic damper (A) from the shaft (B) carefully.



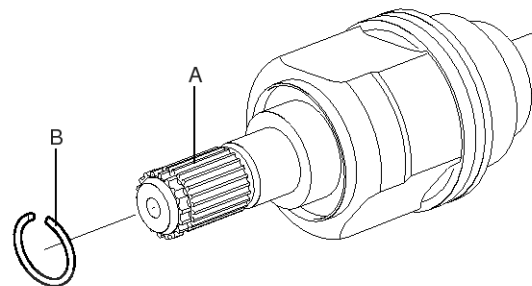
AIGE004D

DISASSEMBLY

NOTICE

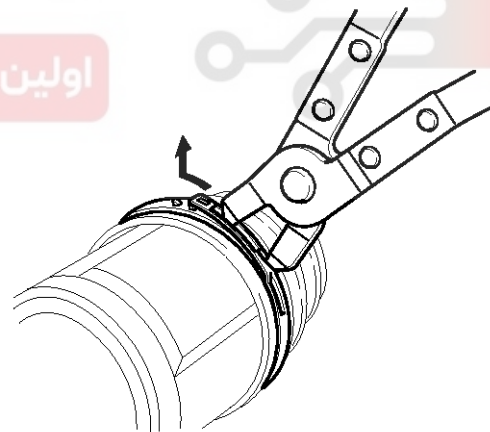
- Do not disassemble the BJ assembly.
- Special grease must be applied to the drive shaft joint. Do not substitute with another type of grease.
- The boot band should be replaced with a new one.

1. Remove the clip (B) from driveshaft splines (A) of the transaxle side.



KXDDE07A

2. Remove both boot bands from the transaxle side UTJ case.



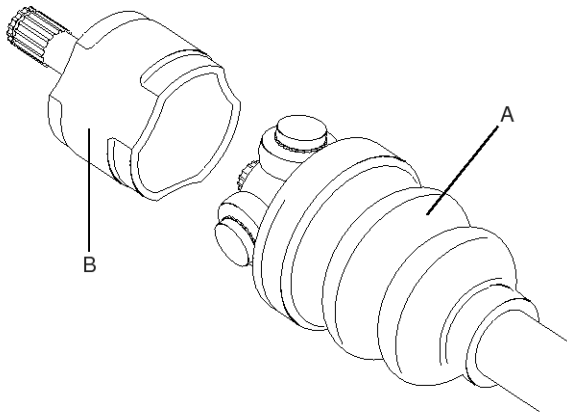
AIGE004A

3. Pull out the boot from the transaxle side joint(UTJ).

DS-16

Driveshaft and axle

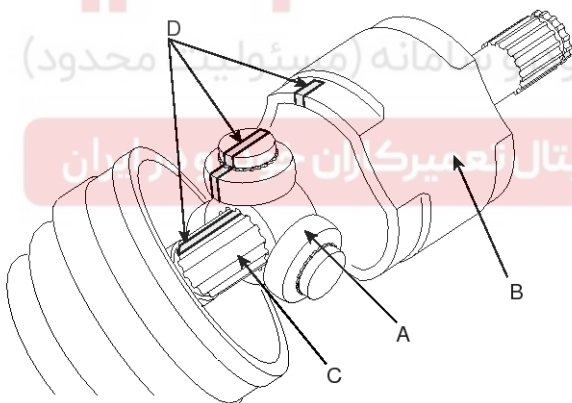
- When separating the joint and boot (A), remove the grease from the UTJ case (B).



AIGE004B

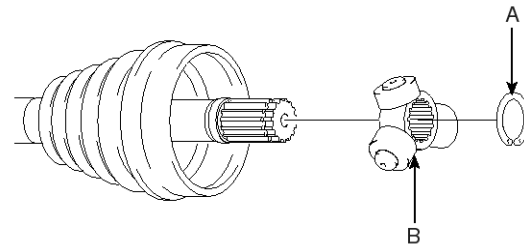
CAUTION

- According to illustration below, put alignment marks across spider roller assembly (A), UTJ case (B), shaft splines (C) to aid in reassembly.
- Be careful not to damage the boot.



BIGE005D

- Using a plier or flat-tipped (-) screwdriver, remove the snap ring (A).

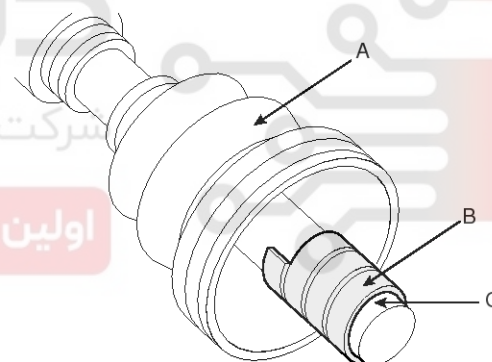


SFDDS8105L

- Remove the spider assembly (B) from drive shaft (A).
- Clean the spider assembly.
- Remove the boot (A), of the transaxle side joint(UTJ).

CAUTION

- Wrap tape (B) around the driveshaft splines (C) to protect the boot (A).

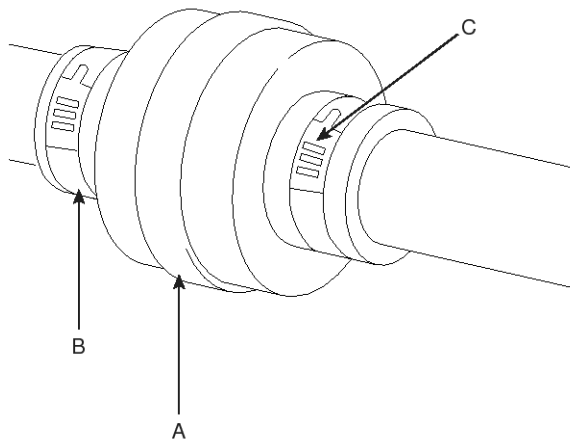


BIGE005G

Driveshaft Assembly

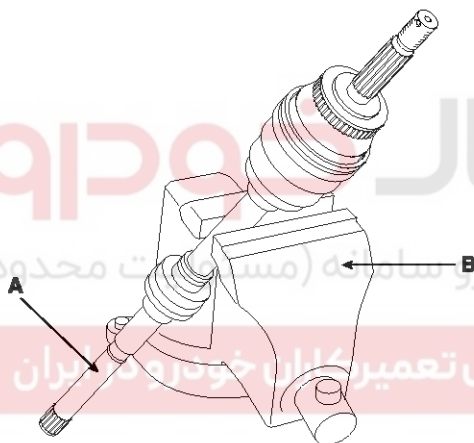
DS-17

9. Remove both side of bands (B,C) of the dynamic damper (A).



LIJF004C

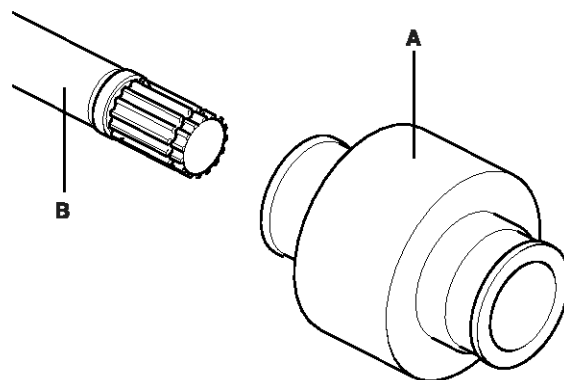
10. Fix the driveshaft (A) with a vice (B) as illustrated.



BIGE005I

11. Apply soap powder on the shaft to prevent being damaged between the shaft spline and the dynamic damper when the dynamic damper is removed.

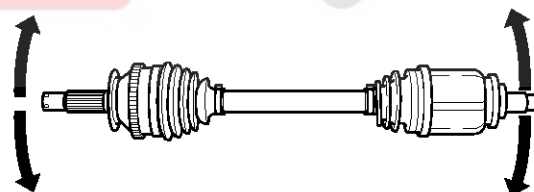
12. Separate dynamic damper (A) from the shaft (B) carefully.



AIGE004D

INSPECTION

1. Check the driveshaft boots for damage and deterioration.
2. Check the boots for grease leak.
3. Check the ball joint for wear and damage.
4. Check the splines for wear and damage.
5. Check the dynamic damper for cracks, wear and position.



EIRF002D

6. Check the driveshaft for cracks and wears.

DS-18

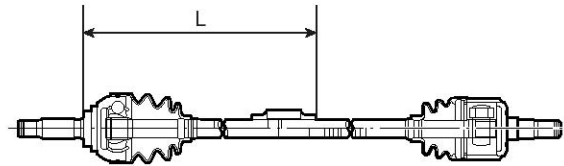
Driveshaft and axle

REASSEMBLY

1. Wrap tape around the driveshaft splines (TJ. side) to prevent damage to the boots.
2. To reassemble the dynamic damper, keeping the shaft in the straight, tighten the dynamic damper with dynamic damper band.

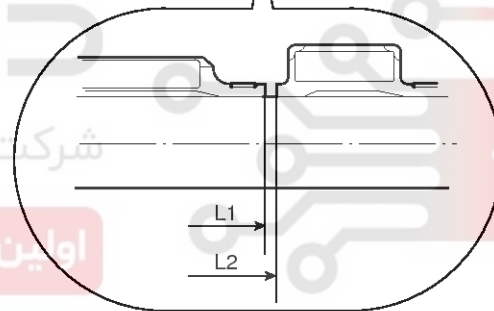
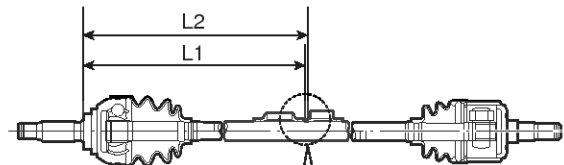
Items		Distance (L)	
		Distance (L1) m-m(in)	Distance (L2) m-m(in)
Diesel 2.0	M/T	310~312	329.5~331.5
Diesel 1.6	A/T	351.5~353.5 (13.83~13.92)	357~359 (14.05~14.13)
Gasoline 2.0	M/T	351.5~353.5 (13.83~13.92)	357~359 (14.05~14.13)
	A/T		
Gasoline 1.6	M/T	360~362 (14.17~14.25)	
	A/T		
Gasoline 1.4	M/T		

< Gasoline 1.4/1.6 >



SHDDS6505L

< Gasoline 2.0/V1.6 AT >



SFDDS8100L

* Reassembling the dynamic dampers, keep the distance L1 and L2 to prevent the contact each dampers.

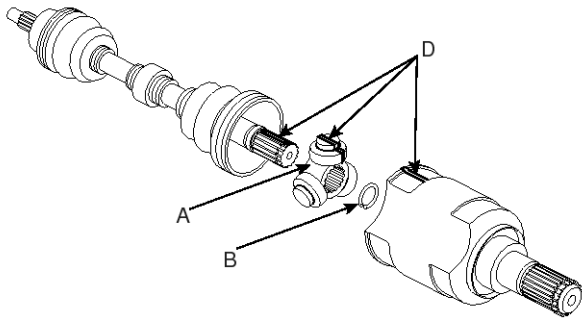
3. Install the TJ boot bands and TJ boot.

Driveshaft Assembly

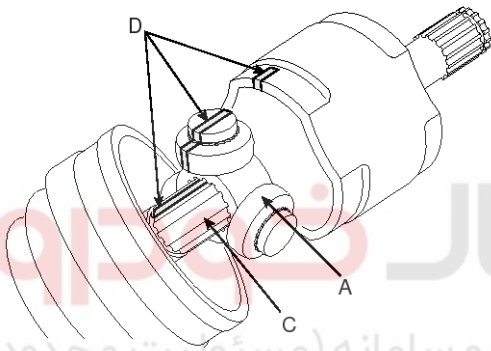
DS-19

4. Install the spider assembly (A) and the circlip (B) to the spline (C) on driveshaft.

At this time align the marks (D) each other.



BIGE007D



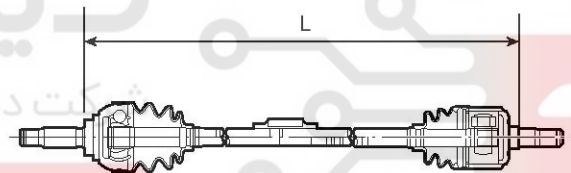
BIGE007E

5. Add the specified grease to the TJ as much as wiped away at inspection.

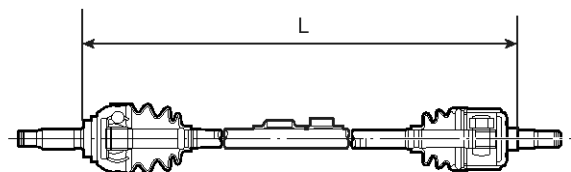
6. Install the TJ boots.

7. To control the air in the TJ boot, keep the specified distance between the boot bands when they are tightened.

Items		Distance (L) mm(in)	
		LH side	RH side
Diesel 1.6	A/T	533.6 (21.0)	808.6 (31.8)
	M/T	538.6 (21.2)	806.8 (31.7)
Gasoline 2.0	M/T	538.6 (21.2)	806.8 (31.7)
	A/T	533.6 (21.0)	806.8 (31.7)
Gasoline 1.6	M/T	533.6 (21.0)	806.8 (31.7)
Gasoline 1.4	M/T	533.6 (21.0)	806.8 (31.7)



AILG500K



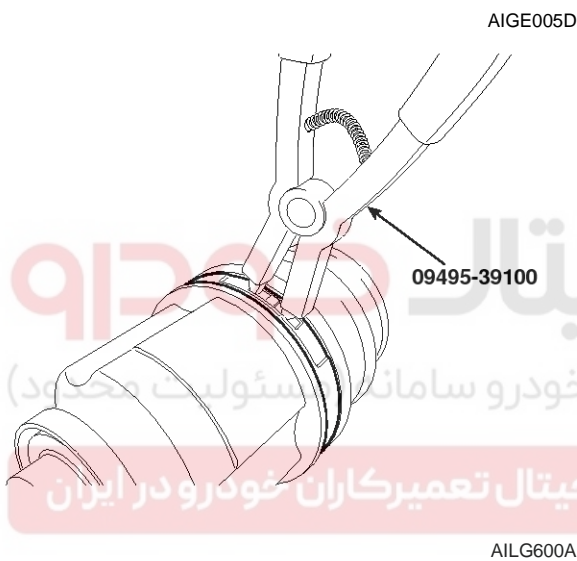
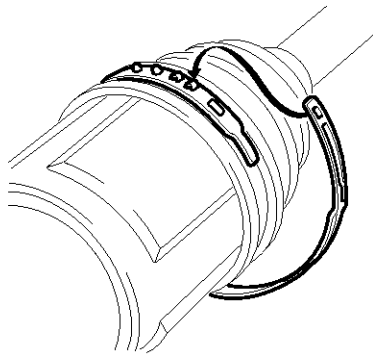
SFDDS8101L

دیجیتال خودرو
 شرکت دیجیتال خودرو سامانه (مسئولیت محدود)
 اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

DS-20

Driveshaft and axle

8. Using the SST (09454-39100), install the boot bands.



REASSEMBLY

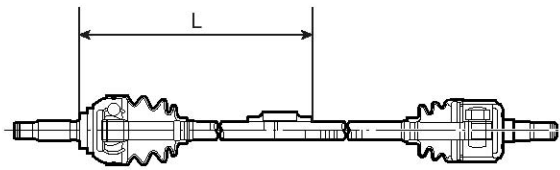
1. Wrap tape around the drive shaft splines (UTJ side) to prevent damage to the boots.
2. Apply grease to the joint(BJ) boot on the side of wheel and install the boots.
3. Install the bands to both boots.
4. To install the dynamic damper, keep the BJ shaft in a straight line and secure the dynamic damper with the dynamic damper bands.

Items		Distance (L)	
		Distance (L1) m-m(in)	Distance (L2) m-m(in)
Diesel 2.0	M/T	310~312	329.5~331.5
Diesel 1.6	A/T	351.5~353.5 (13.83~13.92)	357~359 (14.05~14.13)
Gasoline 2.0	M/T	351.5~353.5 (13.83~13.92)	357~359 (14.05~14.13)
	A/T		
Gasoline 1.6	M/T	360~362 (14.17~14.25)	
	A/T		
Gasoline 1.4	M/T		

Driveshaft Assembly

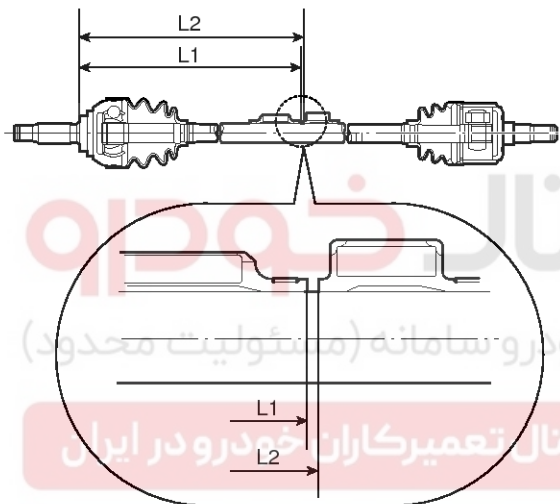
DS-21

< Gasoline 1.4/1.6 >



SHDDS6505L

< Gasoline 2.0/V1.6 AT >

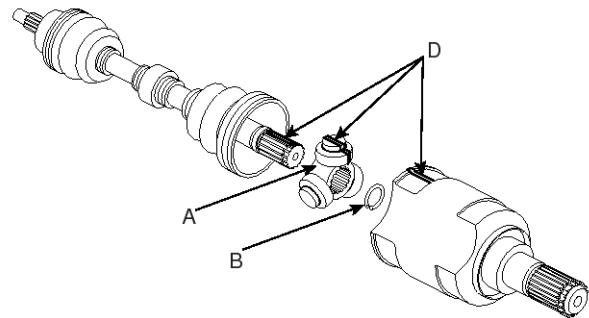


SFDDS8100L

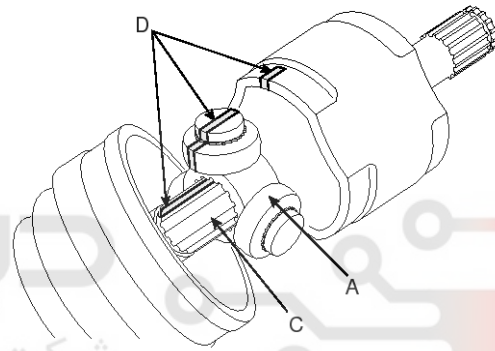
* Reassembling the dynamic dampers, keep the distance L1 and L2 to prevent the contact each dampers.

5. Install the UTJ boot bands and UTJ boot.

6. Using the alignment marks (D) made during disassembly as a guide, install the spider assembly (A) and snap ring (B) on the driveshaft splines (C).



BIGE007D



BIGE007E

7. Add the specified grease to the joint(UTJ) boot as mush as wiped away at inspection.

8. Install the boots.

9. To control the air in the UTJ boot, keep the specified distance between the boot bands when they are tightened.

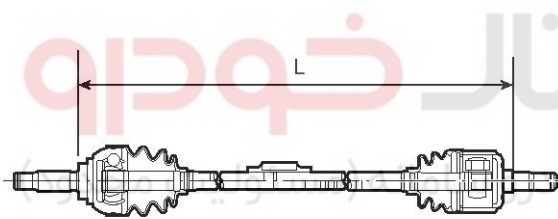
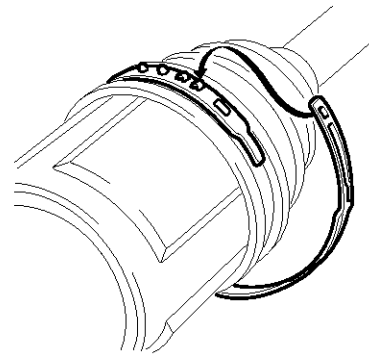
DS-22

Driveshaft and axle

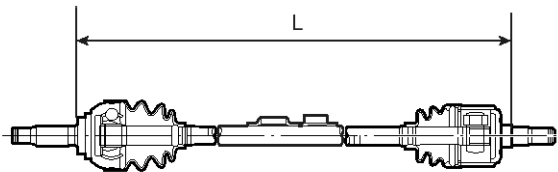
Standard value [L]

Items		Distance (L) mm(in)	
		LH side	RH side
Diesel 2.0	M/T	521.3 (20.5)	821.2 (32.3)
Diesel 1.6	M/T	527.6 (20.8)	815 (32.1)
	A/T	533.6 (21.0)	808.6 (31.8)
Gasoline 2.0	M/T	538.6 (21.2)	806.8 (31.8)
	A/T		
Gasoline 1.6	M/T	533.6 (21.0)	806.8 (31.7)
	A/T		
Gasoline 1.4	M/T		

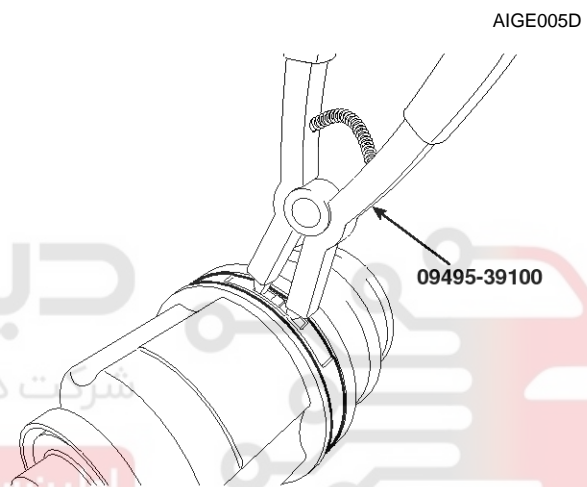
10. Using the SST(09454-39100), install the boot bands.



AILG500K



SFDDS8101L



AILG600A

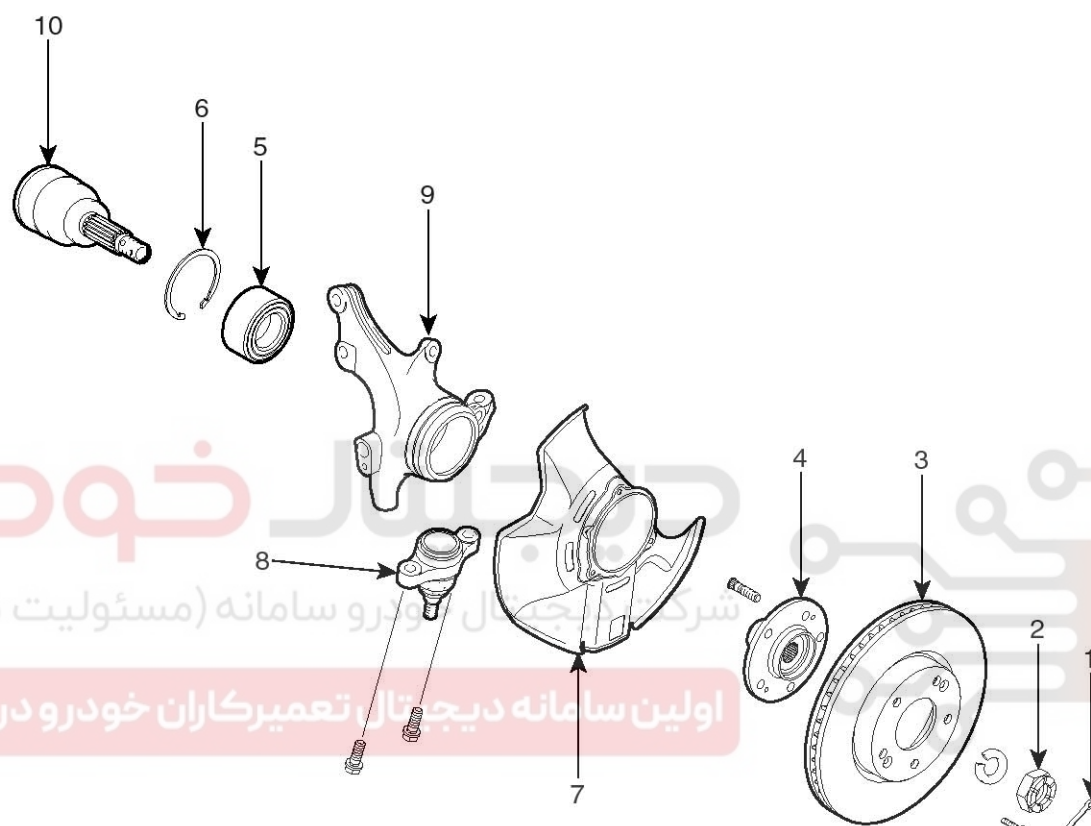
Front Axle Assembly

DS-23

Front Axle Assembly

Front Hub - Axle

COMPONENTS



1. Split pin
2. Driveshaft nut (castle nut)
3. Brake disc
4. Hub
5. Wheel bearing

6. Snap ring
7. Dust cover
8. Lower arm ball joint
9. Knuckle
10. Driveshaft

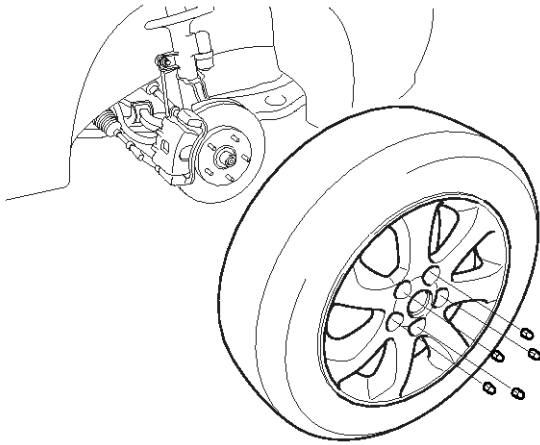
SHDDS6512L

DS-24

Driveshaft and axle

REMOVAL

- Loosen the wheel nuts slightly.
Raise the vehicle, and make sure it is securely supported.
- Remove the front wheel and tire from front hub.

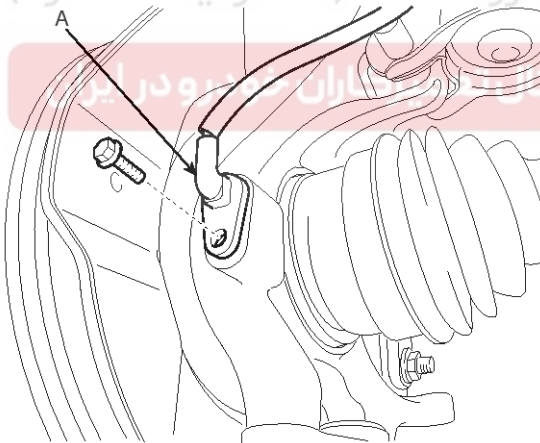


AILG001A

CAUTION

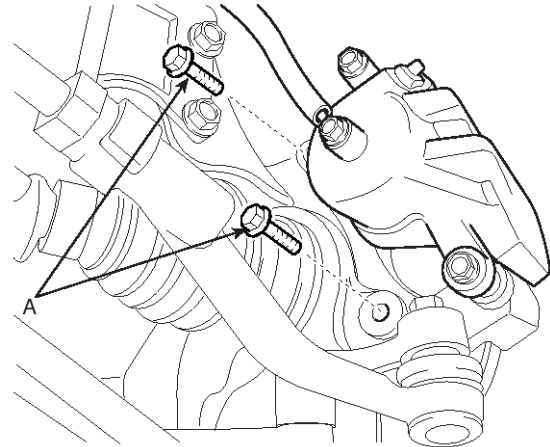
Be careful not to damage to the hub bolts when removing the front wheel and tire.

- Remove the wheel speed sensor (A) from the knuckle.

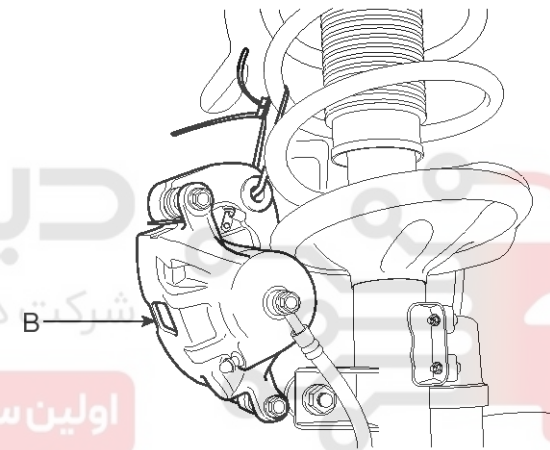


AILG010A

- Remove the brake caliper mounting bolts (A), and then place the brake caliper assembly (B) with wire.

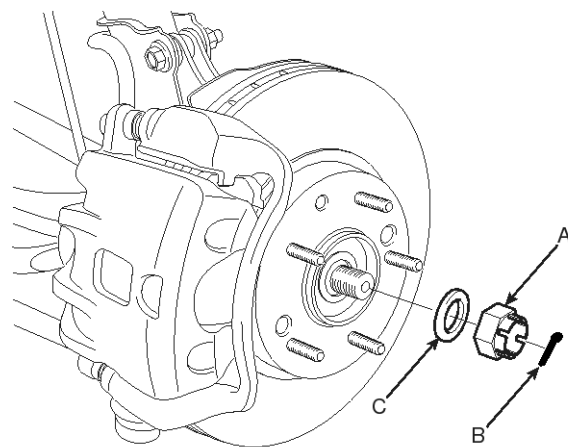


AILG011A



SHDDS6513L

- Remove the split pin (B), then remove castle nut (A) and washer (C) from the front hub under applying the break.

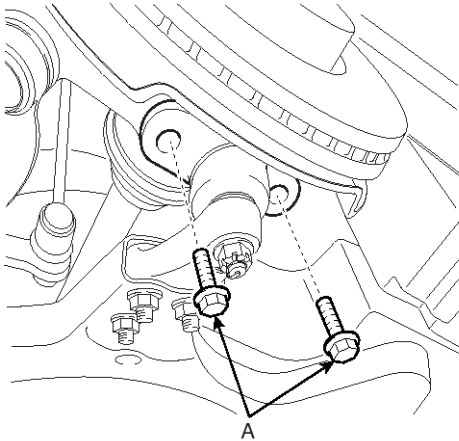


SHDDS6514L

Front Axle Assembly

DS-25

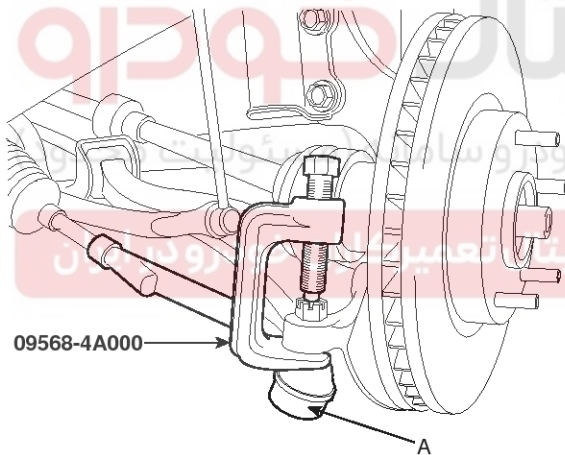
6. Remove the ball joint assembly mounting bolt (A) from the knuckle.



AILG005A

7. Remove the tie rod end ball joint from the knuckle.

- 1) Remove the split pin and castle nut.
- 2) Disconnect the ball joint (A) from knuckle by using the special tool (09568-4A000).

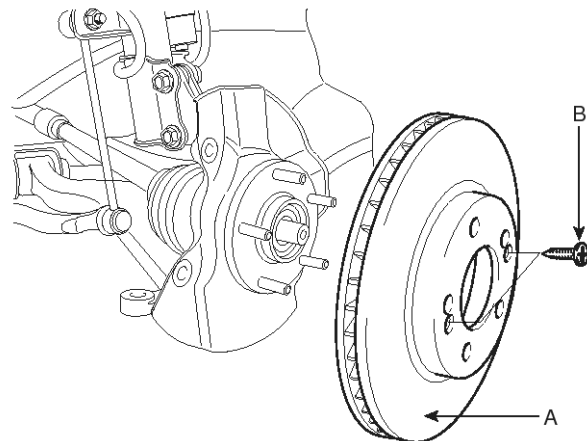


AILG024A

⚠ CAUTION

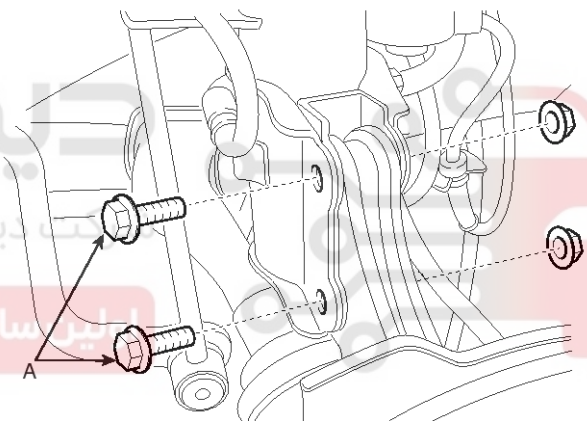
Apply a few drops of oil to the special tool.
(Boot contact part)

8. Remove the brake disc (A) from the front hub assembly after remove the screws (B).



SHDDS6519L

9. Remove the strut assembly mounting bolts (A) and nuts.



AILG025A

10. Remove the hub and knuckle assembly.

⚠ CAUTION

Be careful not to damage the boot and rotor teeth.

DS-26

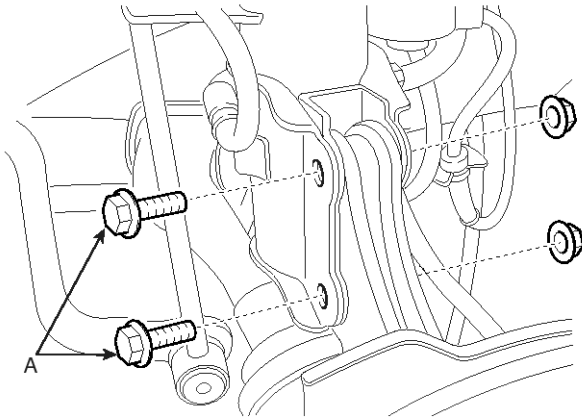
Driveshaft and axle

INSTALLATION

1. Install the hub and knuckle assembly to the drive shaft.
2. Install the knuckle to the strut assembly and tighten mounting bolts (A) and nuts.

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

Bolts(A): 137.3~156.9 (14.0~16.0, 101.3~115.7)

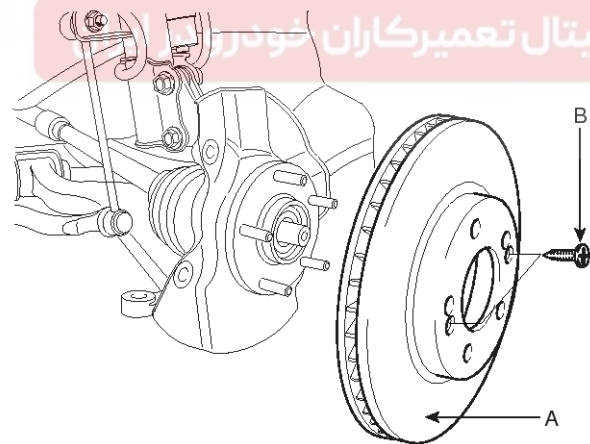


AILG025A

3. Install the brake disc (A) to the front hub assembly, and tighten the screws (B).

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

Bolt(B) : 2.94~5.88 (0.3~0.6, 2.17~4.33)

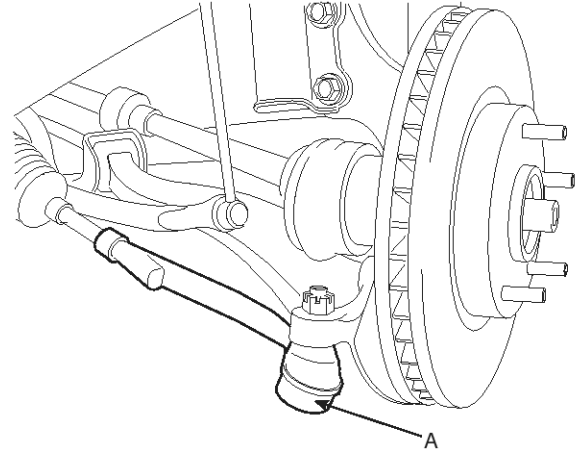


SHDDS6519L

4. Install the tie rod end ball joint (A) to the knuckle.
5. Install the nut and split pin.

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

23.5~33.3 (2.4~3.4, 17.4~24.6)

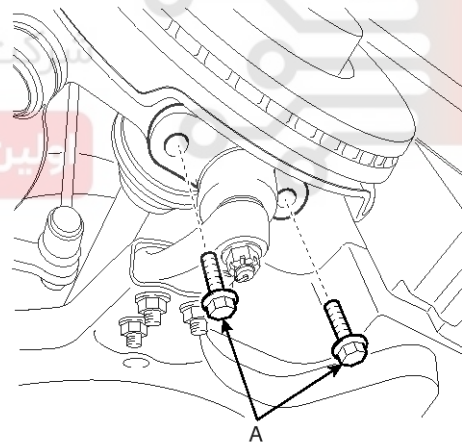


SUNDS6504D

6. Install the ball joint assembly mounting bolt (A) to the knuckle.

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

Bolt(A) : 98.1~117.7 (10~12, 72.3~86.8)



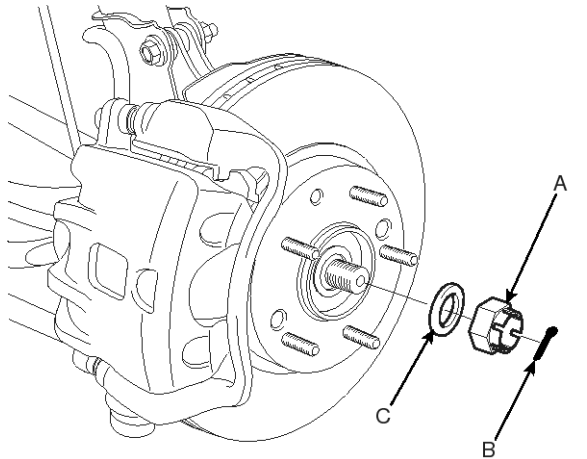
AILG005A

Front Axle Assembly

DS-27

7. Install the washer (C), castle nut (A) and split pin (B) to the front hub assembly.

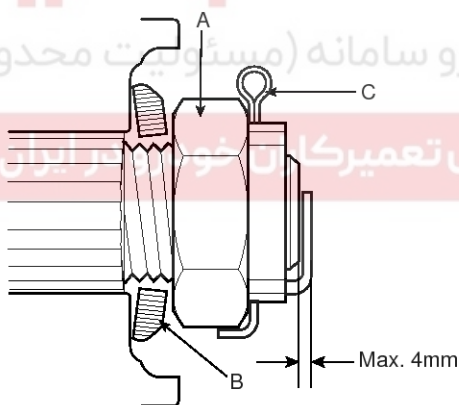
Tightening torque Nm (kgf.m, lb-ft) :
196.1~274.6 (20~28, 144.7~202.5)



SHDDS6515L

CAUTION

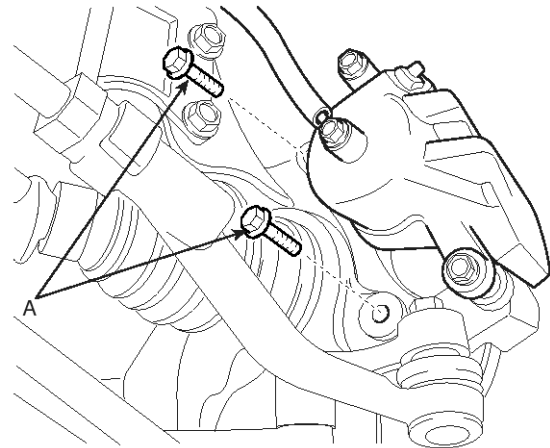
The washer (B) should be assembled with convex surface outward when installing the castle (A) nut and split pin (C).



SFDDS8102L

8. Install the brake caliper and then tighten the mounting bolts(A).

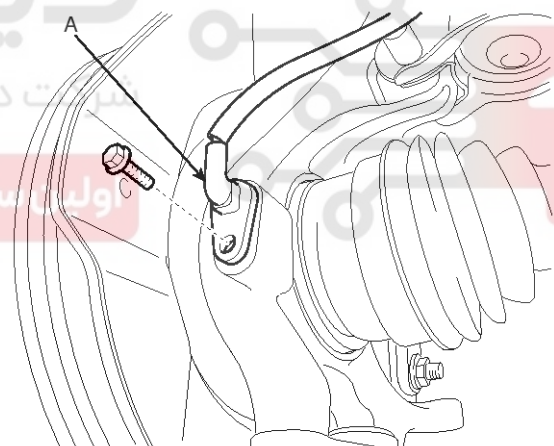
Tightening torque Nm (kgf.m, lb-ft) :
78.5~98.1 (8~10, 57.9~72.3)



AILG011A

9. Install the wheel speed sensor (A) to the knuckle.

Tightening torque Nm (kgf.m, lb-ft) :
6.9~10.8 (0.7~1.1, 5.1~7.95)



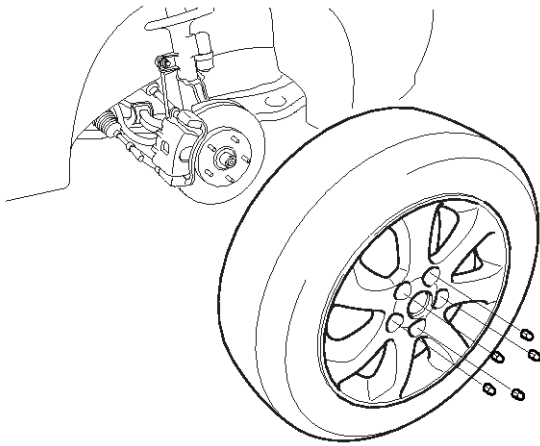
AILG010A

DS-28

10. Install the wheel and the tire to the front hub.

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

88.3~107.9 (9~11, 65.1~79.6)



AILG001A

CAUTION

Be careful not to damage the hub bolts when installing the front wheel and tire.

DISASSEMBLY

1. Remove the snap ring (A).

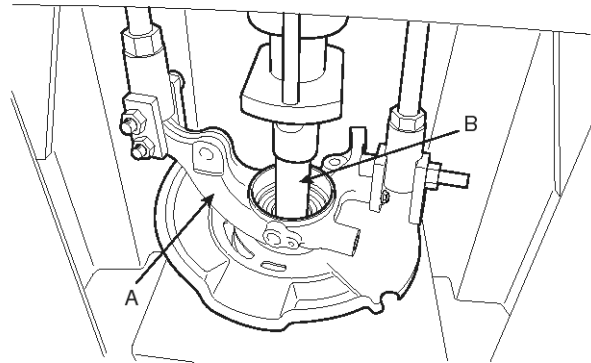


AILG500E

Driveshaft and axle

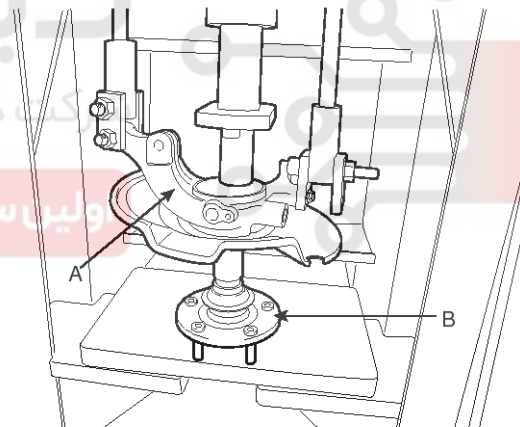
2. Remove the hub assembly from the knuckle assembly.

- 1) Install the front knuckle assembly (A) on press.
- 2) Lay a suitable adapter (B) upon the hub assembly shaft.



SUNDS6001D

3) Remove the hub assembly (B) from the knuckle assembly (A) by using press.

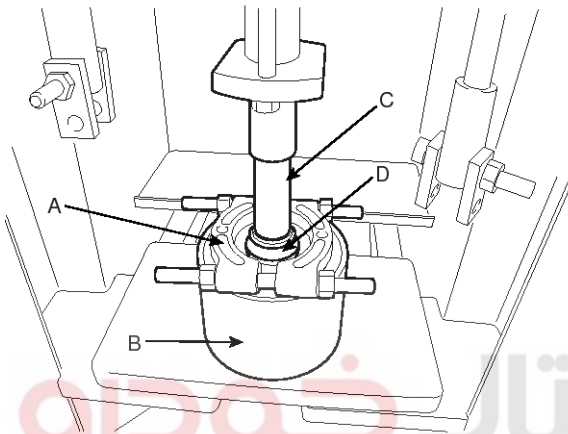


SUNDS6002D

Front Axle Assembly

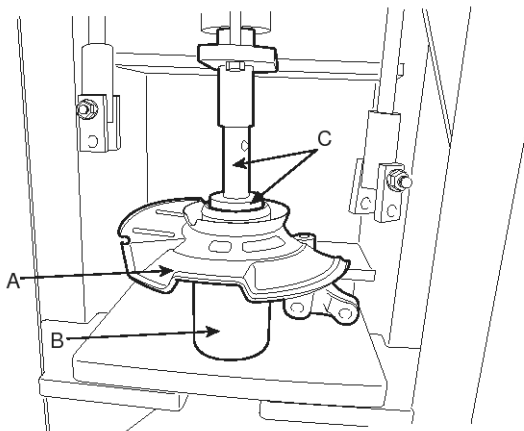
DS-29

3. Remove the hub bearing inner race from the hub assembly.
 - 1) Install a suitable tool (A) for removing the hub bearing inner race on the hub assembly.
 - 2) Lay the hub assembly and tool (A) upon a suitable adapter (B).
 - 3) Lay a suitable adapter (C) upon the hub assembly shaft.
 - 4) Remove the hub bearing inner race (D) from the hub assembly by using press.



SUNDS6003D

4. Remove the hub bearing outer race from the knuckle assembly.
 - 1) Lay the hub assembly (A) upon a suitable adapter (B).
 - 2) Lay a suitable adapter (C) upon the hub bearing outer race.
 - 3) Remove the hub bearing outer race from the knuckle assembly by using press.



SUNDS6004D

5. Replace hub bearing with a new one.

INSPECTION

1. Check the hub for cracks and the splines for wear.
2. Check the brake disc for scoring and damage.
3. Check the knuckle for cracks.
4. Check the bearing for cracks or damage.



DS-30

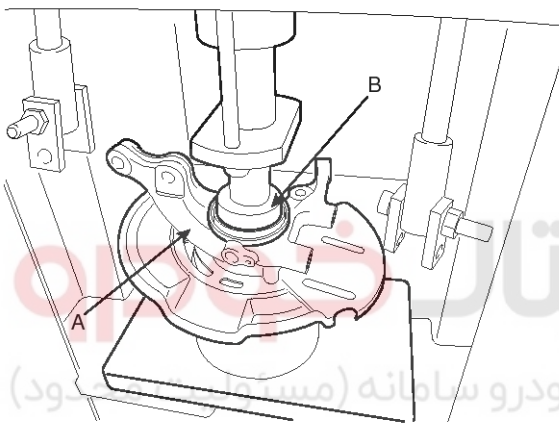
Driveshaft and axle

REASSEMBLY

1. Install the hub bearing to the knuckle assembly.
 - 1) Lay the knuckle assembly (A) on press.
 - 2) Lay a new hub bearing upon the knuckle assembly (A).
 - 3) Lay a suitable adapter (B) upon the hub bearing.
 - 4) Install the hub bearing to the knuckle assembly by using press.

⚠ CAUTION

- Do not press against the inner race of the hub bearing because that can cause damage to the bearing assembly.
- Always use a new wheel bearing assembly.

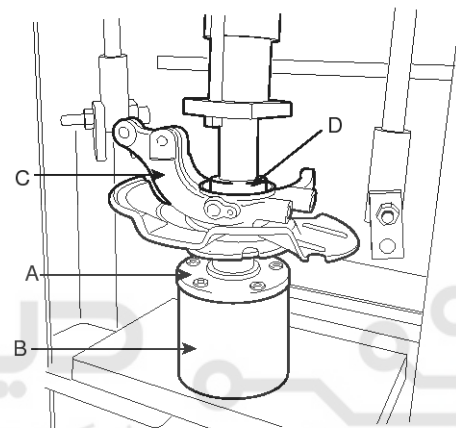


SUNDS6005D

2. Install the hub assembly to the knuckle assembly.
 - 1) Lay the hub assembly (A) upon a suitable adapter (B).
 - 2) Lay the knuckle assembly (C) upon the hub assembly (A).
 - 3) Lay a suitable adapter (D) upon the hub bearing.
 - 4) Install the hub assembly (A) to the knuckle assembly (C) by using press.

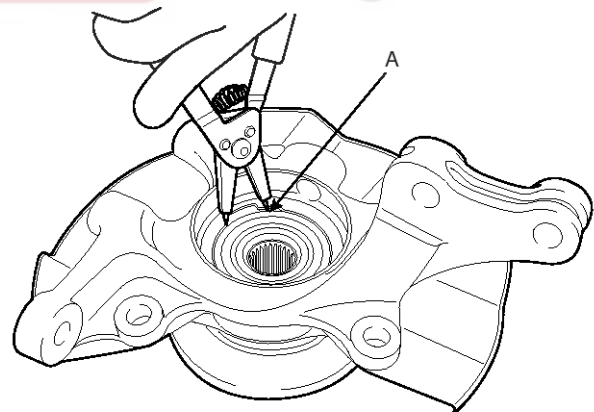
⚠ CAUTION

- Do not press against the inner race of the hub bearing because that can cause damage to the bearing assembly.



SUNDS6006D

3. Install the snap ring (A).



AILG500E

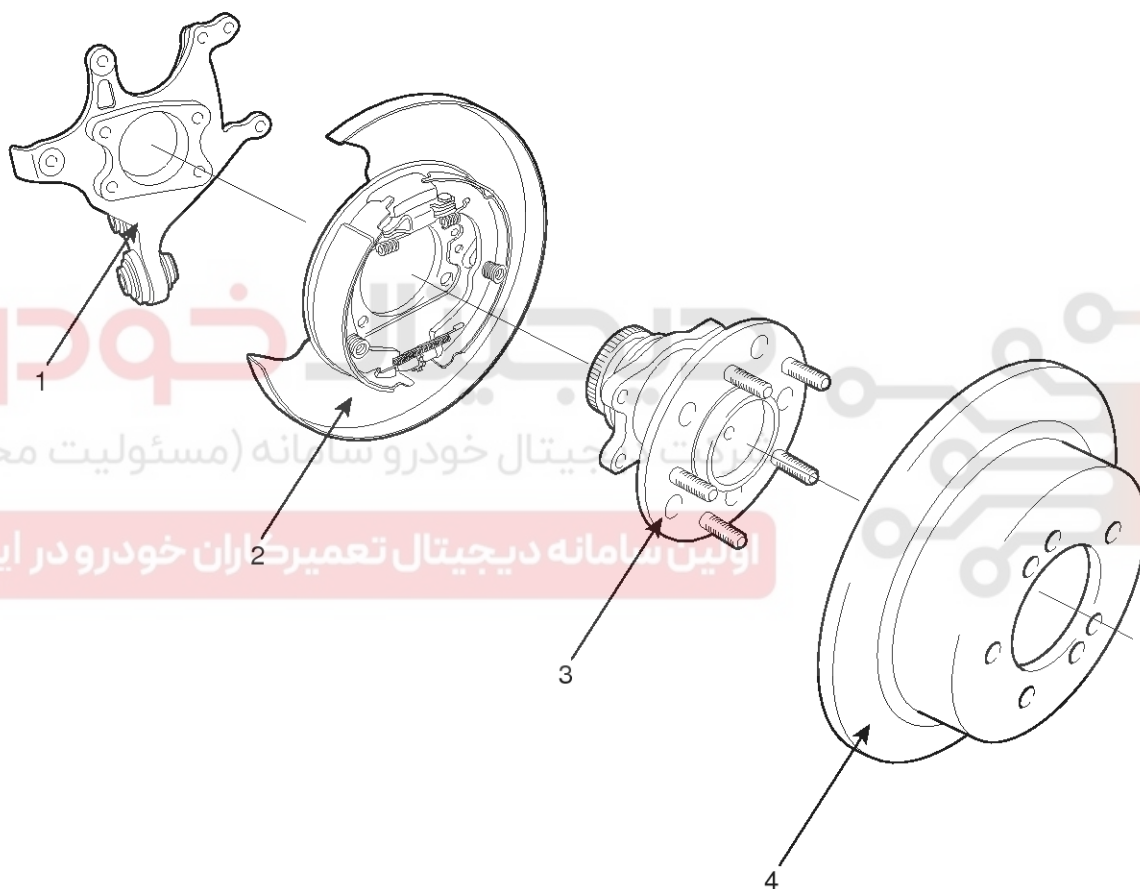
Rear Axle Assembly

DS-31

Rear Axle Assembly

Rear Hub - Carrier

COMPONENT



1. Carrier assembly
2. Rear brake assembly

3. Hub & bearing assembly
4. Rear brake disc

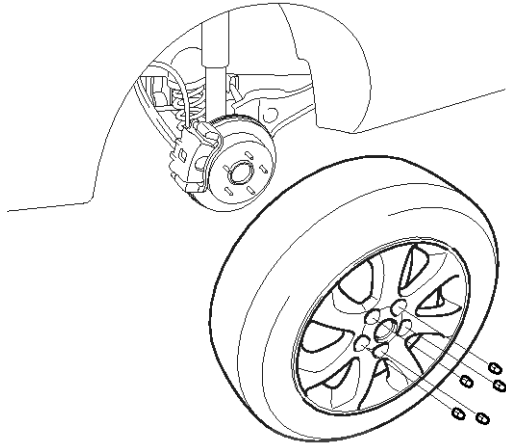
LILG500F

DS-32

Driveshaft and axle

REMOVAL

1. Release the parking brake.
2. Loosen the wheel nuts slightly.
3. Raise the vehicle, and make sure it is securely supported.
4. Remove the rear wheel and tire from rear hub.

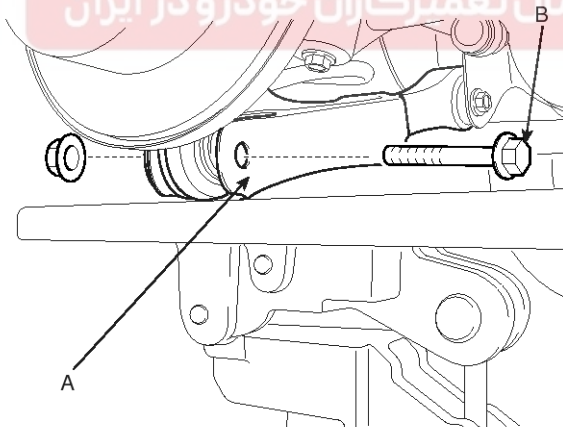


AILG017A

CAUTION

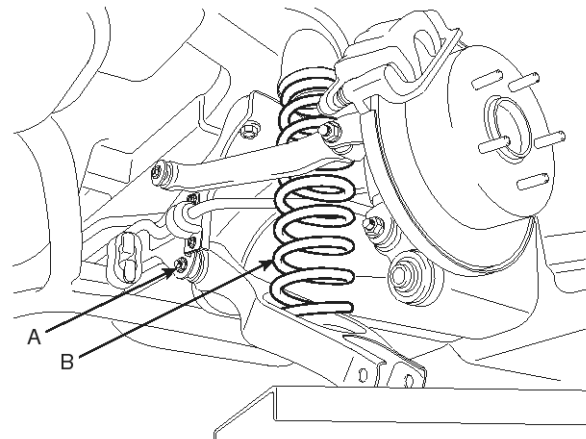
Be careful not to damage to the hub bolts when removing the rear wheel and tire.

5. Remove the mounting bolt (B) of the rear lower arm (A) and the rear carrier, while supporting the lower arm (A) with a jack as shown in the illustration.



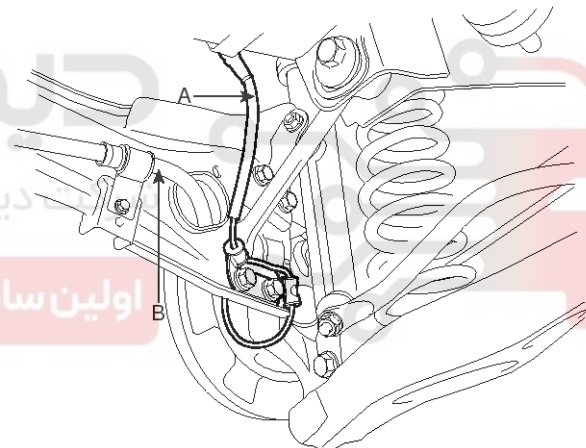
AILG026A

6. Loosen the mounting nut (A) of the cross member and the rear lower arm, then remove the coil spring (B) by taking down the jack.

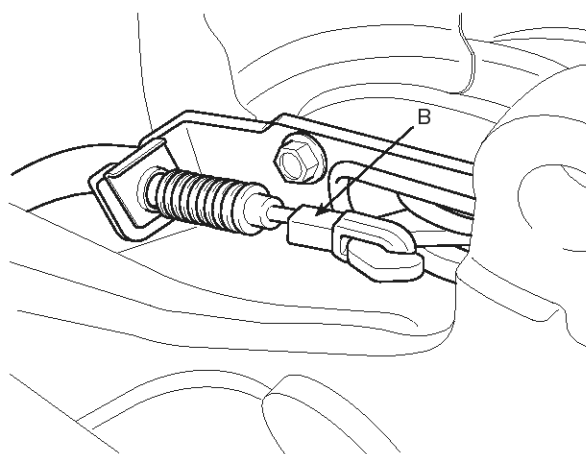


SHDDS6516L

7. Remove the wheel speed sensor (A) and parking brake cable (B).



SFDDS8103L

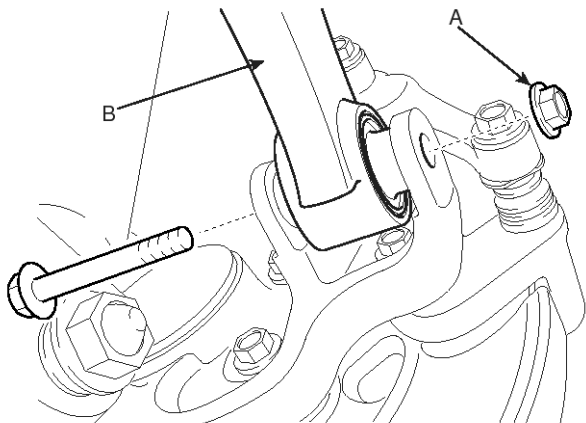


SHDDS6515D

Rear Axle Assembly

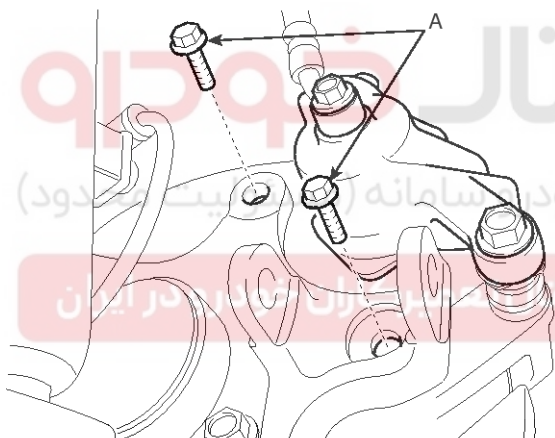
DS-33

8. Disconnect the upper arm (B) from the carrier assembly after loosen the nut (A).

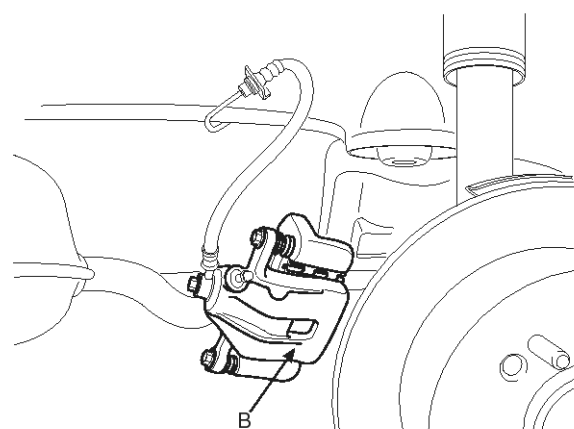


AILG030A

9. Remove the brake caliper mounting bolts (A), and then place the brake caliper assembly (B) with wire as shown in the illustration.

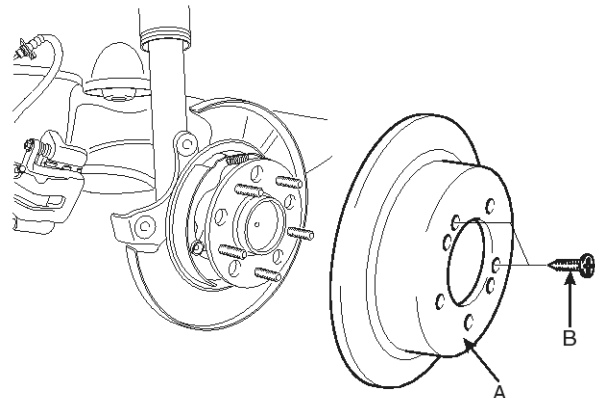


AILG020A



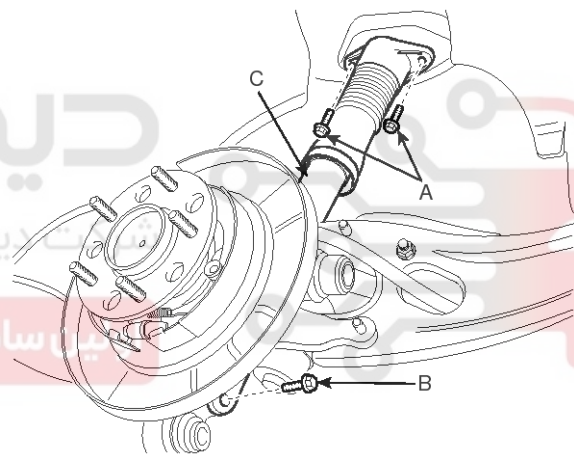
AILG021A

10. Remove the rear brake disc assembly (A) after loosen the screw (B).



SHDDS6537L

11. Remove the rear strut assembly (C) after loosen the bolt (A, B).



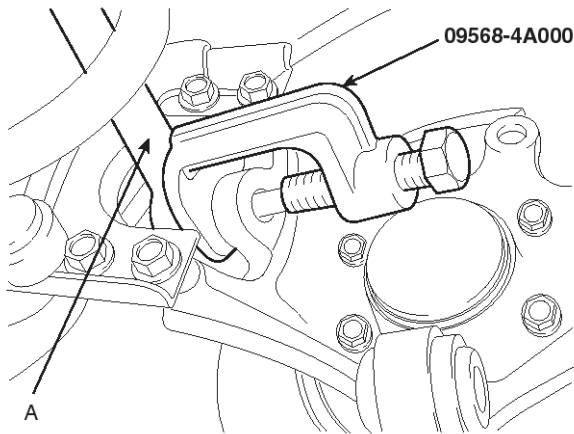
LILG500J

12. Remove the split pin and castle nut from the assist arm.

DS-34

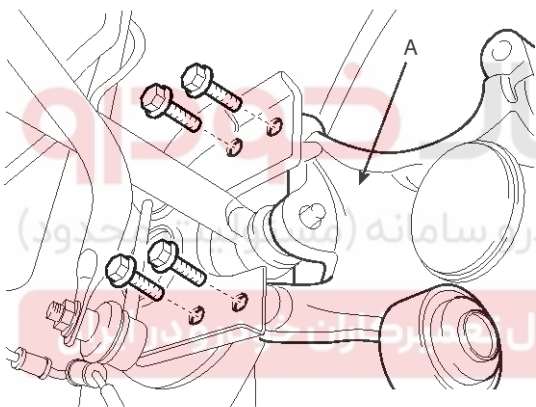
Driveshaft and axle

13. Using the SST (09568-4A000), disconnect the assist arm (A) from the carrier assembly.



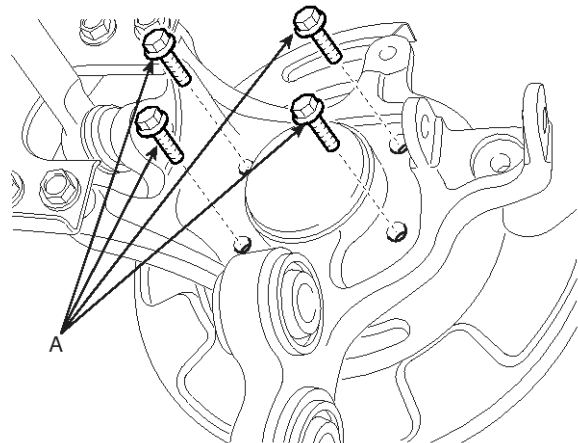
SHDDS6538L

14. Remove the carrier assembly (A) from the trailing arm after remove the mounting bolts.

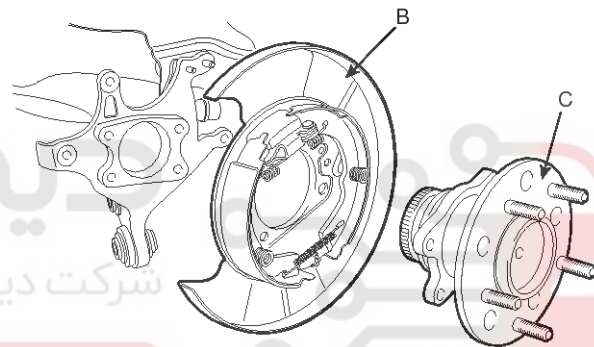


AILG032A

15. Remove the rear hub assembly (C) and rear brake assembly (B) after remove mounting bolts (A).



AILG028A



AILG029A

Rear Axle Assembly

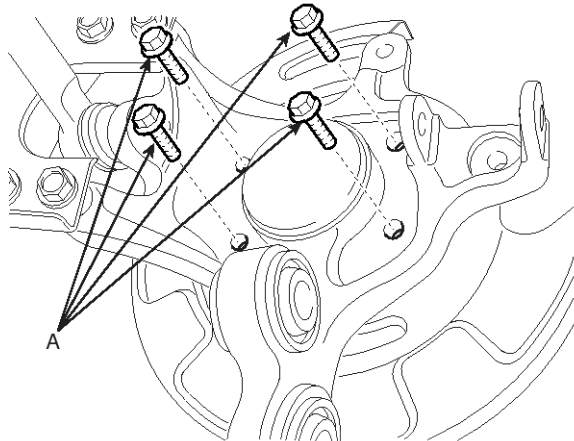
DS-35

INSTALLATION

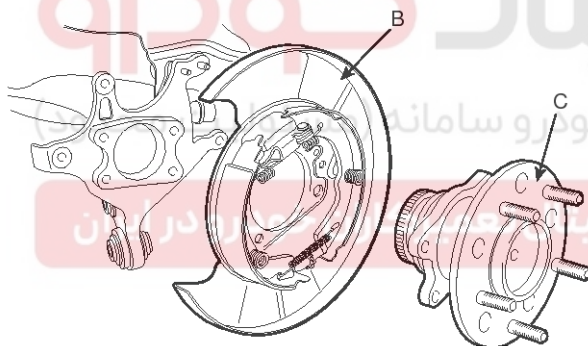
1. Install the rear hub assembly (C) and rear brake assembly (B) to the rear carrier, then tighten mounting bolts (A).

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

68.6~88.3 (7.0~9.0, 50.6~65.1)



AILG028A

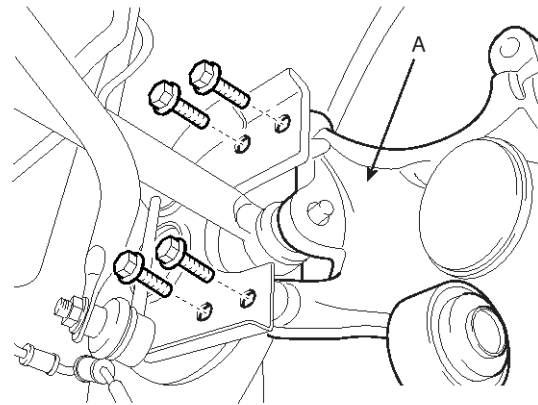


AILG029A

2. Install the carrier assembly (A) to the trailing arm, then tighten the mounting bolts.

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

34.3~53.9 (3.5~5.5, 25.3~39.8)

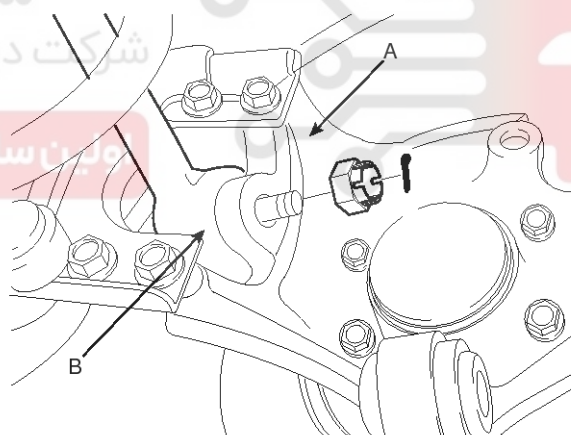


AILG032A

3. Install the assist arm(B) to the carrier assembly (A) , then install the castle nut and split pin.

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

44.1~53.9 (4.5~5.5, 32.5~39.8)



SHDDS6518L

DS-36

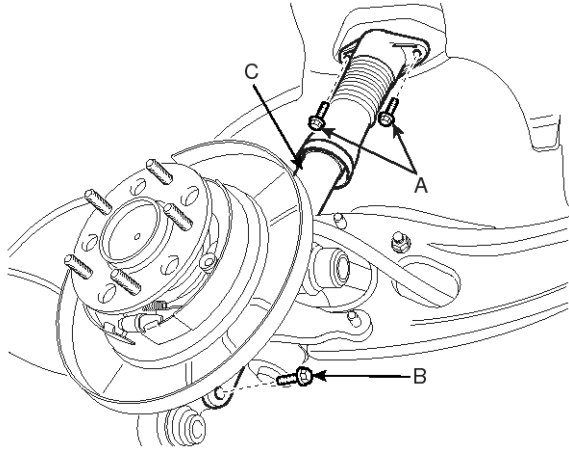
Driveshaft and axle

4. Install the rear strut assembly (C), then tighten the bolt (A, B).

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

Bolt(A) : 49.0~63.7 (5.0~6.5, 36.2~47.0)

Bolt(B) : 137.3~156.9 (14.0~16.0, 101.3~115.7)

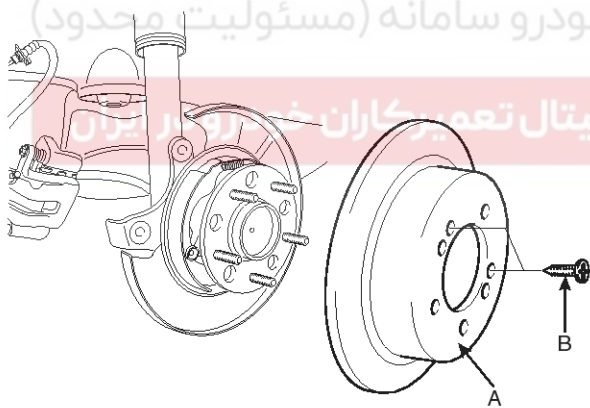


LILG500J

5. Install the rear brake disc assembly (A) and tighten screw (B).

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

Bolt(B) : 4.9~5.88 (0.5~0.6, 3.61~4.33)

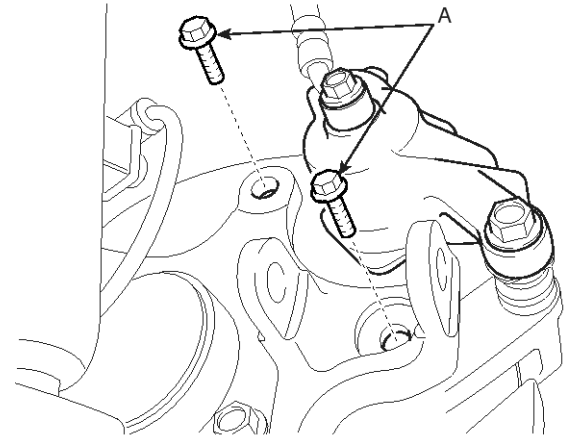


SHDDS6537L

6. Install the brake caliper, then tighten the brake caliper mounting bolts (A).

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

49.0~58.8 (5.0~6.0, 36.2~43.4)

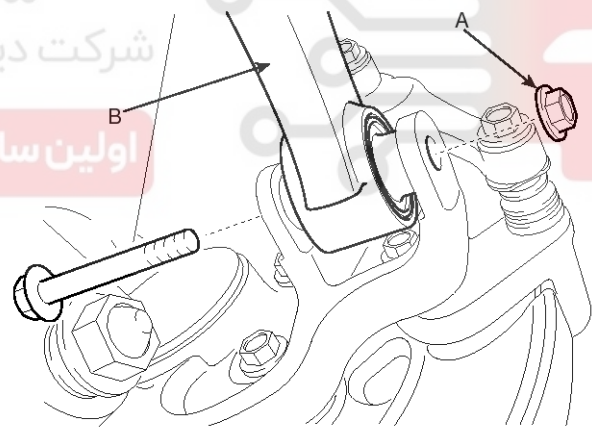


AILG020A

7. Install the upper arm (B) from the carrier assembly , then tighten the nut (A).

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

Nut(A) : 98.1~117.7 (10~12, 72.3~86.8)

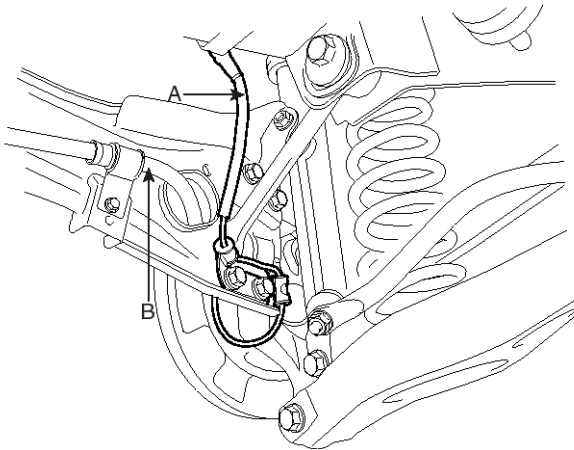


AILG030A

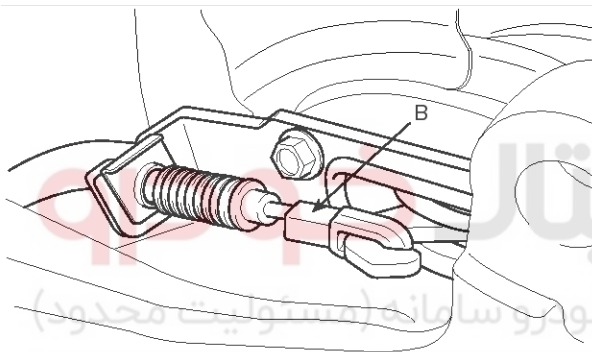
Rear Axle Assembly

DS-37

8. Install the wheel speed sensor (A) and parking brake cable (B).

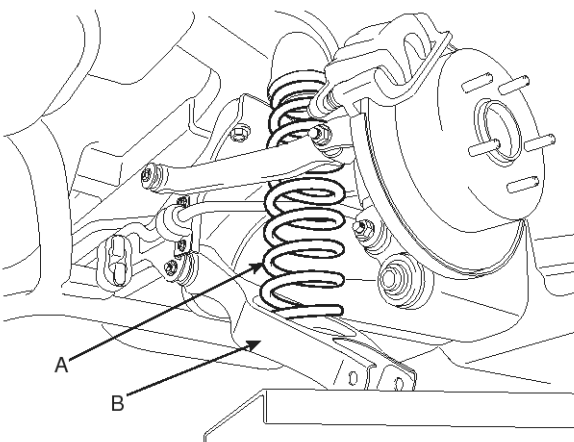


SHDDS6521L



SHDDS6515D

9. Install the coil spring (A) on the rear lower arm (B), then slowly jack-up the rear lower arm (B) by using jack.

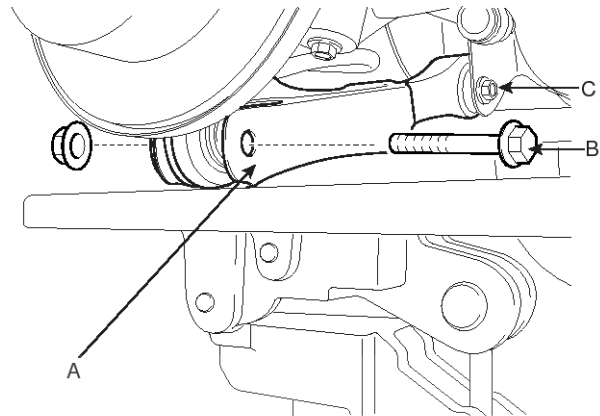


SUNDS6508D

10. Install the mounting bolt (B) of the rear lower arm (A) and the rear carrier with a specified torque, while supporting the lower arm (A) with a jack as shown in the illustration. Tighten the mounting bolt (C) of the cross member and the rear lower arm with a specified torque.

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

Bolt (B, C) :137.3~156.9 (14.0~16.0, 101.3~115.7)

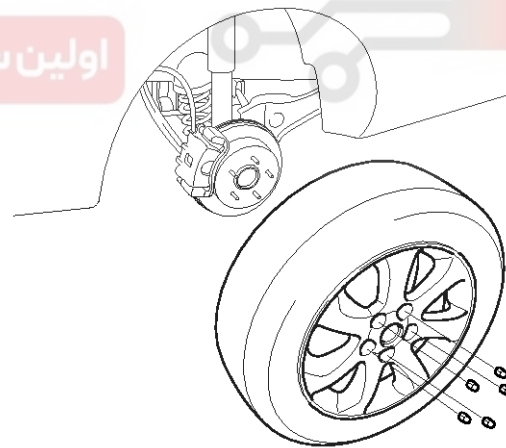


SHDDS6522L

11. Install the wheel and the tire to the rear hub.

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

88.3~107.9 (9~11, 65.1~79.6)



AILG017A

CAUTION

Be careful not to damage the hub bolts when installing the rear wheel and tire.

DS-38

Driveshaft and axle

INSPECTION

1. Check the hub for cracks and the splines for wear.
2. Check the bearing for cracks or damage.
3. Check the brake disc for scoring and damage.
4. Check the rear axle carrier for cracks.
5. Check the rear tone wheel for chipped the teeth.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

