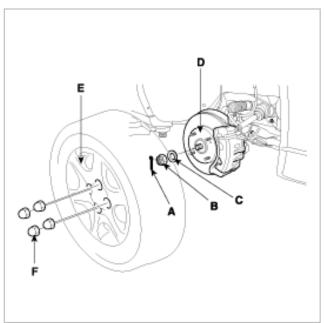
### 2004 > G 2.0 DOHC > Driveshaft and axle



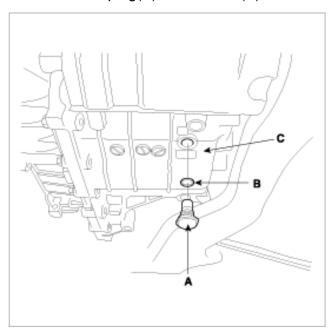


# **REMOVAL**

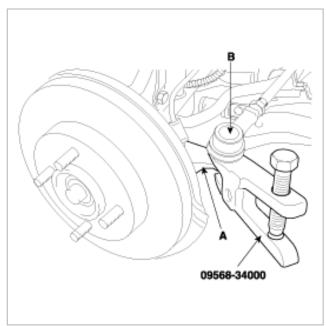
- 1. Loosen the wheel nuts(F) slightly.
- 2. Raise the front of the vehicle and support it with safety stands in a proper location.
- 3. Remove the front wheel and tire(E).
- 4. Remove the split pin(A), the castle nut(B) and the washer(C) from the front hub(D) under applying the brake.



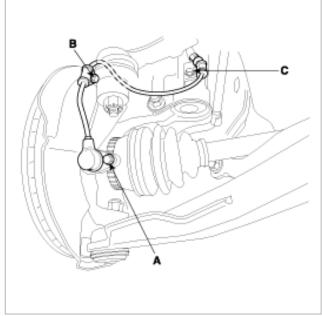
- 5. Remove the drain plug(A). Drain the transaxle oil.
  - A. Lay a bottle keeping the gear oil under transaxle.
  - B. Remove drain plug(A) and washer(B) in the lower part of transaxle(C).



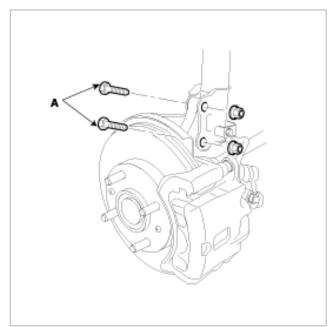
6. Disconnect the tie rod end ball joint(B) from the knuckle(A) using the Special Tool (09568-34000) after removing the split pin and castle nut.



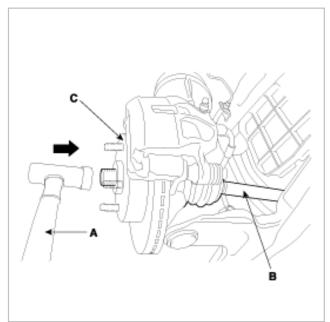
7. Remove the bolts(A,B) connected the knuckle among 3 wheel speed sensor mounting bolts(A,B,C).



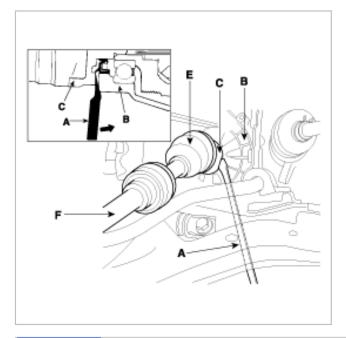
- 8. Remove the vehicle speed sensor from the knuckle.
- 9. Disconnect the strut upper mounting bolts(A).



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



- 11. Push the axle hub(C) outward and separate the driveshaft(B) from the axle hub(C).
- 12. Insert a pry bar(A) between the transaxle case(B) and joint case(C), and separate the driveshaft from the transaxle case(B).



# CAUTION

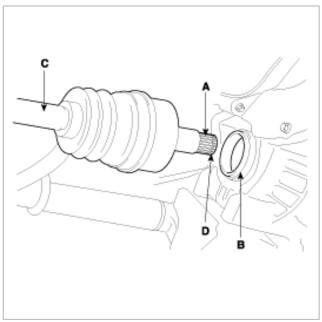
- •Use a pry bar(A) being careful not to damage the transaxle and joint.
- •Do not insert the pry bar(A) too deep, as this may cause damage to the oil seal. [max. depth : 7mm (0.28 in.)]
- •Do not pull the driveshaft by excessive force it may cause components inside the BJ or TJ joint(C) kit to dislodge resulting in a torn boot(E) or a damaged bearing.
- 13. Pull out the driveshaft(F) from the transaxle case(B).

## 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.

# **INSTALLATION**

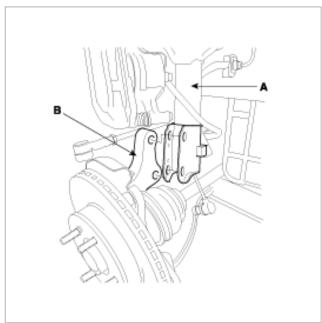
- 1. Apply gear oil on the driveshaft splines(A) and the contacting surface of differential case oil seal(B).
- 2. Before installing the driveshaft(C), set the opening side of the circlip(E) facing downward.



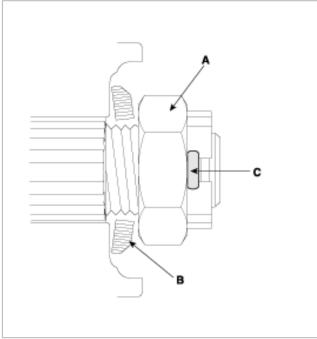
- 3. After installation, check that the driveshaft cannot be removed by hand.
- 4. Assemble the dust cover, the hub brake disc and the wheel bearing to the knuckle.
- 5. Install the BJ. into the knuckle.
- 6. In practice, the knuckle(A) should be installed in the lower arm ball joint(B) and the BJ.(C) is installed in the knuckle(A).

# Be careful not to damage the boot(D).

7. Install the knuckle(B) in the strut assembly(A) with the tightening torque(C), 75~90 Nm (750~900 kgf·cm, 54~65 lbf·ft).



- 8. Install the lower arm in the knuckle with the tightening torque 60~72 Nm (600~720 kgf·cm, 43~52 lbf·ft).
- 9. After the installation, check on the driveshaft(D) for stability by hand.
- 10. After installing the washer(B) with convex surface outward, install the castle nut(A) and the split pin(C).

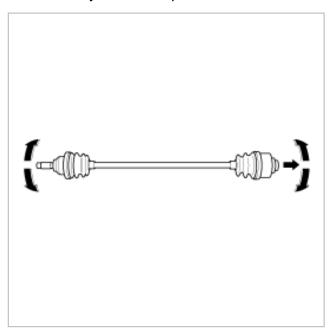


11. Install the wheel and tire.

# INSPECTION

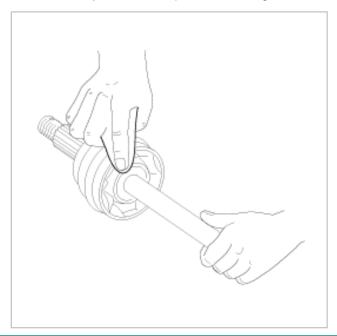
- 1. Check the driveshaft boots for damage and deterioration.
- 2. Check the ball joints for wear and damage.
- 3. Check the splines for wear and damage.

4. Check the dynamic damper for cracks and wear.



# INSPECTION

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



# **DISASSEMBLY**

# **DRIVESHAFT (LH)**

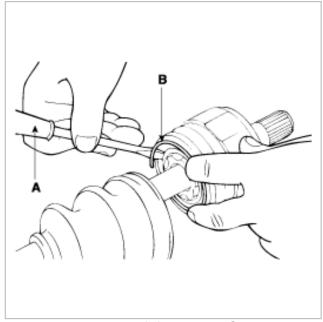
### NOTE

- Do not disassemble the BJ assembly.
- •Special grease must be applied to the driveshaft joint. Do not substitute with another type of grease. (refer to 'LUBRICANTS', See page DS-3).
- •The boot band should be replaced with a new one.
- 1. Remove the DOJ. boot bands and pull the DOJ. boot from the DOJ. outer race.
  - A. Using a plier or flat-tipped (-) screwdriver, remove the LH boot band and LH DOJ. boot band from the driveshaft.
  - B. Remove RH boot band and RH DOJ. boot band in the same way of LH removal procedure.

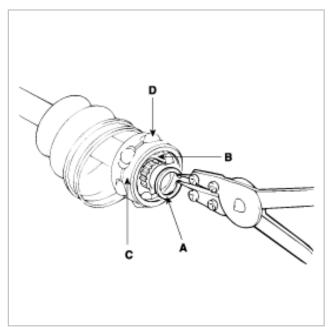
# NOTE

Be careful not to damage the boot.

2. Remove the circlip(B) with a flat-tipped (-) screwdriver (A).



- 3. Pull out the driveshaft from the DOJ. outer race.
- 4. Remove the snap ring(A) and take out the inner race(B), cage(C) and balls(D) as an assembly.

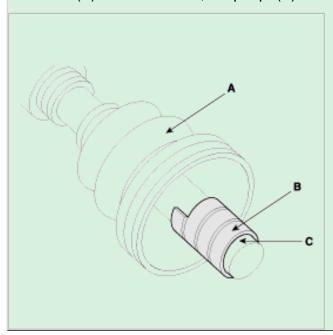


5. Clean the inner race, cage and balls without disassembling.

Remove the BJ. boot bands and pull out the DOJ. boot and BJ. boot.

# NOTE

If the boot(A) is to be reused, wrap tape(B) around the driveshaft splines(C) to protect the boot(A).



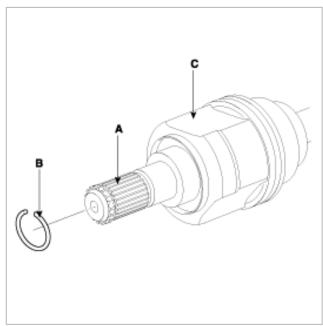
# DISASSEMBLY

# **DRIVESHAFT (LH)**

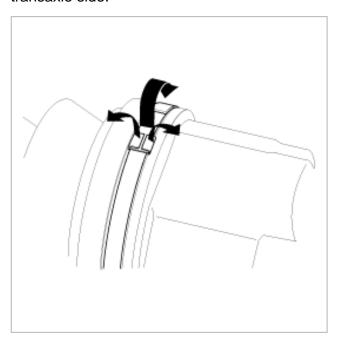
### NOTE

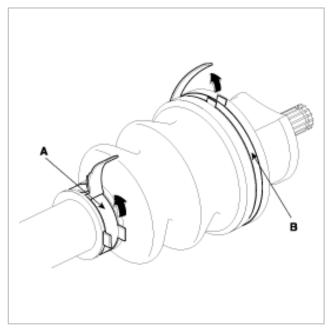
- •Do not disassemble the BJ. assembly.
- •Special grease must be applied to the driveshaft joint. Do not substitute with another type of grease. (refer to 'LUBRICANTS', See page DS-3)
- •The boot band should be replaced with a new one.

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

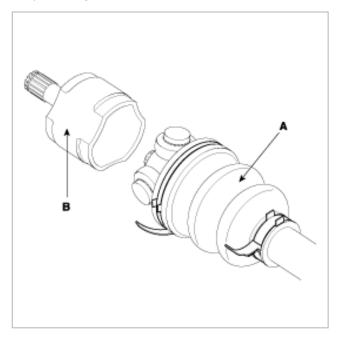


- 2. Remove the both boot clamps from the transaxle side TJ. case.
  - A. Using a plier or flat-tipped (-) screwdriver, remove the both clamps(TJ. boot band(B), boot band(A)) of the transaxle side.





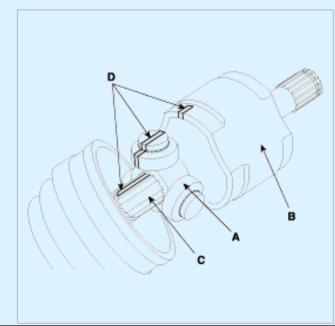
- 3. Pull out the boot from the transaxle side joint(TJ).
- 4. While dividing joint(TJ) boot(A) of the transaxle side wipe the grease in TJ. case(B) and collect them respectively.



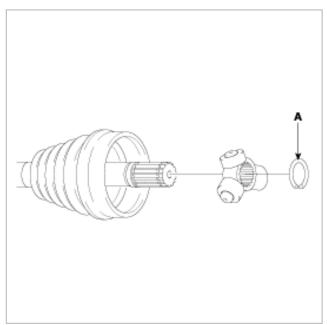
# CAUTION

•Be careful not to damage the boot.

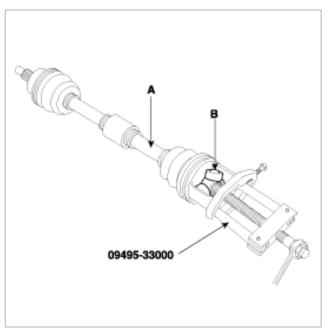
•According to below the illustrated, put marks(D) on roller of spider assembly(A), TJ. case(B) and spline part(C), for providing assembly.



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



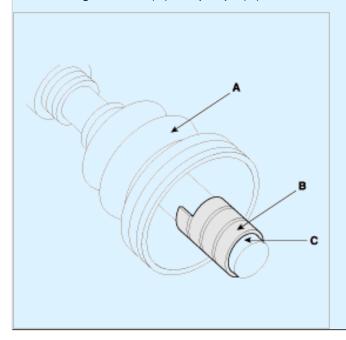
6. Remove the spider assembly(B) from driveshaft(A) by using the Special Tool(09495-33000).



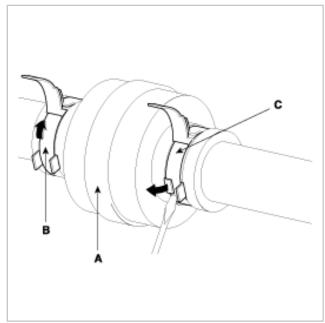
- 7. Clean the spider assembly.
- 8. Remove the boot(A), of the transaxle side joint(TJ).

# CAUTION

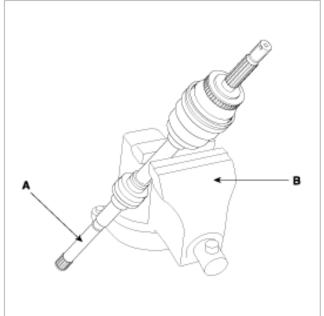
For reusing the boot(A) wrap tape(B) around the driveshaft splines(C) to protect the boot(A).



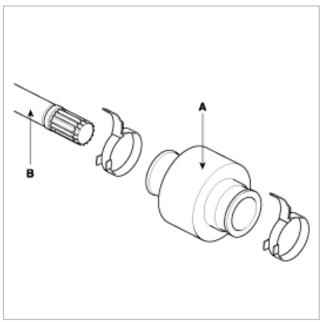
9. Using a plier or flat-tipped (-) screwdriver, remove the both side of clamps(B,C) of the dynamic damper(A).



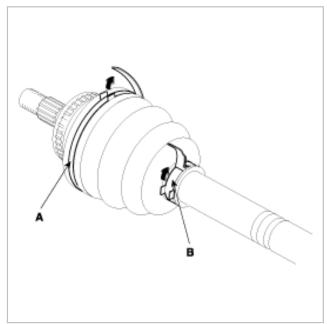
10. Fix the driveshaft(A) with a vice(B) as illustrated.



- 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.



13. Using a plier or flat-tipped (-) screwdriver, remove the both clamps(A,B) on the side of wheel.

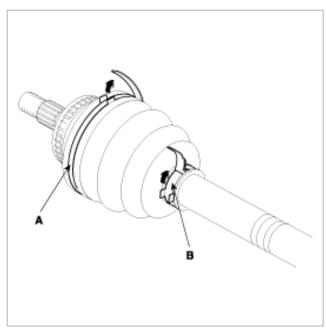


14. Pull out the joint(BJ) on the side of wheel into the transaxle direction. Be carefull not to damage the boot.

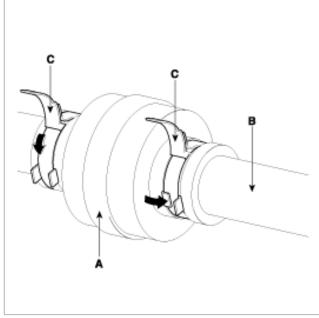
# REASSEMBLY

- 1. Wrap tape around the driveshaft splines (TJ. side) to prevent damage to the boots.
- 2. Apply grease to the driveshaft and install the boots. (refer to 'LUBRICANTS', See page DS-3)

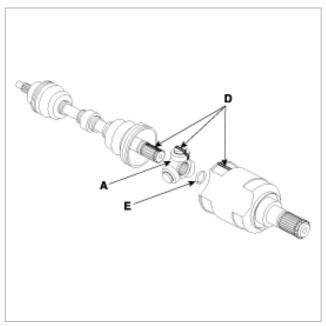
3. Install the clamps(A,B) to both boots.

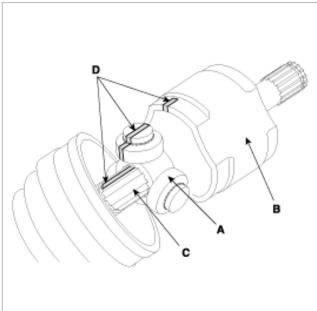


4. To reassemble the dynamic damper(A), keeping the shaft(B) in the straight, tighten the dynamic damper(A) with dynamic bands(C), as the illustration.



- 5. Install the TJ. boot bands and TJ. boot.
- 6. Install the spider assembly(A) and the circlip(E) to the spline(C) on the drivershaft. At this time align the marks(D) each other.





- 7. Add the specified grease to the TJ. as mush as wiped away at inspection.
- 8. Install the boots.
- 9. Tighten the TJ. boot bands.
- 10. To control the air in the T.J. boot, keep the specified distance between the boot bands when they are tightened.

# Standard value [A] mm(in.)

LH:  $514.2 \pm 2 (20.24 \pm 0.08)$ RH:  $799.2 \pm 2(31.46 \pm 0.08)$ 

