WWW.DIGITALKHODRO.COM 021 62 99 92 92

General Information

Specification

Engine, T/M		Joint type		Max. permissible angle	
		Outer	Inner	Outer	Inner
Gasoline M/T	LH	BJ22	UTJ22	46°	23°
	RH	BJ22	TJ22		
Gasoline A/T	LH	BJ22	UTJ22		
	RH	BJ22	TJ22		
Diesel M/T	LH	BJ25	UTJ25		
	RH	BJ25	UTJ25		
Diesel A/T	LH	BJ24	UTJ22		
	RH	BJ24	TJ22		

Tightening torque

Item			
	Nm	Kgf.m	lb-ft
Hub nuts	90 ~ 110	9.0 ~ 11.0	65 ~ 80
Driveshaft lock nut	196 ~ 274	20.2 ~28.0	144 ~ 202
Strut assembly to knuckle	137 ~ 160	14.0 ~16.0	101 ~ 105
Lower arm to knuckle	78 ~ 72	8.0 ~ 10.0	43 ~ 52
Tie rod end castle nut	23 ~ 34	2.4 ~ 3.4	17 ~ 25
Front caliper to knuckle	80 ~ 100	8.0 ~ 10.0	58 ~ 72
Rear caliper to carrier	49 ~ 59	5.0 ~ 6.0	36 ~ 43
Rear carrier to torsion axle	70 ~ 90	7.0 ~ 9.0	51 ~ 65

⚠CAUTION
Replace self-locking nuts with new ones after removal.

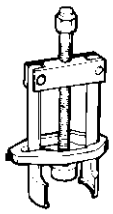
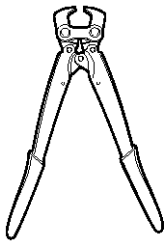
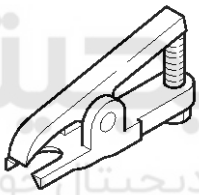
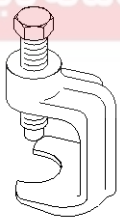
Lubricants

Items		Lubricants	Quantity
Front driveshaft	BJ#22	RBA	90g
	TJ#22	RBA	125g
	UTJ#22	RBA	210g
	BJ#24	RBA	110g

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

Special Service Tools

Tool(Number and Name)	Illustration	Use
09495-33000Puller	 D9533000	Removal of spider assembly from a drive shaft.
09495-3K000Band installer	 KINF500C	Installation of ear type boot band
09568-34000Ball joint remover	 E6834000	Removal of the rear upper arm ball joint
09568-4A000Ball joint remover	 KPRE103I	Removal of the front lower arm and tie rod end ball joint

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

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
Vibartion	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

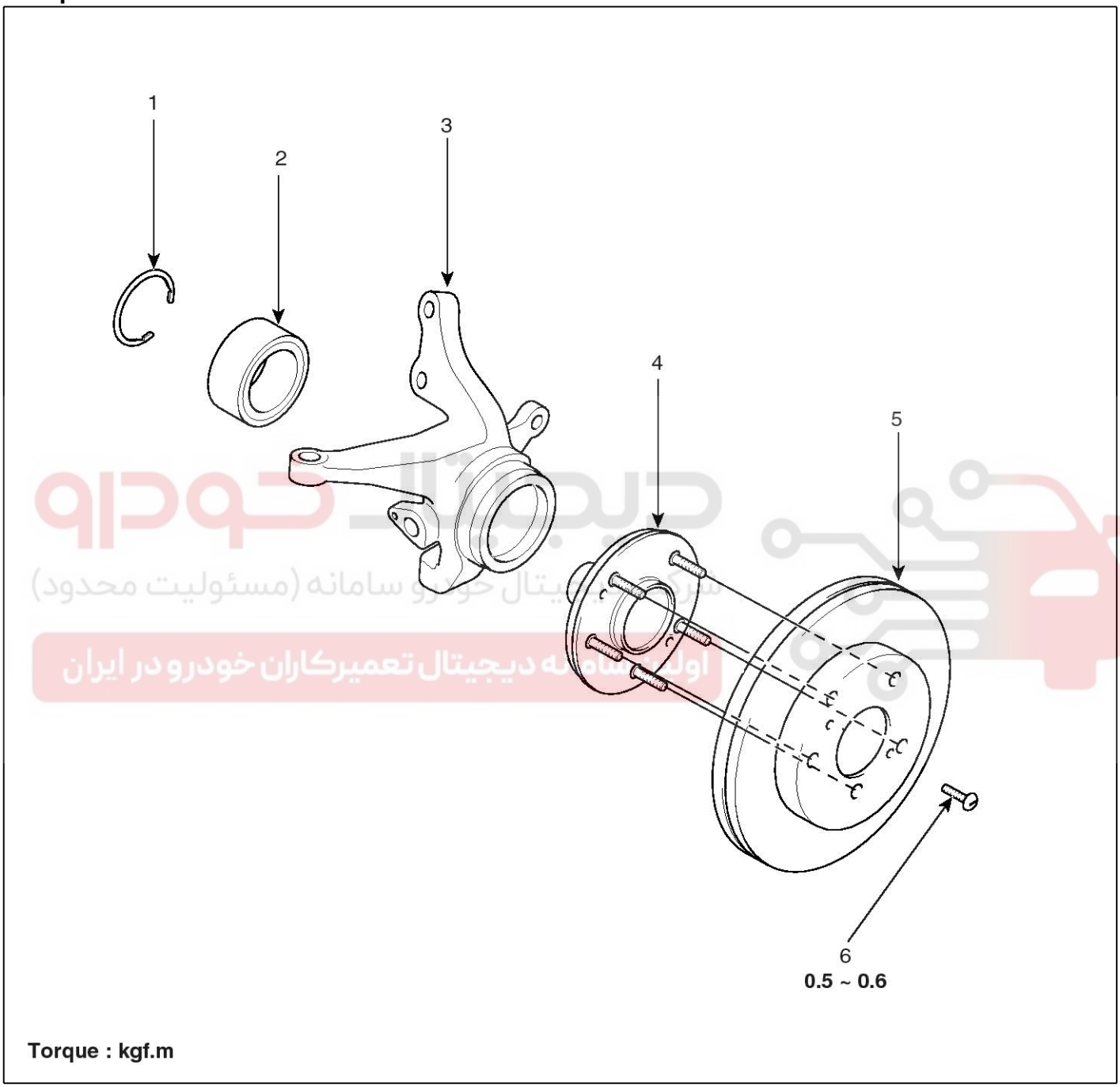
WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

Front Axle Assembly

Front Hub / Knuckle / Tone Wheel

Components



STDDS9100L

1. Snap ring
2. Front wheel hub bearing
3. Front knuckle
4. Front wheel hub assembly
5. Front wheel brake disc
6. Front brake disc screu

WWW.DIGITALKHODRO.COM 021 62 99 92 92

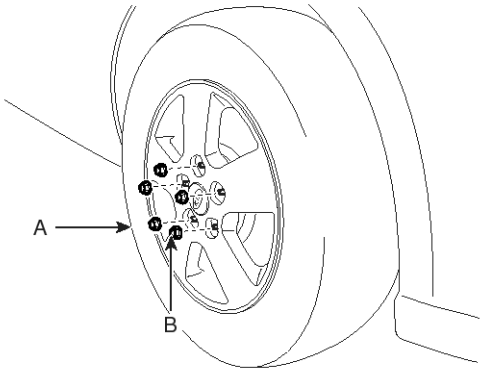
WWW.DIGITALKHODRO.COM 021 62 99 92 92

Replacement

1. Loosen the wheel nuts(B) slightly.

   Raise the vehicle, and make sure it is securely supported.

2. Remove the front wheel and tire(A) from front hub .

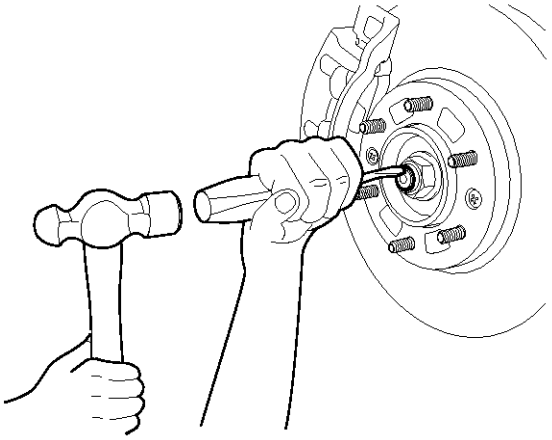


STDDS9001D

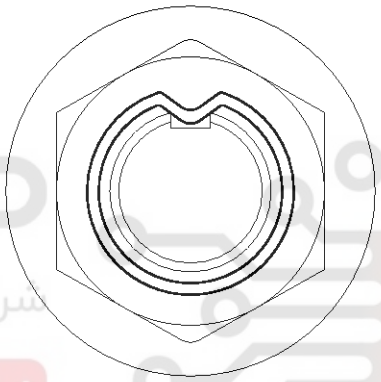
⚠CAUTION

Be careful not to damage to the hub bolts (B) when removing the front wheel and tire (A).

3. Unstake the driveshaft lock nut using a chisel and hammer.



AIKF001A



AIKF011A

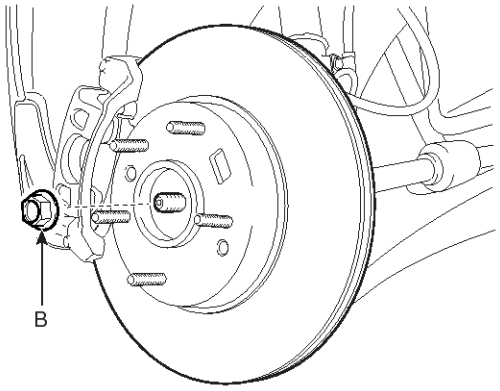
شرکت دیجیتال خودرو سامانه (مسئولیت محدود)
اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

4. Remove driveshaft nut(B) from the front hub under applying the break.

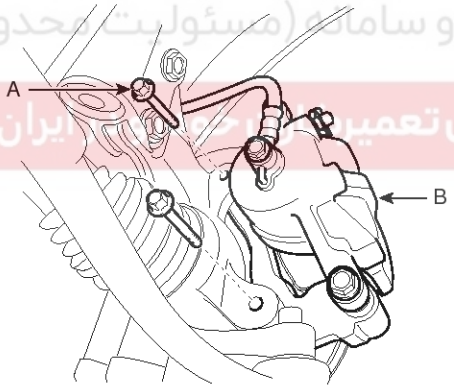
Tightening torque:
196.1~274.5 N.m(20.0~28.0 Kgf.m, 144.6~202.5lb.ft)



STDDS9002D

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

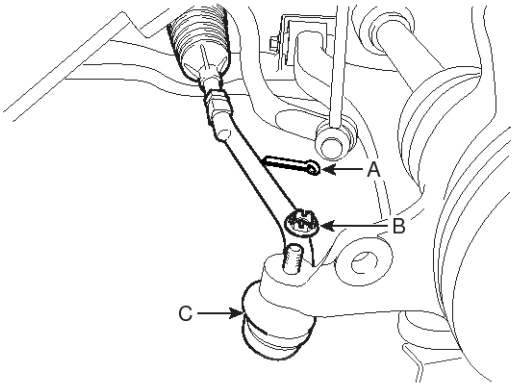
Tightening torque:
80~100 N.m (8.0~10.0 Kgf.m, 58~72.3lb.ft)



STDDS9003D

6. Remove the tie rod end ball joint from the knuckle.
   1) Remove the split pin(A).
   2) Remove the castle nut(B).
   3) Disconnect the ball joint(C) from knuckle using the special tool (09568-4A000).

Tightening torque:
23~32 N.m (2.4~3.4 Kgf.m, 17~25 lb.ft)

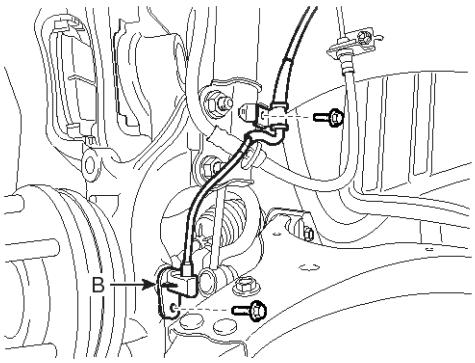


STDDS9004L

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

7. Remove the wheel speed sensor(B).

Tightening torque:
6.8~10.8N.m(0.7~1.1Kgf.m, 5.1~7.9lb.ft)

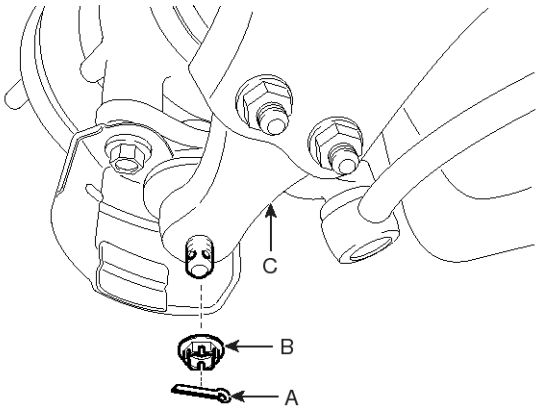


STDDS9005D

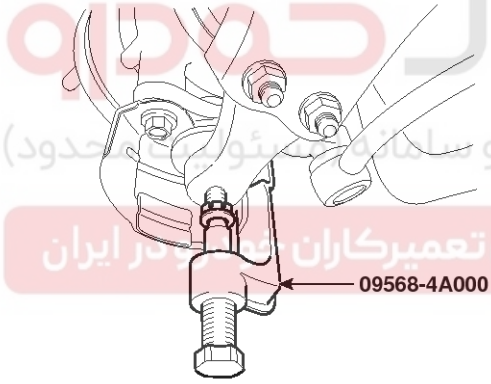
WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

8. Remove the lower arm from the knuckle.
   1) Remove the split pin(A).
   2) Remove the castle nut(B).
   3) Disconnect the lower amr(C) from knuckle using the special tool (09568-4A000).



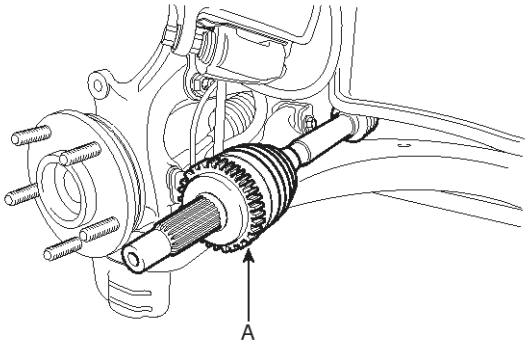
STDDS9006D



STDDS9007D

⚠CAUTION
Be careful not to damage the boot and rotor teeth.

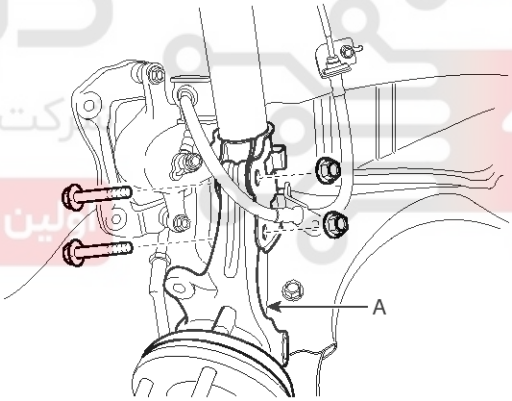
9. Disconnect the driveshaft (A) from the front hub assembly.



STDDS9008D

10. Loosen the strut mount bolts and then remove the knuckle assembly(A).

Tightening torque:
137~160 N.m (14.0~16.0 Kgf.m, 144~202 lb.ft)

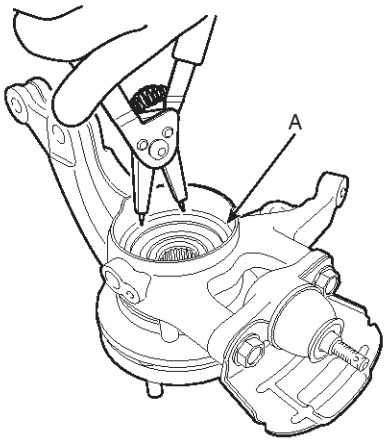


STDDS9009D

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

11. Remove the snap ring (A).



STDDS9011L

12. Install in the reverse order of removal.

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.

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

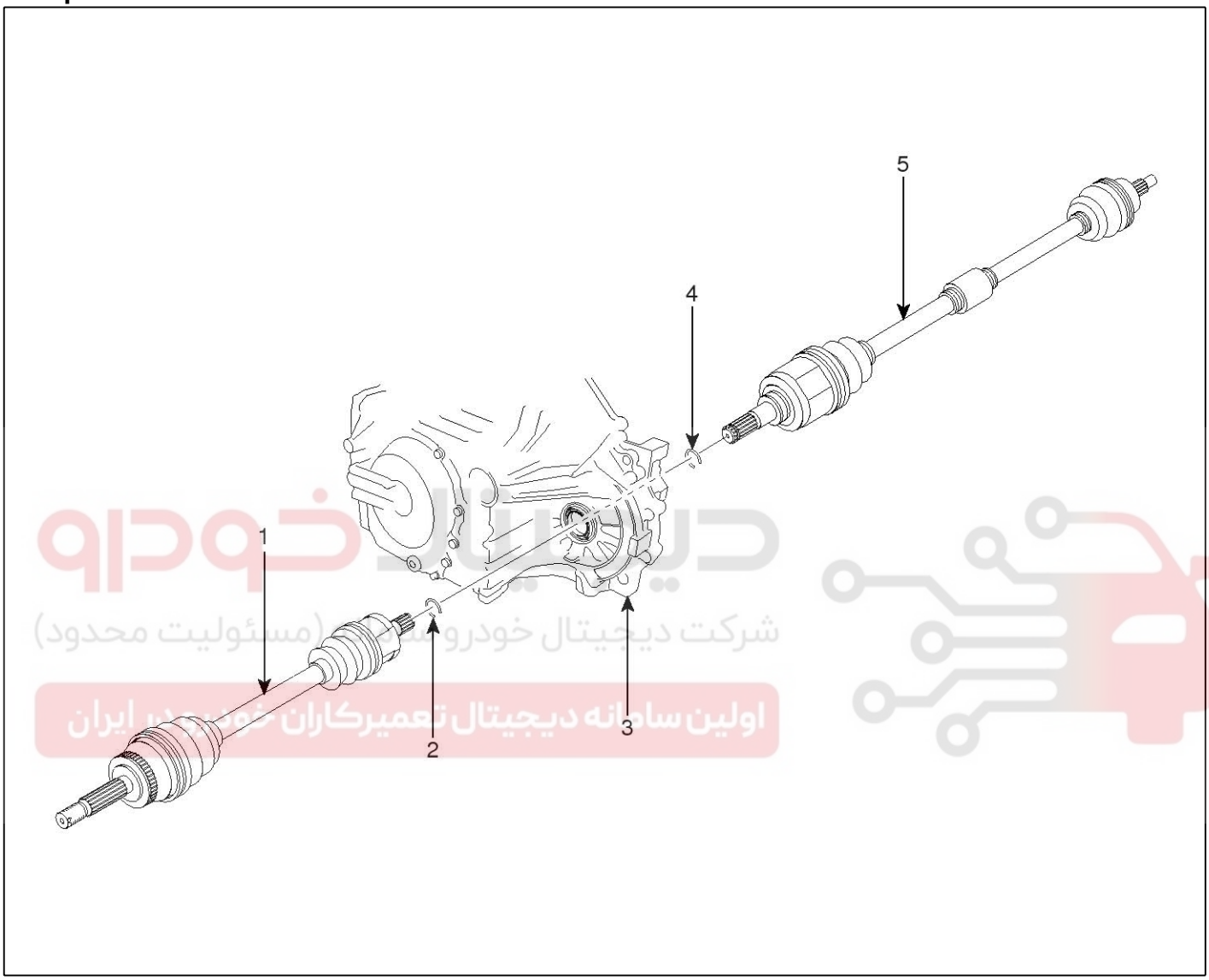
WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

Driveshaft Assembly

Front Driveshaft

Component location



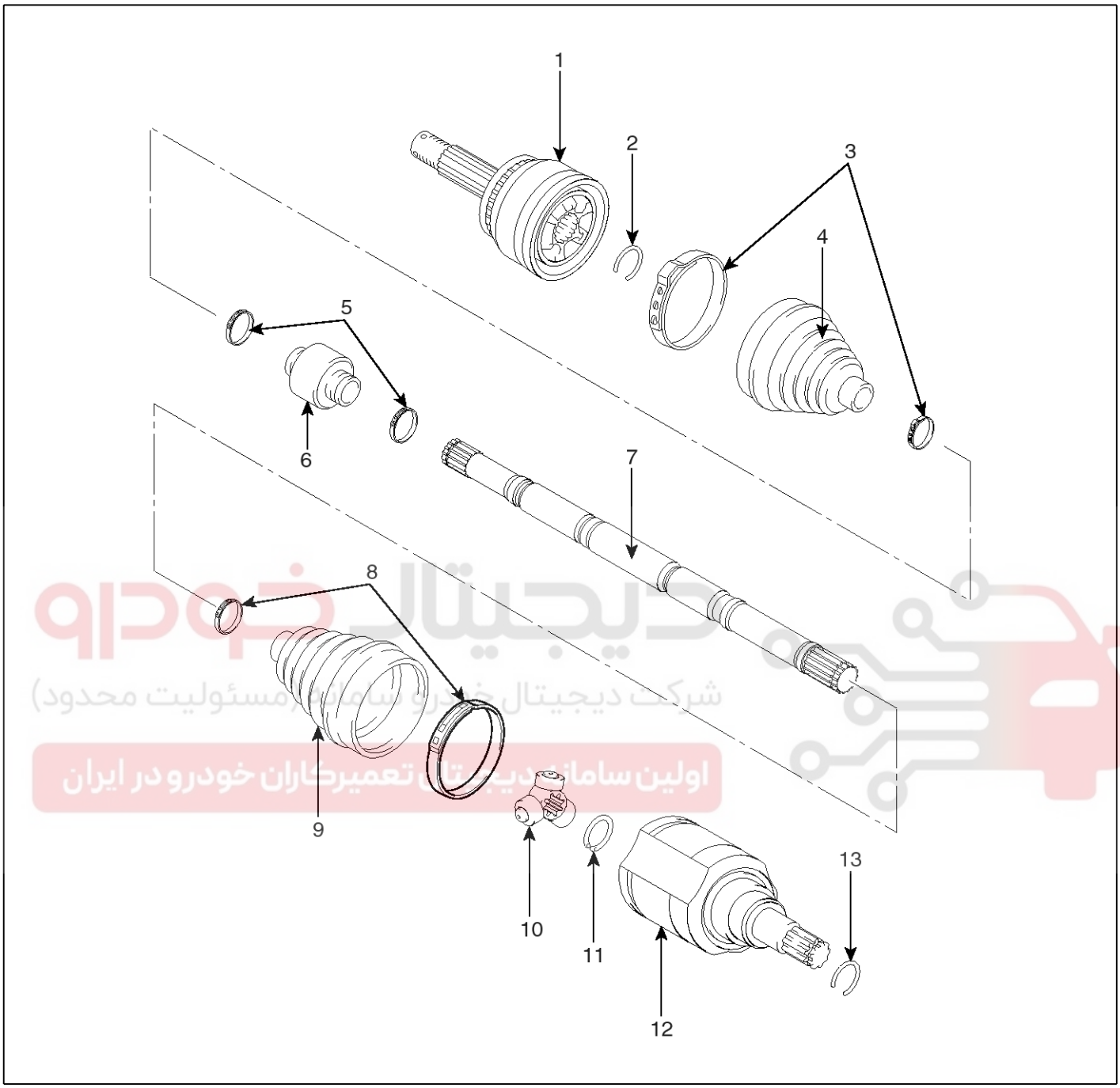
STDDS9060D

1. Drive shaft(LH)
2. Circlip
3. Transaxle
4. Circlip
5. Driveshaft(LH)

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

Components



STDDS9040L

1. BJ boot assembly
2. BJ circlip
3. BJ boot bend
4. BJ boot
5. Dynamic damper bend
6. Dynamic damper
7. Shaft
8. TJ boot bend
9. TJ boot
10. Spider assembly
11. Snap ring
12. TJ case
13. Snap ring

WWW.DIGITALKHODRO.COM 021 62 99 92 92

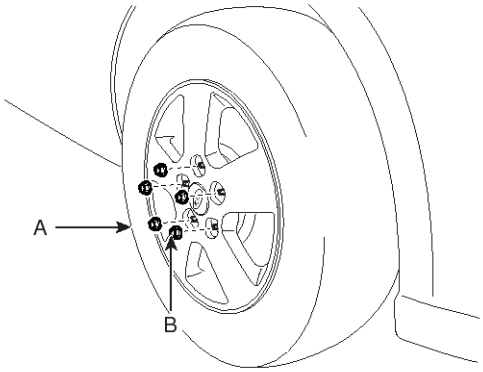
WWW.DIGITALKHODRO.COM 021 62 99 92 92

Replacement

1. Loosen the wheel nuts(B) slightly.

   Raise the vehicle, and make sure it is securely supported.

2. Remove the front wheel and tire(A) from front hub .

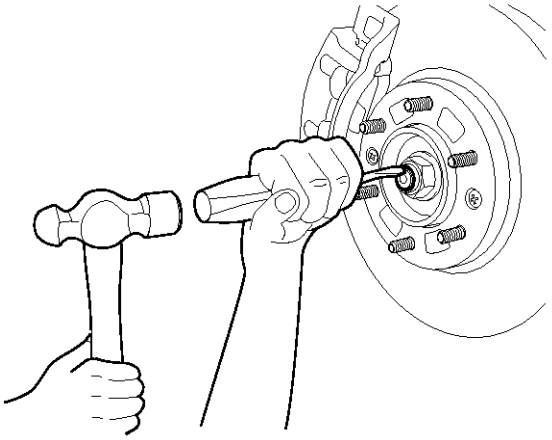


STDDS9001D

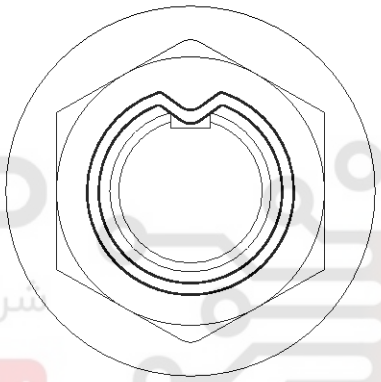
⚠CAUTION

Be careful not to damage to the hub bolts (B) when removing the front wheel and tire (A).

3. Unstake the driveshaft lock nut using a chisel and hammer.



AIKF001A



AIKF011A

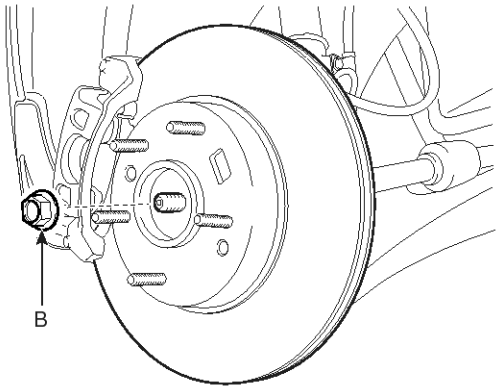
شرکت دیجیتال خودرو سامانه (مسئولیت محدود)
اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

4. Remove driveshaft nut(B) from the front hub under applying the break.

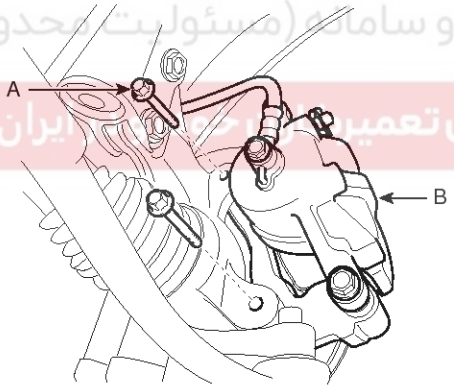
Tightening torque:
196.1~274.5N.m(20.0~28.0Kgf.m, 144.6~202.5lb.ft)



STDDS9002D

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

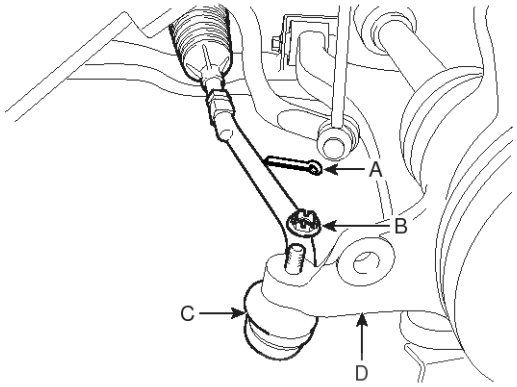
Tightening torque:
80~100 N.m (8.0~10.0 Kgf.m, 58~72.3lb.ft)



STDDS9003D

6. Remove the tie rod end ball joint from the knuckle.
   1) Remove the split pin(A).
   2) Remove the castle nut(B).
   3) Disconnect the ball joint(C) from knuckle using the special tool (09568-4A000).

Tightening torque:
23~32 N.m (2.4~3.4 Kgf.m, 17~25 lb.ft)

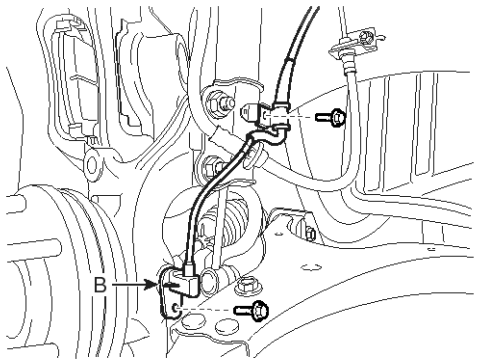


STDDS9004D

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

7. Remove the wheel speed sensor(B).

Tightening torque:
6.8~10.8N.m(0.7~1.1Kgf.m,5.1~7.9lb.ft)

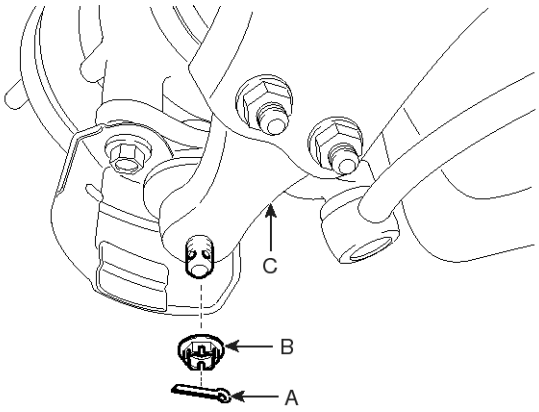


STDDS9005D

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

8. Remove the lower arm from the knuckle.
   1) Remove the split pin(A).
   2) Remove the castle nut(B).
   3) Disconnect the lower amr(C) from knuckle using the special tool (09568-4A000).

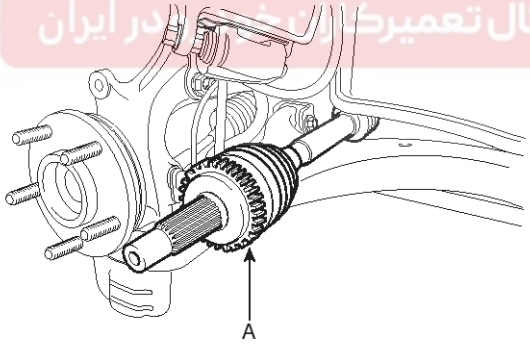


STDDS9006D

⚠CAUTION

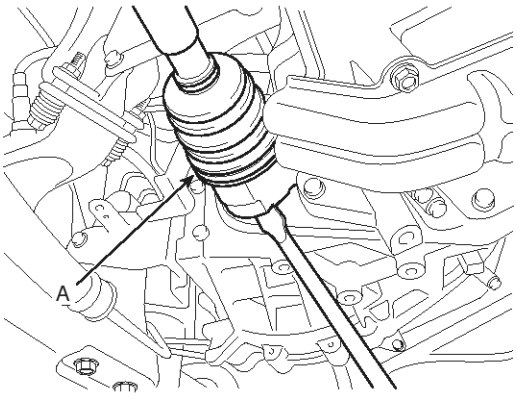
Be careful not to damage the boot and rotor teeth.

9. Disconnect the driveshaft (A) from the front hub assembly.



STDDS9008D

10. Insert a pry bar between the transaxle case and joint case(A), and separate the drive shaft from the transaxle case.



STDDS9016D

11. Install in the reverse order of removal.

⚠CAUTION

- **Use a pry bar(A) being careful not to damage the transaxle and joint.**
- **Do not insert the pry bar(A) 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.**
- **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.**

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

Inspection

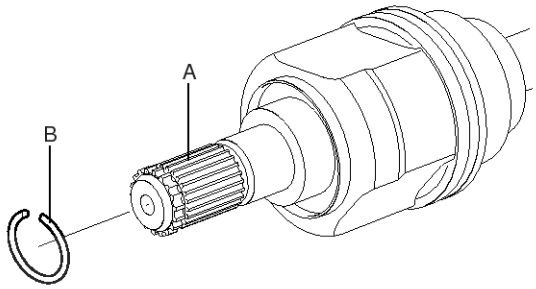
1. Check the driveshaft boots for damage and deterioration.
2. Check the driveshaft spline for wear or damage.
3. Check that there is no water or foreign material in the joint.
4. Check the spider assembly for roller rotation, wear or corrosion.
5. Check the groove inside the joint case for wear or corrosion.
6. Check the dynamic damper for damage or cracks.

Disassembly

⚠CAUTION

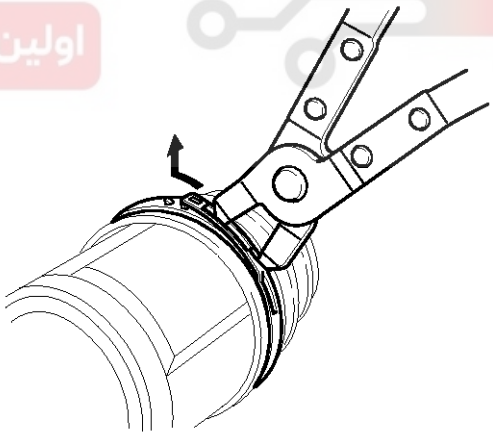
- **Do not disassemble the BJ assembly.**
- **Special grease must be applied to the driveshaft joint. Do not substitute with another type of grease.**
- **The boot band should be replaced with a new one.**

1. Remove the circlip (B) from the driveshaft spline (A).



KXDDE07A

2. Remove both boot bands from the transaxle side joint(TJ) case.



AIGE004A

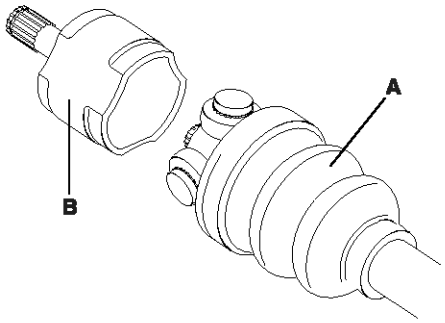
3. Pull out the boot from transaxle side joint case (B).

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

WWW.DIGITALKHODRO.COM 021 62 99 92 92

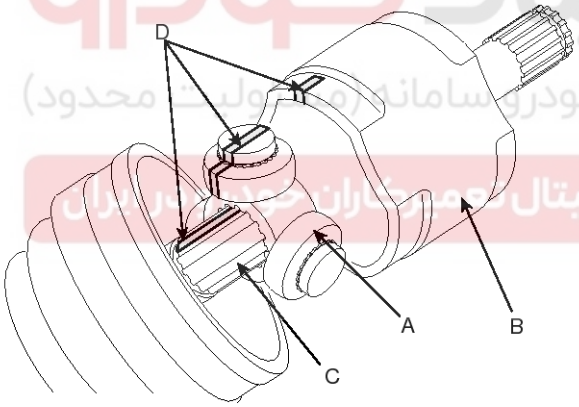
WWW.DIGITALKHODRO.COM 021 62 99 92 92

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



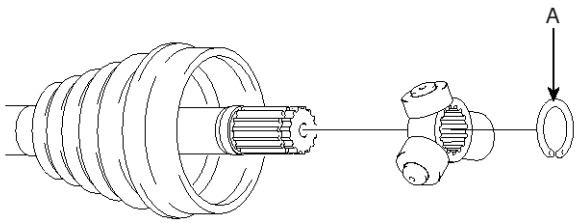
AIGE004B

⚠CAUTION
Make alignment marks on spider roller assembly (A), joint case (B), and shaft spline (C) to aid reassembly.



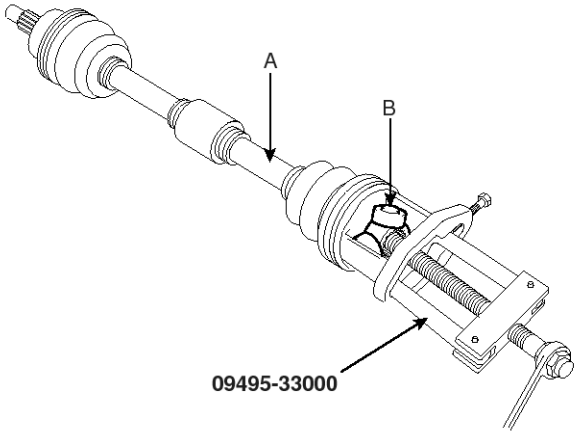
KXDDE11A

5. Remove the snap ring (A) and spider roller assembly (B) from the shaft.



KXDDE12A

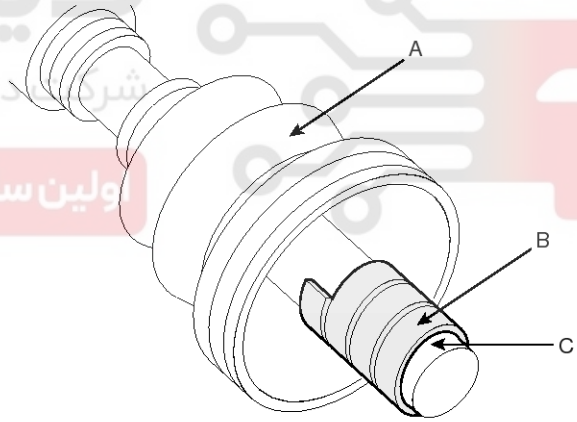
6. Remove the spider assembly (B) from the driveshaft (A) using the special tool (09495-33000).



KXDDE13A

7. Clean the spider assembly.
8. 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).

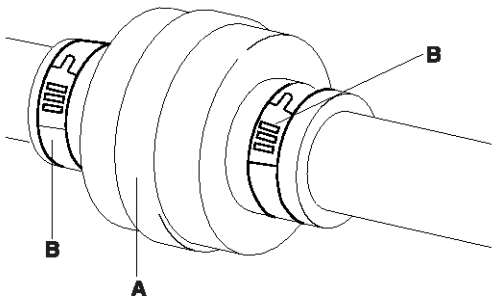


KXDDE14A

WWW.DIGITALKHODRO.COM 021 62 99 92 92

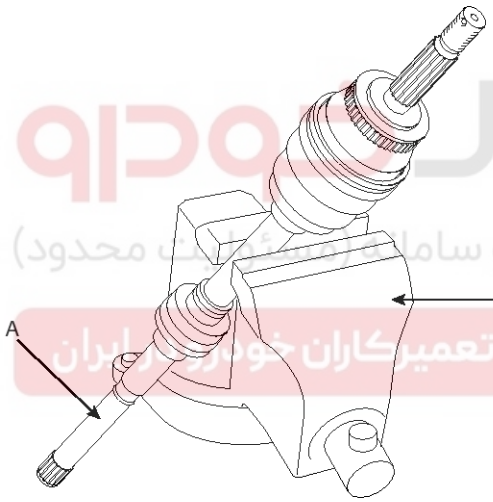
WWW.DIGITALKHODRO.COM 021 62 99 92 92

9. Using a plier or flat-tipped (-) screwdriver, remove the both side of clamp (B) of the dynamic damper (A).



STDDS9017D

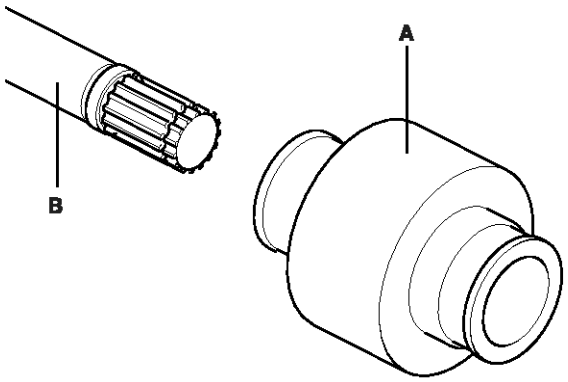
10. Fix the driveshaft (A) with a vice (B) as illustrated.



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. Saperate the dynamic damper (A) from the shaft (B) carefully.



AIGE004D

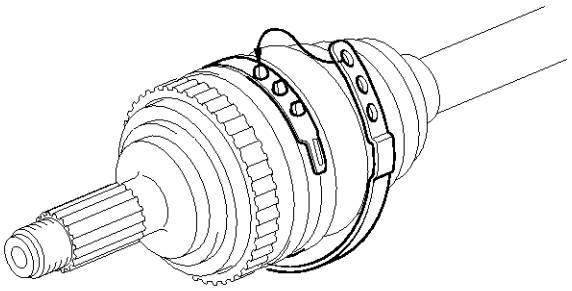
دیجیتال خودرو
شرکت دیجیتال خودرو سامانه (سهامی خاص)
اولین سامانه دیجیتال تعمیرکاران خودرو در ایران

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

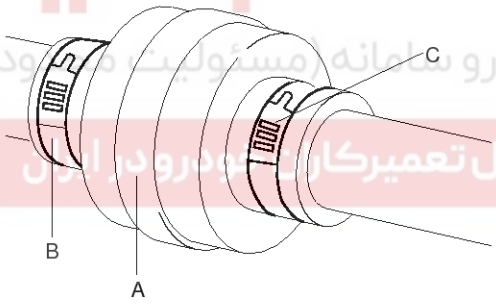
Reassembly

1. Wrap tape around the driveshaft spline(TJ) to prevent damage to the boots.
2. Apply grease to the joint boot on the side of the wheel and install the boot.
3. Install the clamp.



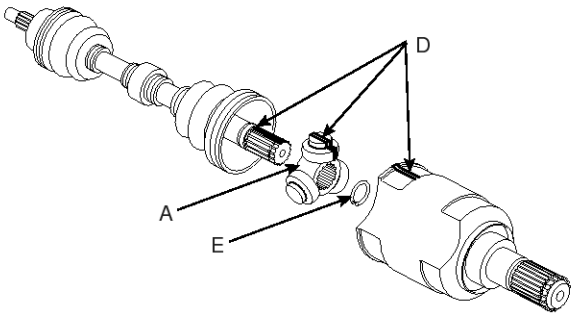
KIQE105A

4. To install the dynamic damper(A), keep the shaft(B) in a straight line and assemble the dynamic damper with the bands(C).

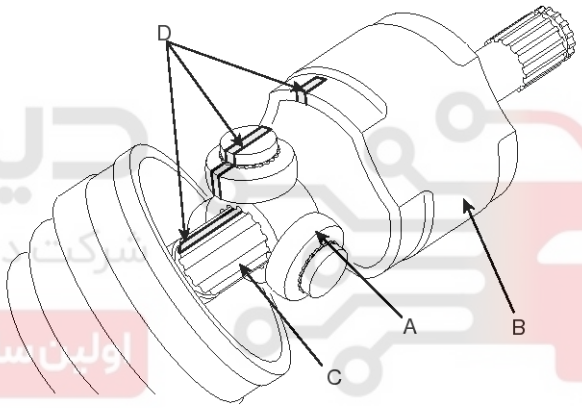


AIGE004C

5. Assemble the transaxle side joint boot and bands.
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).



KXDDE20A



KXDDE11A

7. Add specified grease to the joint boot as much as it was wiped away at inspection.
8. Install the both boot band.

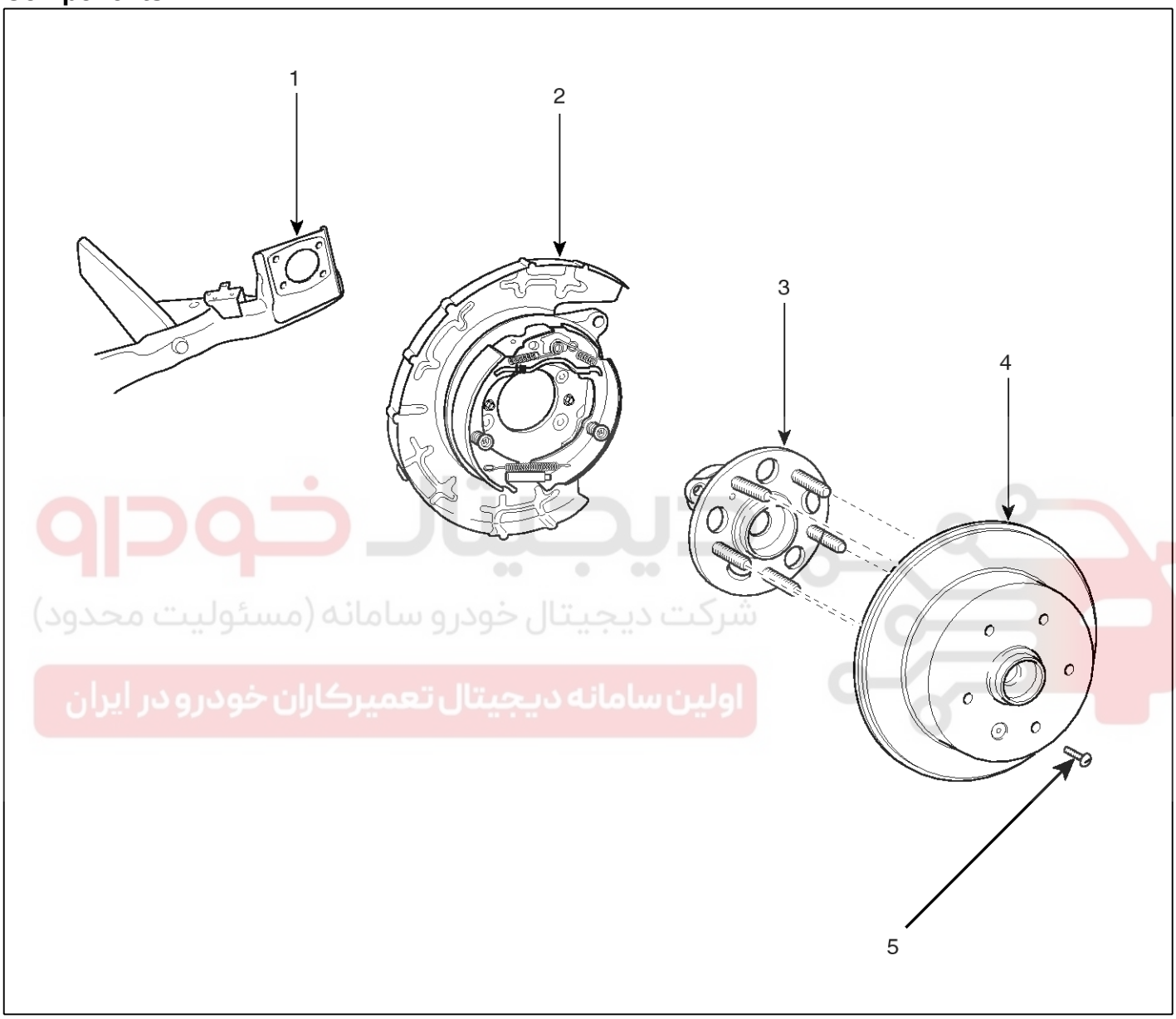
WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

Rear Axle Assembly

Rear Hub - Axle

Components



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

STDDS9030D

1. Rear torsion beam assembly
2. Rear drum brake assembly
3. Rear wheel hub assembly
4. Rear brake disc
5. Rear brake disc screw

WWW.DIGITALKHODRO.COM 021 62 99 92 92

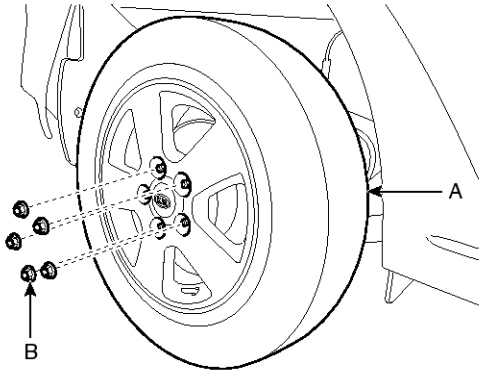
WWW.DIGITALKHODRO.COM 021 62 99 92 92

Replacement

1. Loosen the wheel nuts(B) slightly.

   Raise the vehicle, and make sure it is securely supported.

2. Remove the rear wheel and tire(A) from rear hub .



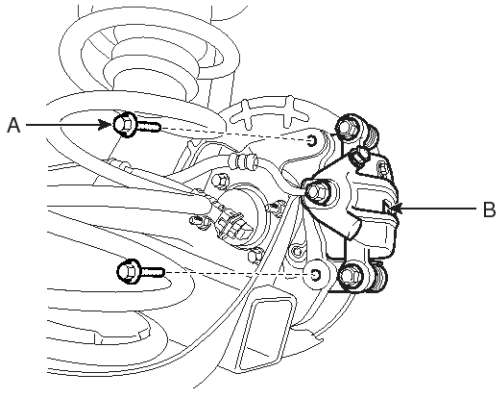
STDDS9010D

⚠CAUTION

Be careful not to damage to the hub bolts (B) when removing the rear wheel and tire (A).

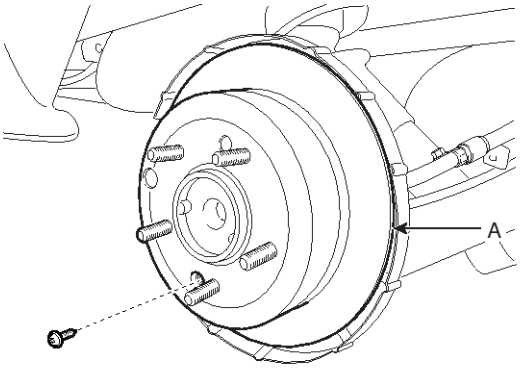
3. Remove the brake caliper mounting bolts (A), and then place the brake caliper assembly (B) with wire as shown in the illustration.

Tightening torque:
49~ 59 N.m (5.0~6.0 Kgf.m, 36 ~ 43lb.ft)



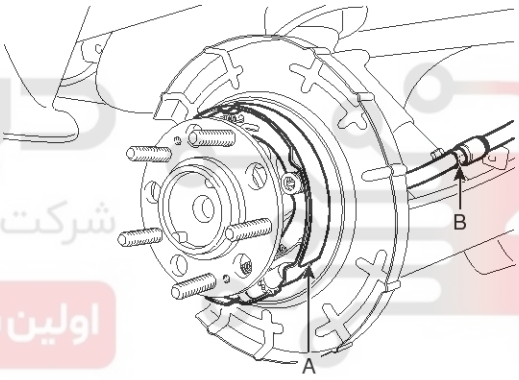
STDDS9012D

4. Loosen the mount screw and then brake disc(A).



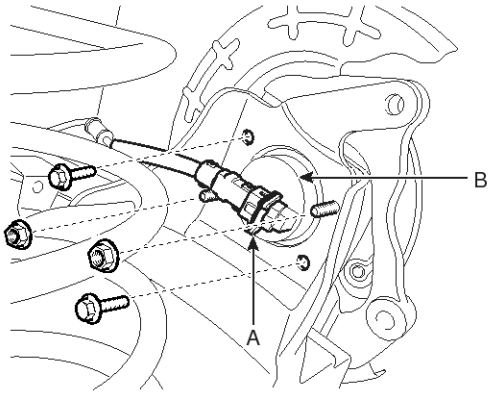
STDDS9013D

5. Remove the rear brake lining and parking brake cable(B). (refer to BR group-rear brake)



STDDS9014D

6. Disconnect the wheel speed sensor connector(A) and then remove the hub bearing(B).



STDDS9015L

WWW.DIGITALKHODRO.COM 021 62 99 92 92

WWW.DIGITALKHODRO.COM 021 62 99 92 92

7. Install in the reverse order of removal.

Inspection

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

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

WWW.DIGITALKHODRO.COM 021 62 99 92 92