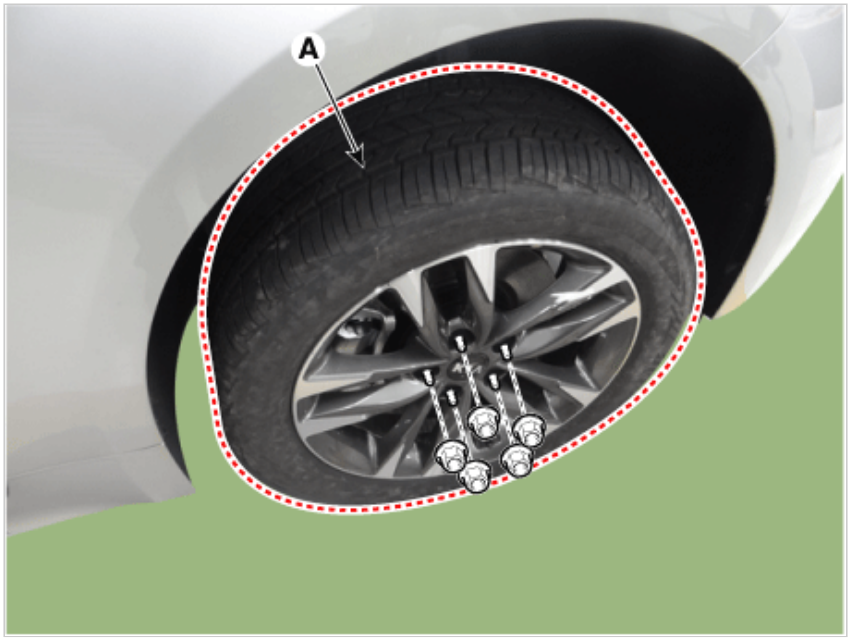
Removal

[2WD]

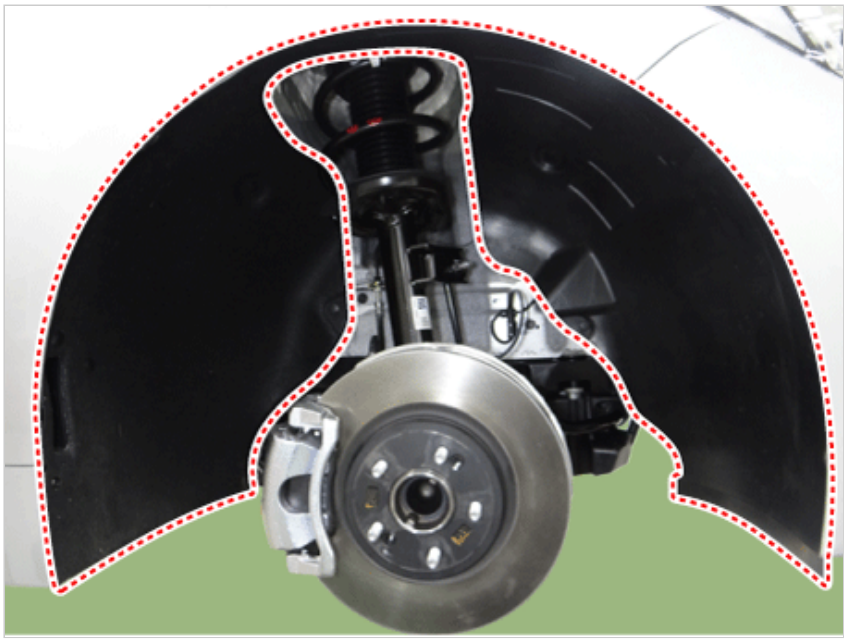
1. Remove wheel nuts, front wheel and tire (A) from front hub.

Tightening torque:
107.9 - 127.5 N·m (11.0 - 13.0 kgf·m, 79.6 - 94.0 lb·ft)



NOTICE
Be careful not to damage the wheel nuts when removing the front wheel and tire (A).

2. Remove the front wheel guard.

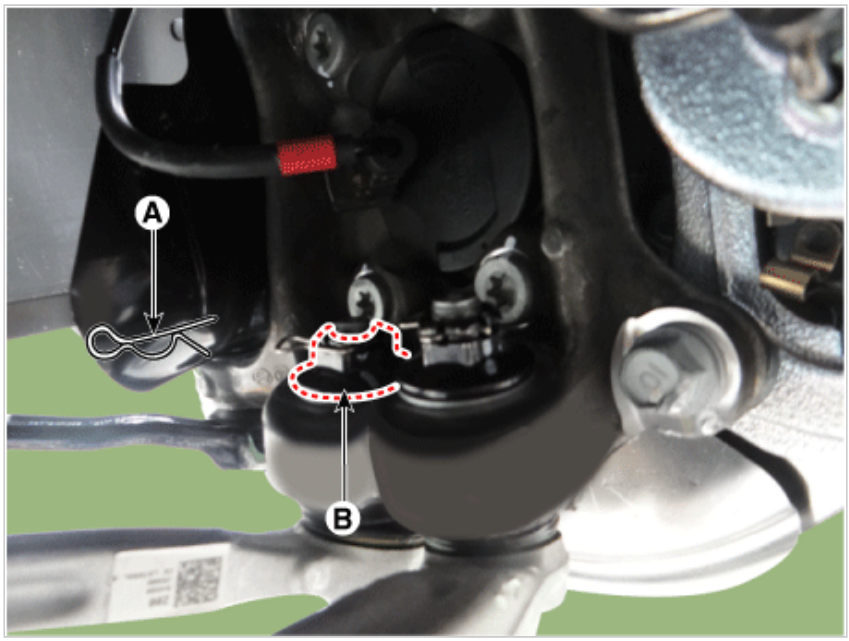


3. Remove the front stabilizer bar.
(Refer to Suspension System - "Front Stabilizer Bar")

4. Remove the engine room side cover.
G 2.0 T-GDI THETA II (Refer to Engine Mechanical System - "Engine Room Under cover")
G 3.3 T-GDI LAMBDA II (Refer to Engine Mechanical System - "Engine Room Under cover")

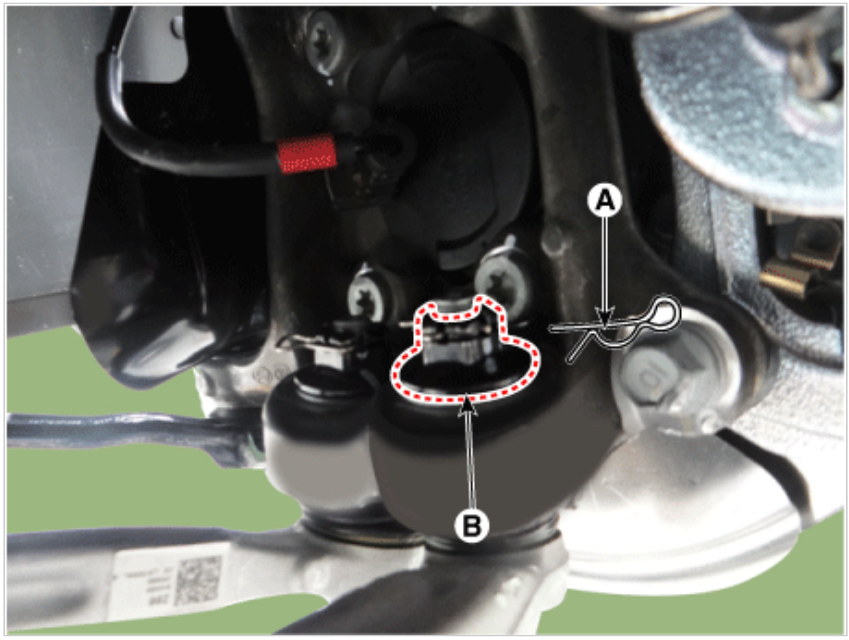
5. Loosen the lateral arm pin (A) and nut (B).

Tightening torque:
88.3 - 107.9 N·m (9.0 - 11.0 kgf·m, 65.1 - 79.6 lb·ft)



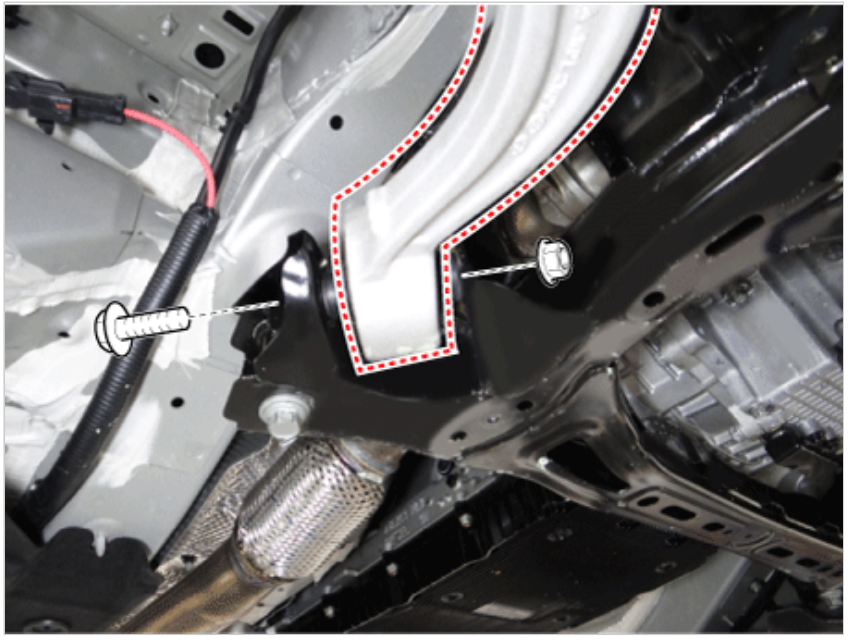
6. Loosen the compression arm pin (A) and nut (B).

Tightening torque:
88.3 - 107.9 N·m (9.0 - 11.0 kgf·m, 65.1 - 79.6 lb·ft)



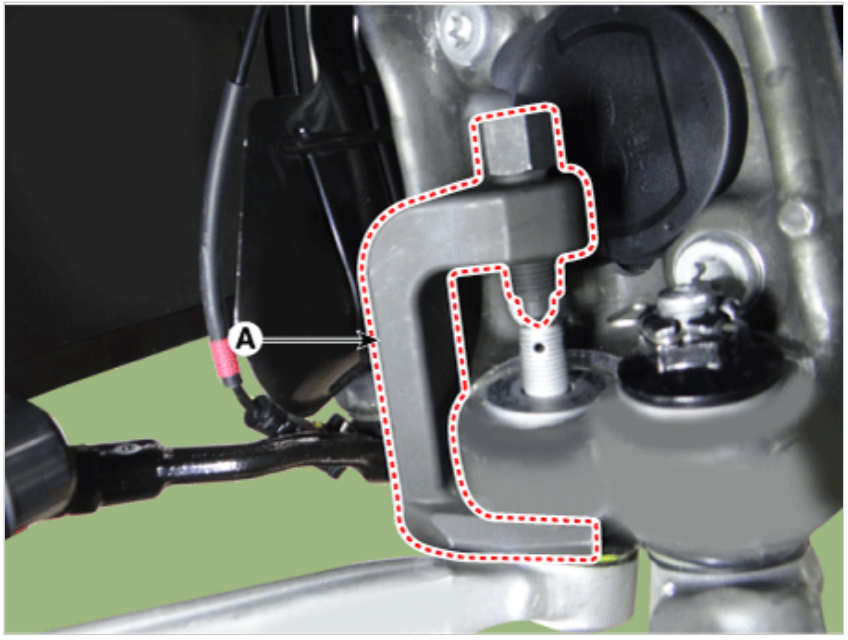
7. Loosen the compression arm bolt & nut from the sub frame.

Tightening torque :
156.9 - 176.5 N·m (16.0 - 18.0 kgf·m, 115.7 - 130.2 lb·ft)

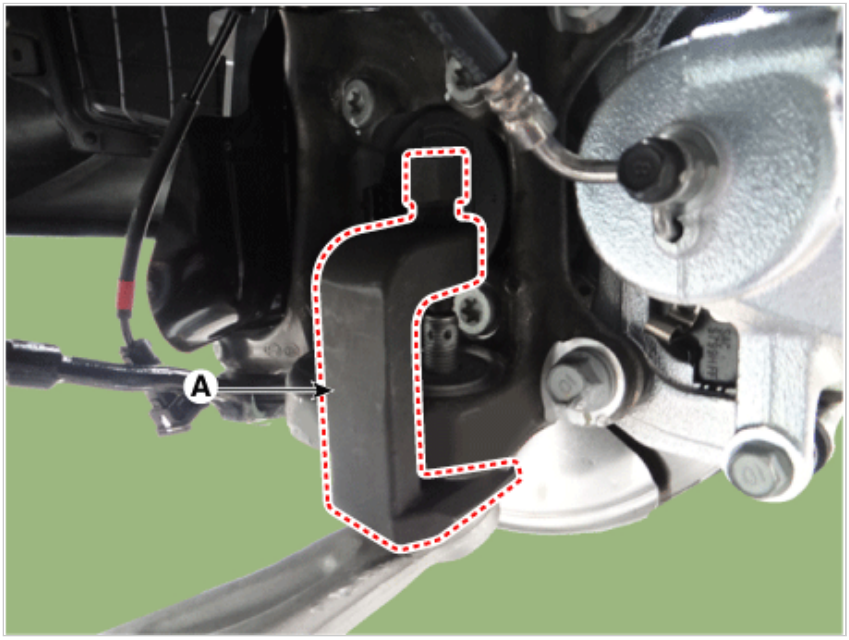


8. Disconnect the wheel speed sensor connector.

9. Remove the lateral arm by using the ball joint remover (A).



10. Remove the compression arm by using the ball joint remover (A).

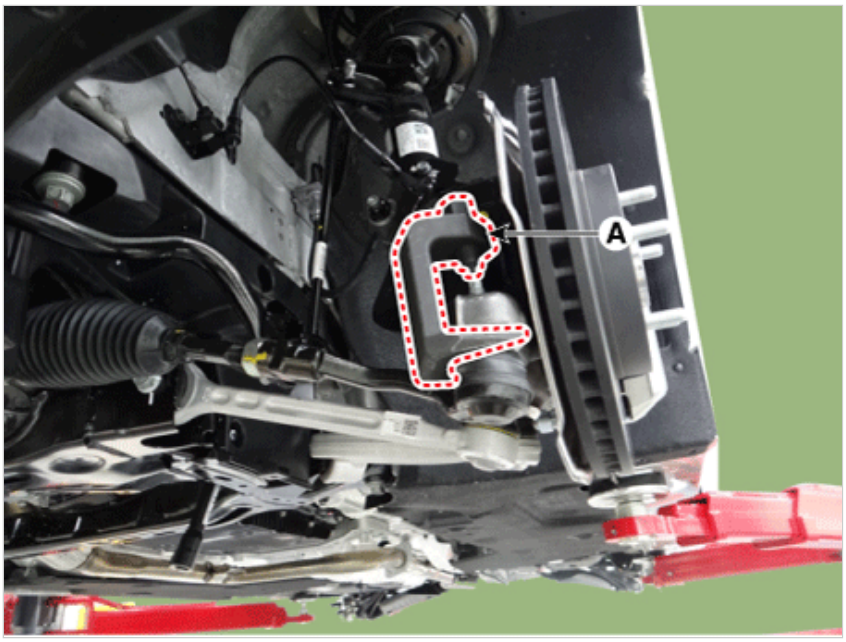


11. Remove the brake caliper.
(Refer to Brake System - "Front Disc Brake")

12. Remove the tie rod end nut.

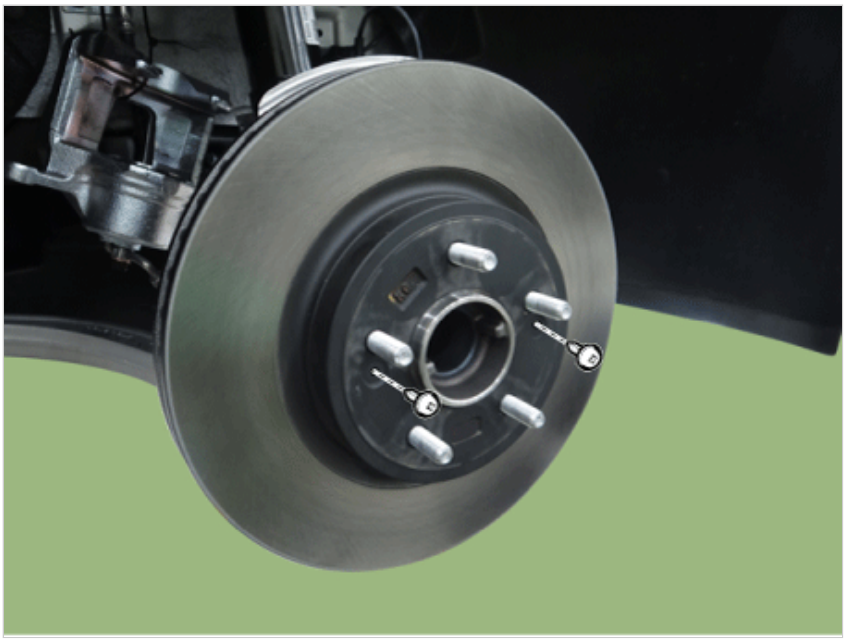
Tightening torque :
88.3 - 107.9 N·m (9.0 - 11.0 kgf·.m, 65.1 - 79.6 lb·ft)

13. Remove the knuckle by using the ball joint remover (A).



14. Loosen the screw, and then remove the brake disc.

Tightening torque :
4.9 - 5.9 N·m (0.5 - 0.6 kgf·m, 3.6 - 4.3 lb·ft)

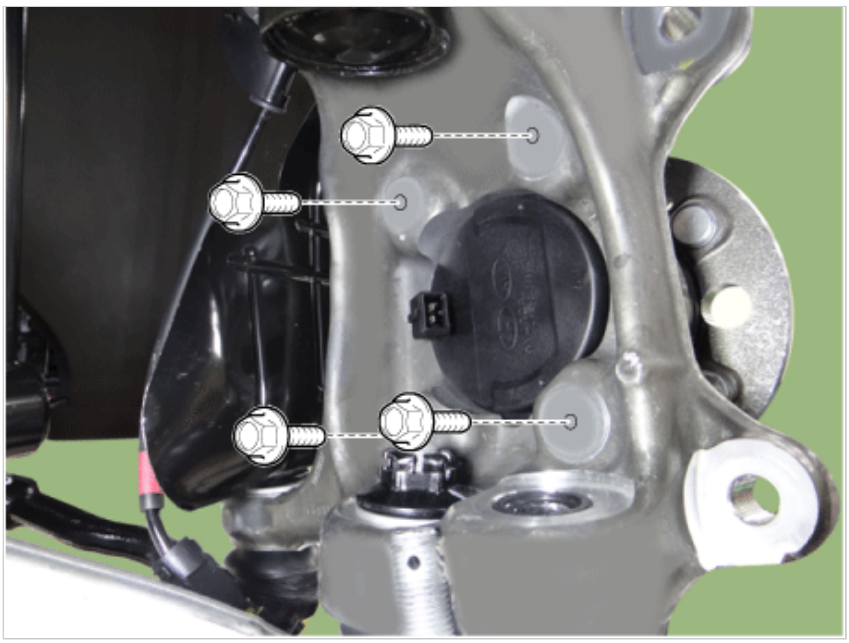


15. Loosen the dust cover bolt and then remove the dust cover.

Tightening torque :
10.8 - 12.7 N·m (1.1 - 1.3 kgf·m, 8.0 - 9.4 lb·ft)

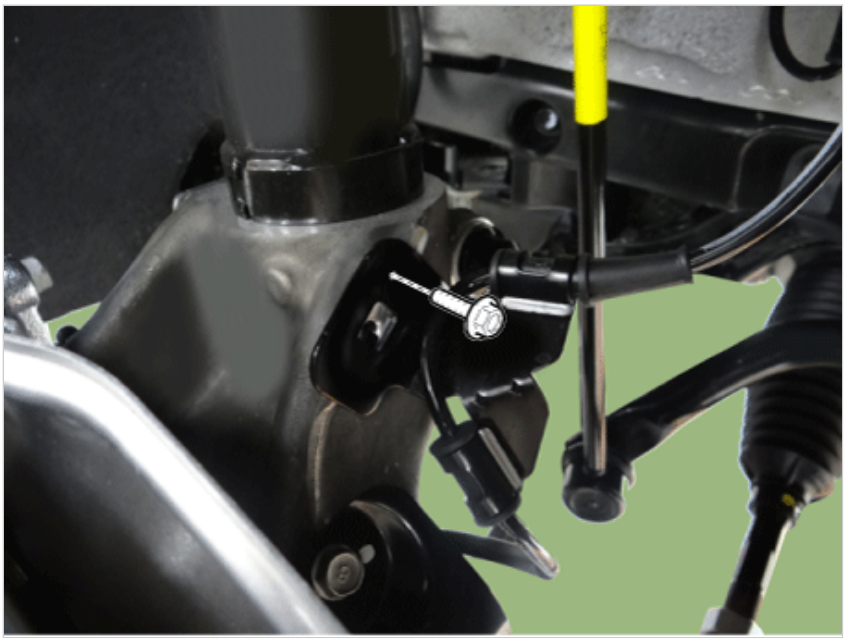
16. Loosen the hub assembly bolts and then remove the hub assembly.

Tightening torque :
88.3 - 107.9 N·m (9.0 - 11.0 kgf·m, 65.1 - 79.6 lb·ft)



17. Loosen the wheel speed sensor bracket bolt and then remove the wheel speed sensor bracket.

Tightening torque :
6.9 - 10.8 N·m (0.7 - 1.1 kgf·m, 5.1 - 7.9 lb·ft)



18. Loosen the brake caliper hose bracket bolt.

Tightening torque :
6.9 - 10.8 N·m (0.7 - 1.1 kgf·m, 5.1 - 7.9 lb·ft)

19. Loosen the brake cooling cover bolts.

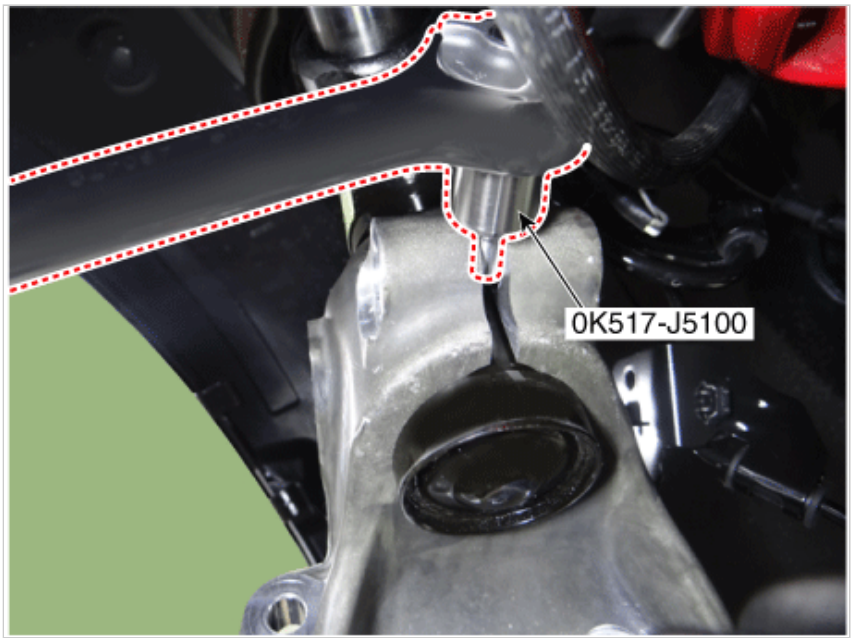
Tightening torque :
7.8 - 11.8 N·m (0.8 - 1.2 kgf·m, 5.8 - 8.7 lb·ft)

20. Loosen the knuckle upper bolt & nut.

Tightening torque :
78.5 - 98.1 N.m (8.0 - 10.0 kgf.m, 57.9 - 72.3 lb-ft)

21. Remove the knuckle by using the SST (0K517-J5100).

Reference value : Below 8.0 mm (0.31 in.)



NOTICE

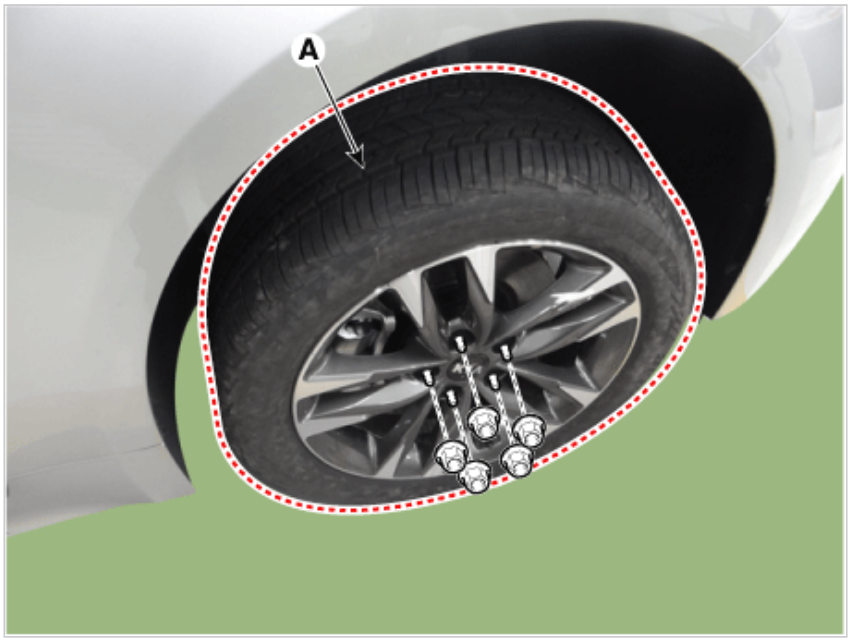
Be careful not to exceed 8 mm (0.31 in.) because it may cause knuckle quality issues.

22. Install in the reverse order of removal.
23. Check the front alignment.
    (Refer to Suspension System - "Alignment")

[AWD]

1. Remove wheel nuts, front wheel and tire (A) from front hub.

Tightening torque:
107.9 - 127.5 N·m (11.0 - 13.0 kgf·m, 79.6 - 94.0 lb·ft)



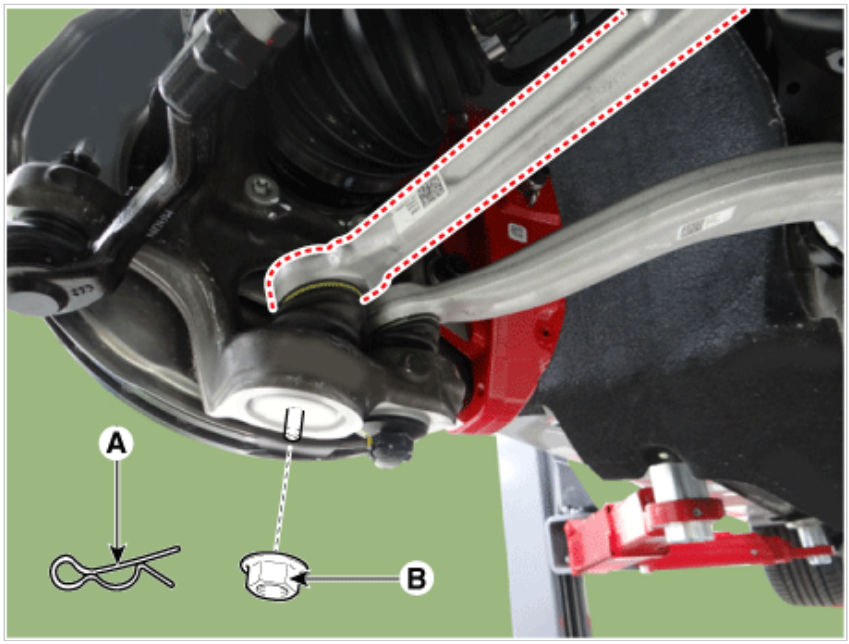
NOTICE

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

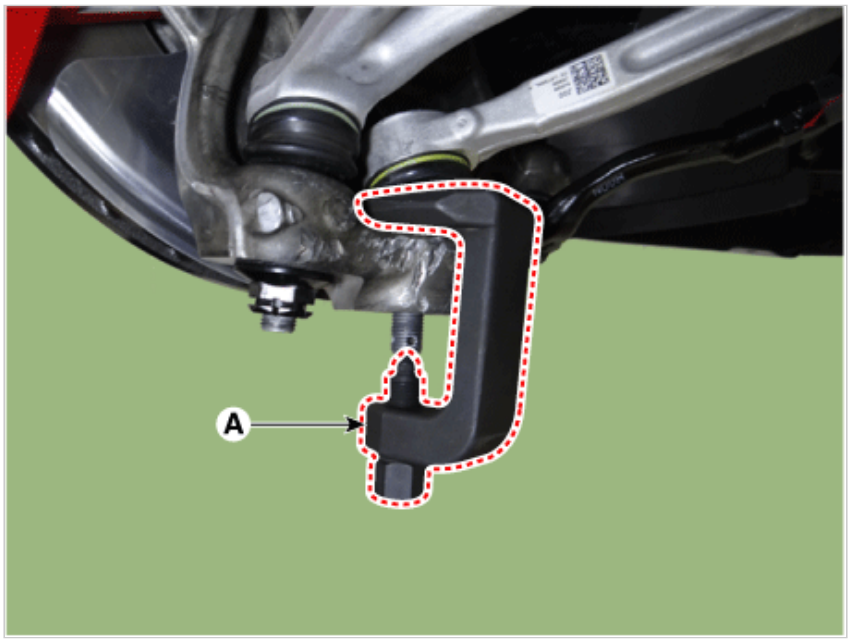
2. Remove the brake caliper.
   (Refer to Brake System - "Front Disc Brake")
3. Loosen the lateral arm pin (A) and nut (B).

Tightening torque :

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



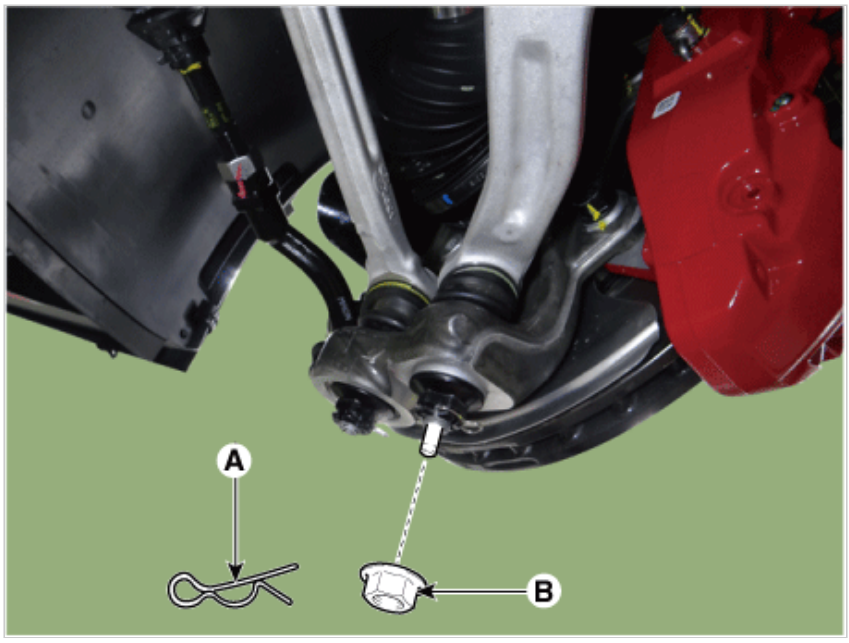
4. Remove the lateral arm by using the ball joint remover (A).



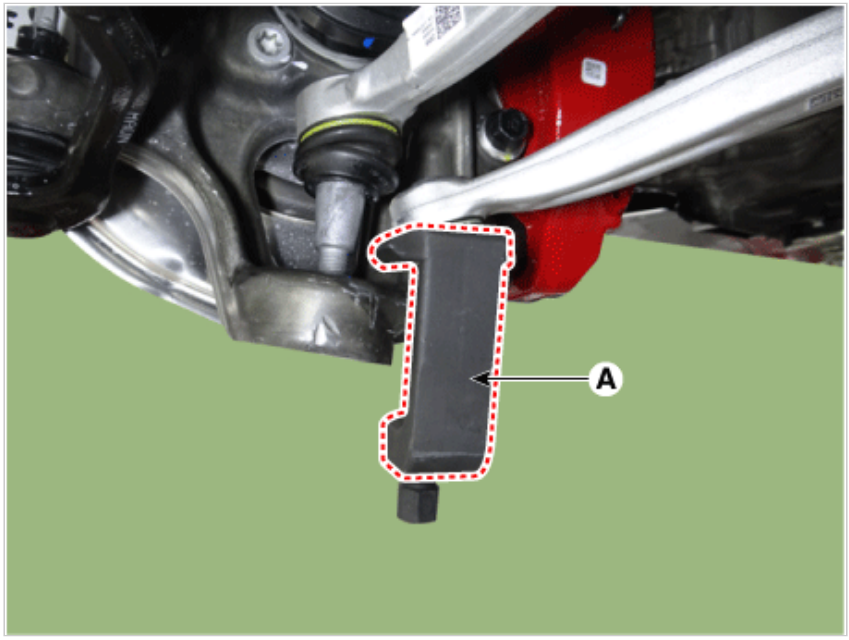
5. Loosen the compression arm pin (A) and nut (B).

Tightening torque:

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



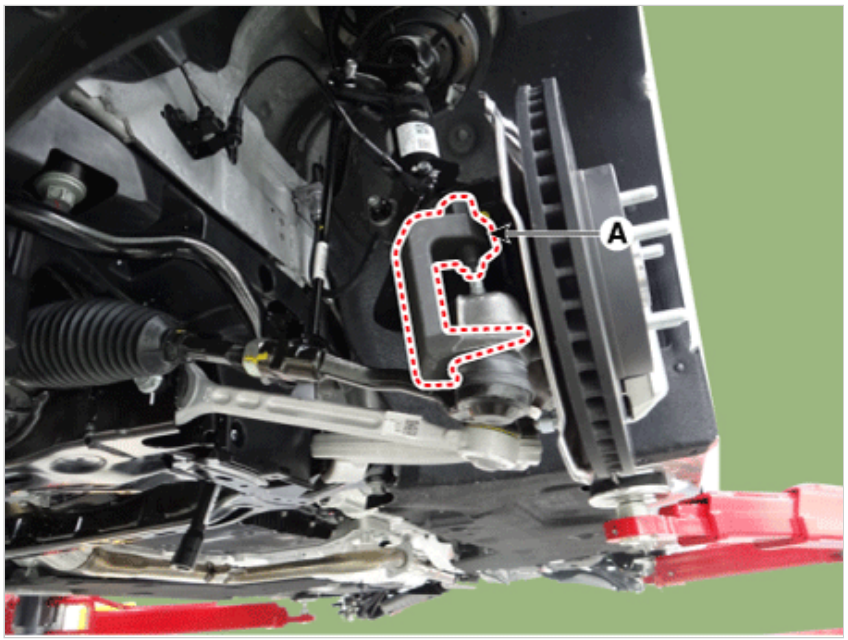
6. Remove the compression arm by using the ball joint remover (A).



7. Remove the tie rod end nut.

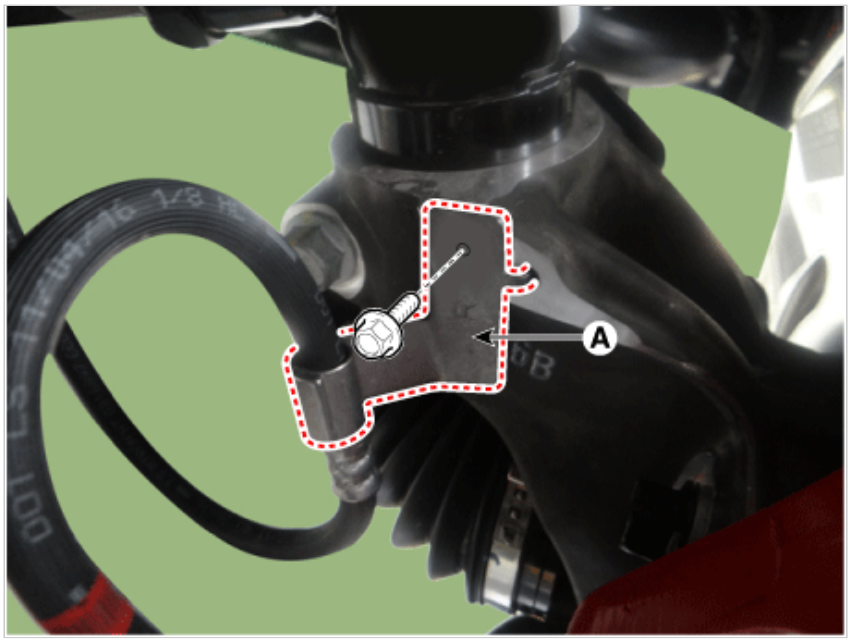
Tightening torque :
88.3 - 107.9 N·m (9.0 - 11.0 kgf·m, 65.1 - 79.6 lb·ft)

8. Remove the knuckle by using the ball joint remover (A).



9. Remove the brake hose bracket (A).

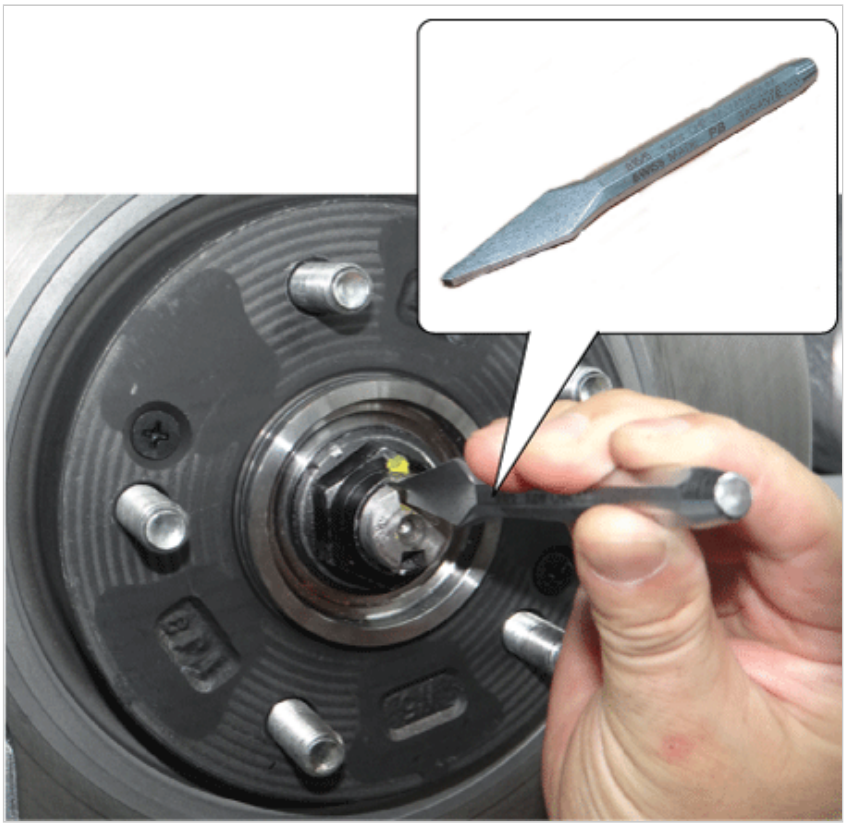
Tightening torque :
6.9 - 10.8 N·m (0.7 - 1.1 kgf·m, 5.1 - 7.9 lb·ft)



10. Loosen the screw, and then remove the brake disc.

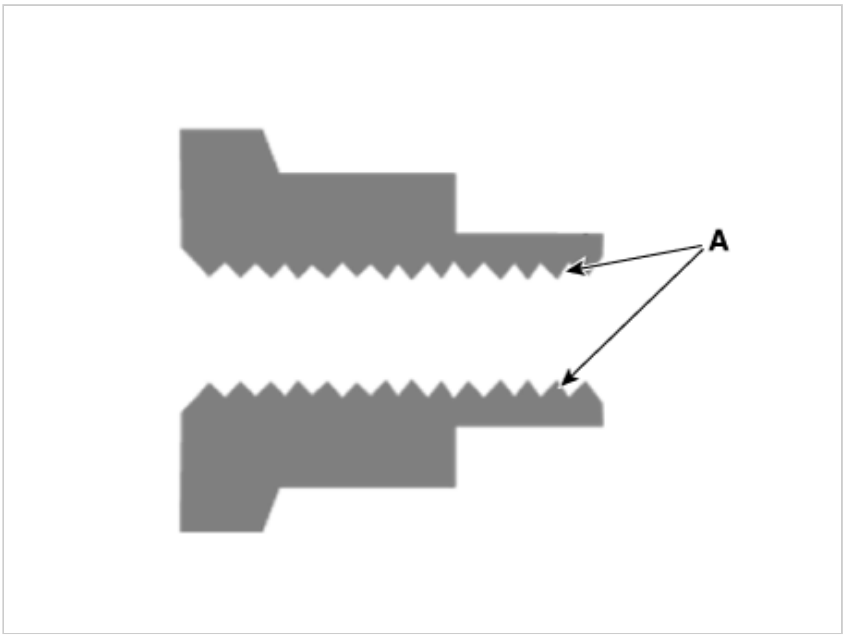
Tightening torque :
4.9 - 5.9 N·m (0.5 - 0.6 kgf·m, 3.6 - 4.3 lb·ft)

11. By hammering on a chisel, unlock the driveshaft lock hub nut caulking.



NOTICE

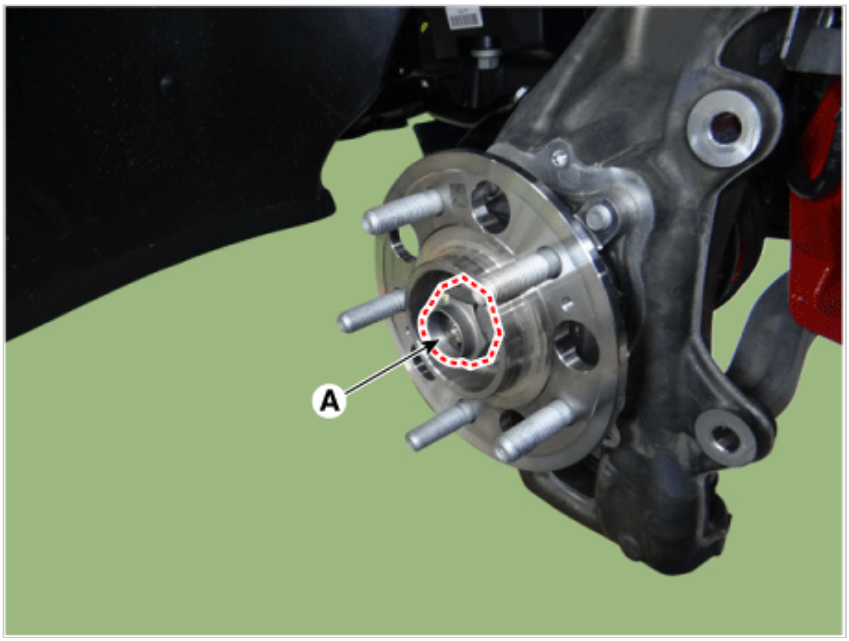
If there is screw thread (A) on the end of the nut, unlock the caulking by using a chisel and then loosen the nut to prevent damaging driveshaft screw thread.



12. Loosen the caulking nut (A) and then separate the hub assembly from the drive shaft.

Tightening torque :

294.2 - 313.8 N·m (30.0 - 32.0 kgf·m, 217.0 - 231.5 lb·ft)



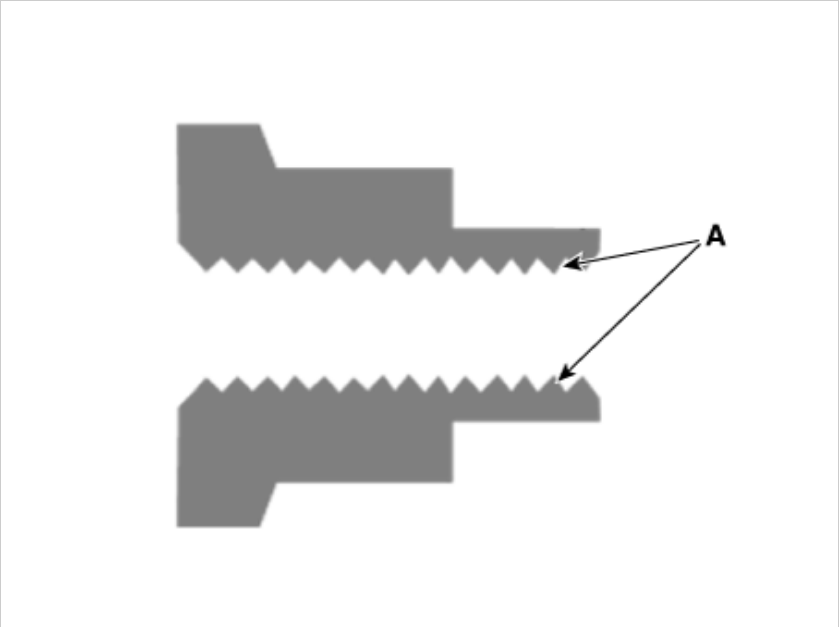
NOTICE

- Use plastic hammer to avoid damaging on axle when the drive shaft is disassembled.
- Do not pull or twist excessively to remove the axle when the drive shaft is disassembled.

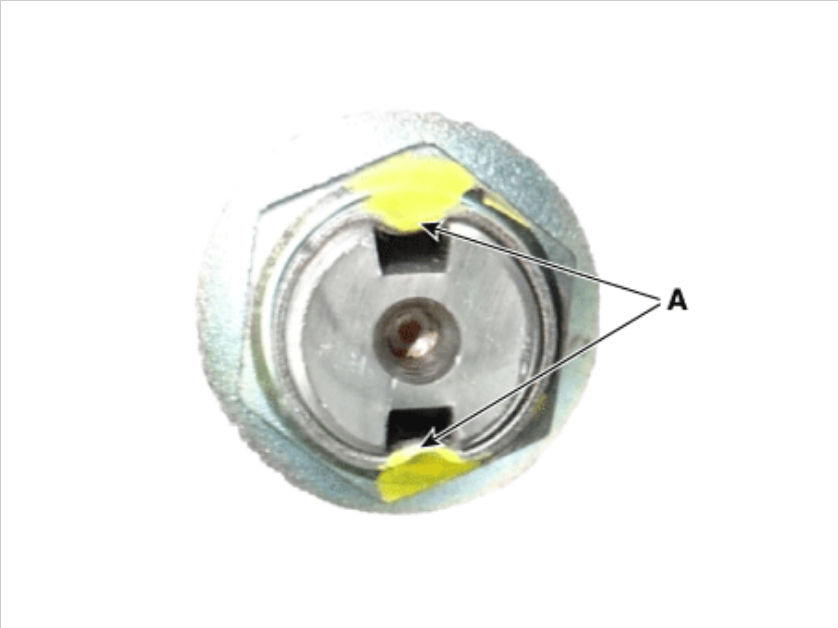
NOTICE

The driveshaft lock nut must be replaced with new one.

When replacing the drive lock hub nut, use only the nut with screw thread (A) on the end.

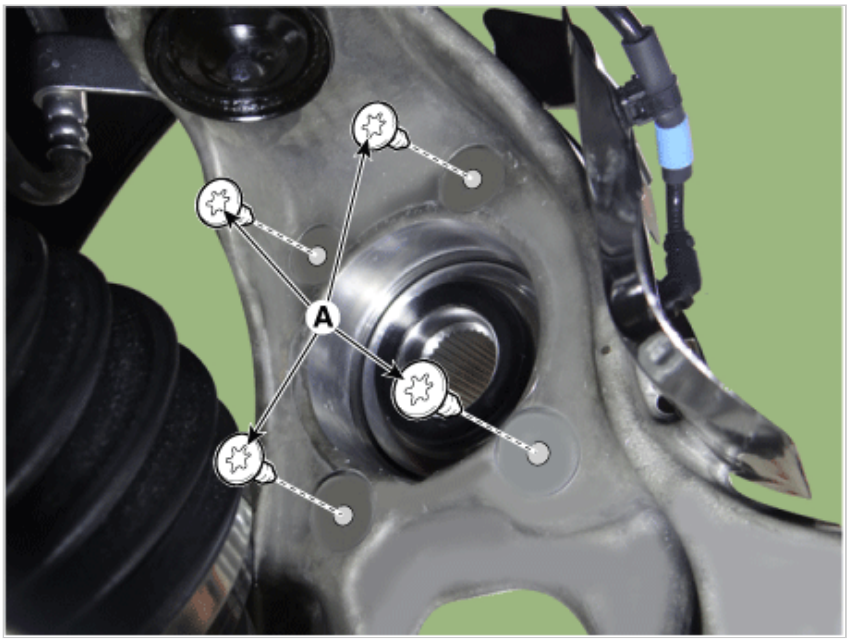


- Tighten the driveshaft lock hub nut to the specified tightening torque, and caulk by using a chisel and hammer.
- If there are two key seats, perform on all two seats.
  Caulking depth (A) :1.5 mm (0.0591 in)



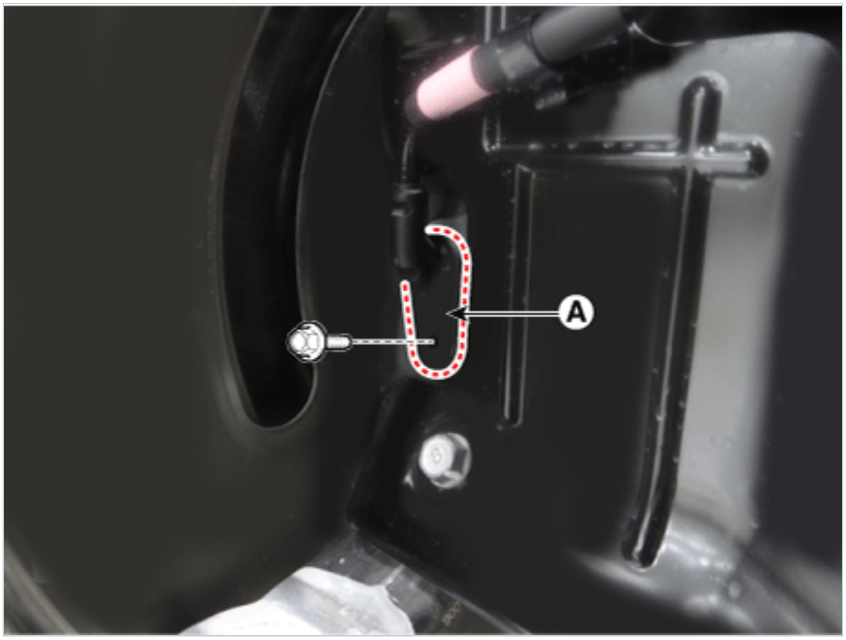
13. Loosen the hub assembly bolts (A) and then remove the hub assembly.

Tightening torque :
88.3 - 107.9 N·m (9.0 - 11.0 kgf·m, 65.1 - 79.6 lb·ft)



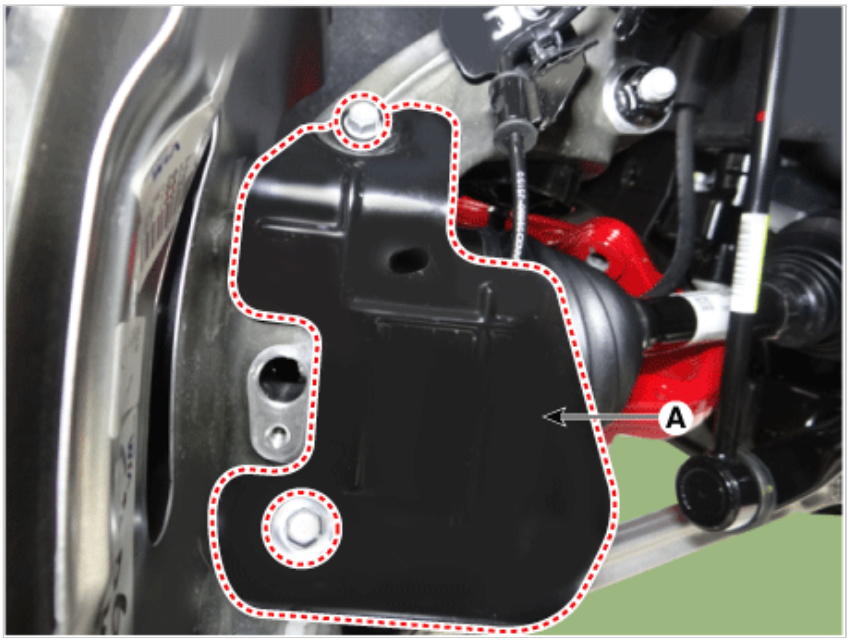
14. Loosen the wheel speed sensor bolt (A) and then disconnect the wheel speed sensor.

Tightening torque :
6.9 - 10.8 N·m (0.7 - 1.1 kgf·m, 5.1 - 7.9 lb·ft)



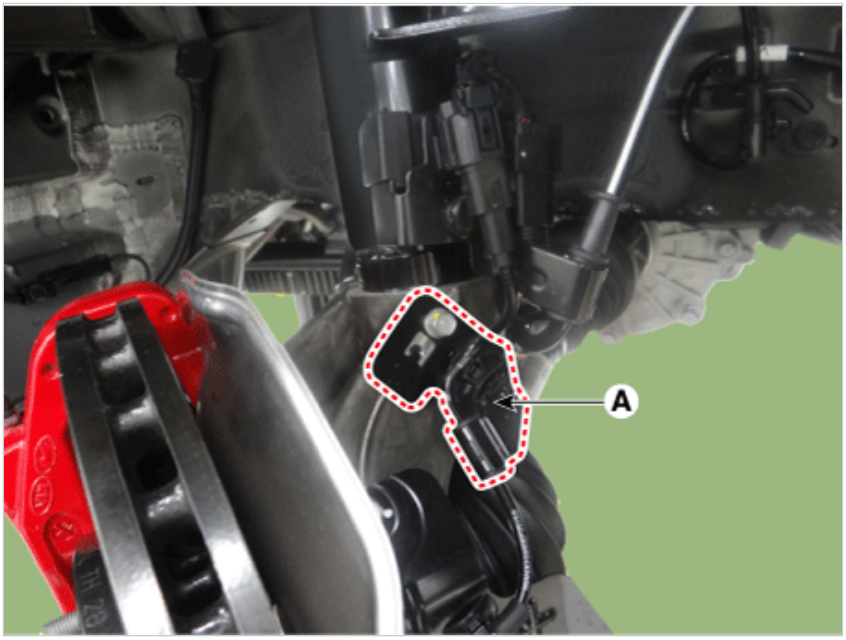
15. Remove the brake cooling cover (A).

Tightening torque :
7.8 - 11.8 N·m (0.8 - 1.2 kgf·m, 5.8 - 8.7 lb·ft)



16. Remove the wheel speed sensor bracket (A).

Tightening torque :
6.9 - 10.8 N·m (0.7 - 1.1 kgf·m, 5.1 - 7.9 lb·ft)

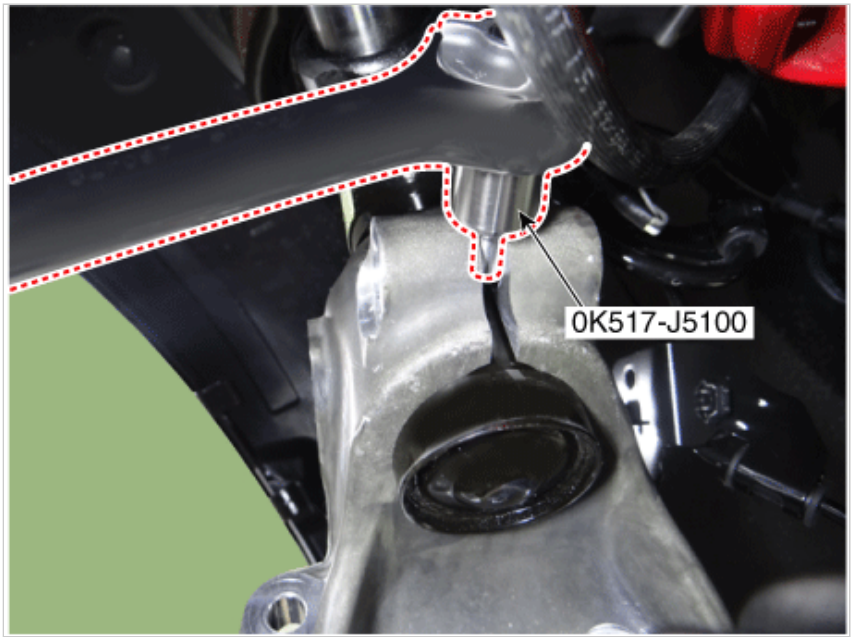


17. Loosen the knuckle upper bolt & nut.

Tightening torque :
78.5 - 98.1 N·m (8.0 - 10.0 kgf·m, 57.9 - 72.3 lb·ft)

18. Remove the knuckle by using the SST (0K517-J5100).

Reference value : Below 8.0 mm (0.31 in.)



NOTICE

Be careful not to exceed 8 mm (0.31 in.) because it may cause knuckle quality issues.

19. Install in the reverse order of removal.
20. Check the front alignment.
    (Refer to Suspension System - "Alignment")

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.