REMOVAL

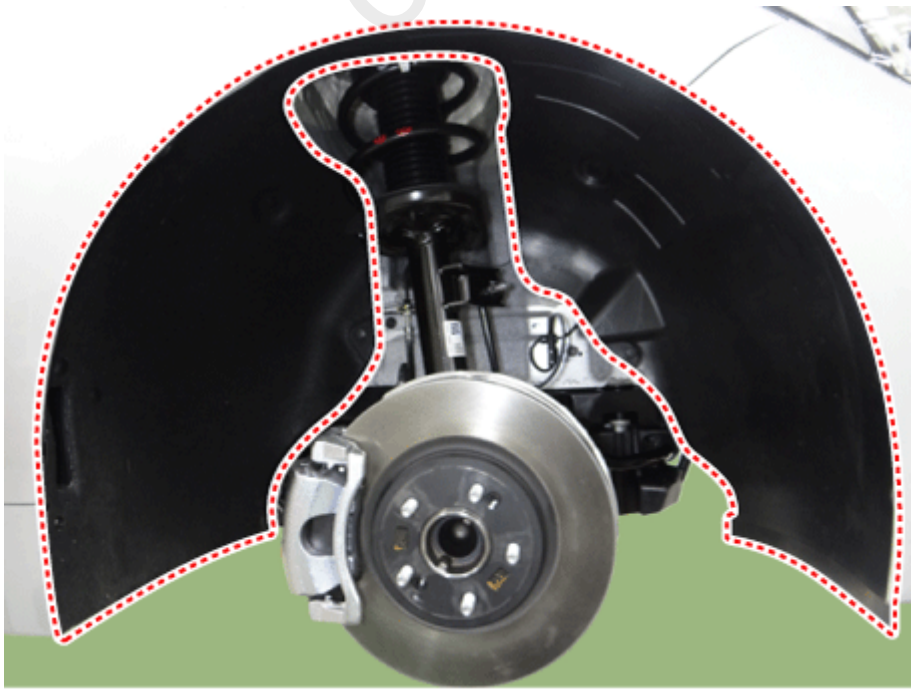
[2WD]

1. Remove wheel nuts, front wheel and tire (A) from 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 bolts when removing the wheel and tire (A).

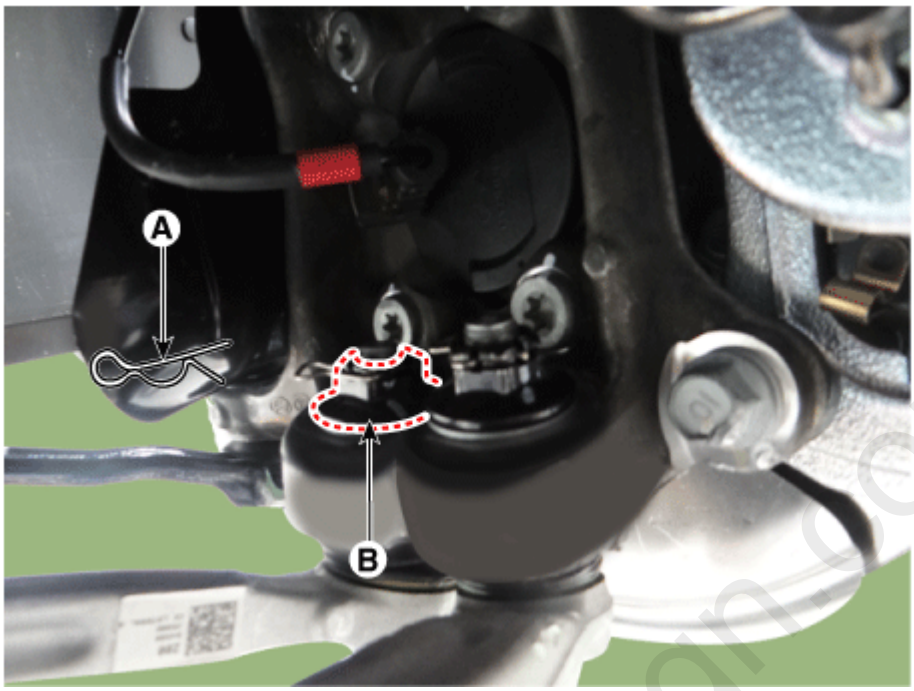
2. Remove the front wheel guard.



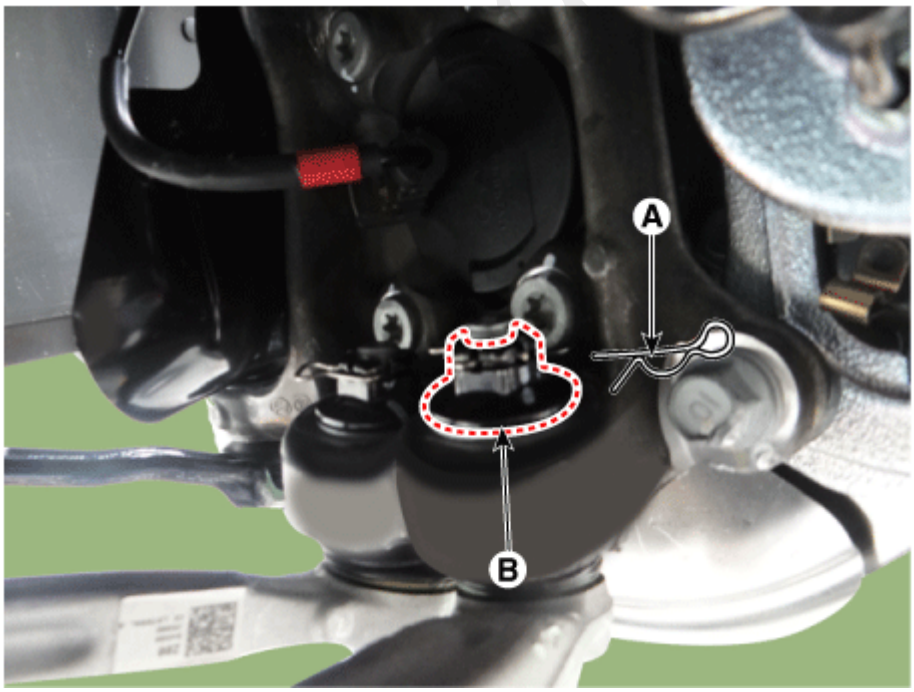
3. Remove the front stabilizer bar.
   (Refer to Suspension System - "Front Stabilizer Bar")

4. Remove the engine room side cover.
   D 2.2 R VGT (Refer to Engine Mechanical System - "Engine Room Under 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")

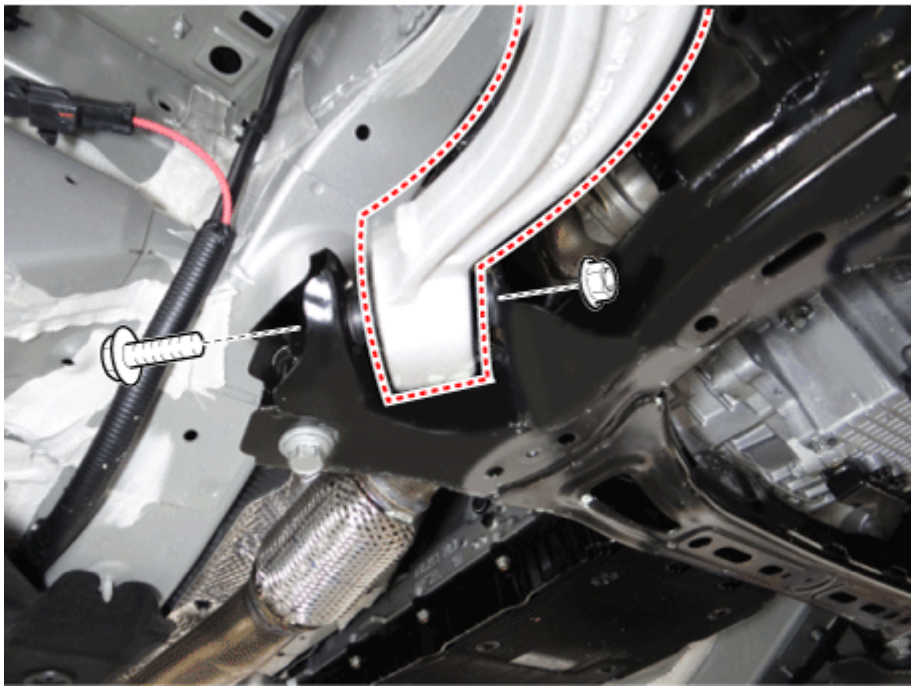
5. Loosen the lateral arm pin (A) and nut (B).
   Tightening torque:
   88.3 - 107.9 N·m (9.0 - 11.0 kgf·m, 65.1 - 79.6 lb·ft)



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)

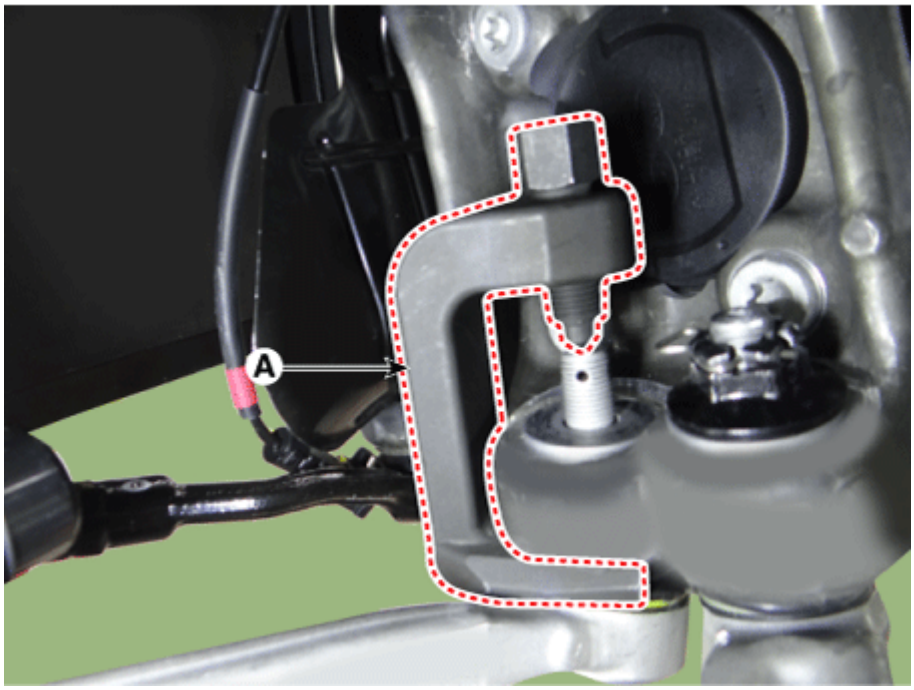


7. Loosen the compression arm bolt & nut from the subframe.
   Tightening torque:
   156.9 - 176.5 N·m (16.0 - 18.0 kgf·m, 115.7 - 130.2 lb·ft)

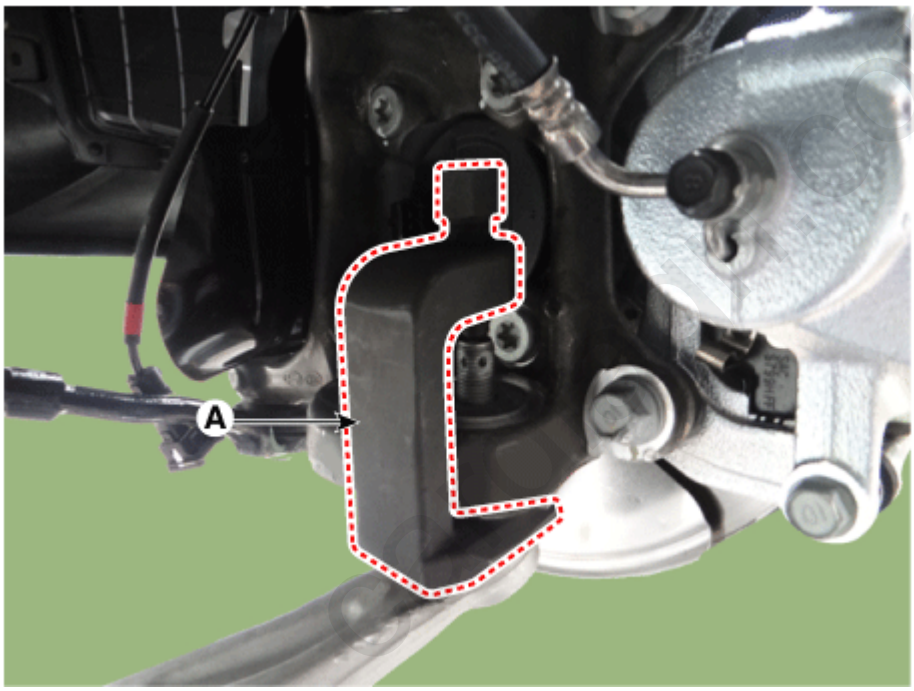


8. Disonnec the wheel speed sensor connector.

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

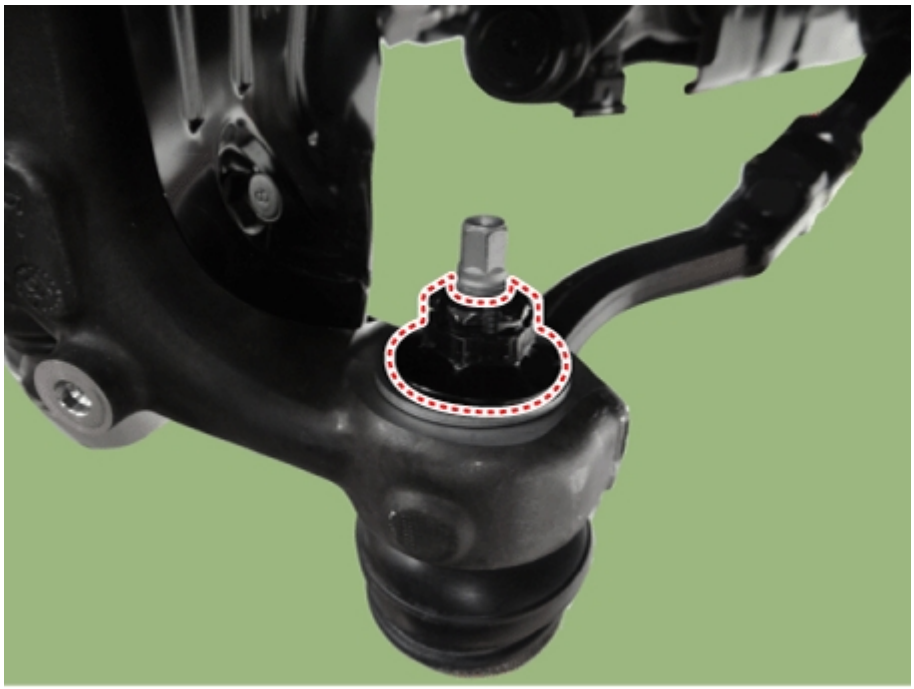


10. Remove the compression arm by using the ball joint remover (A).

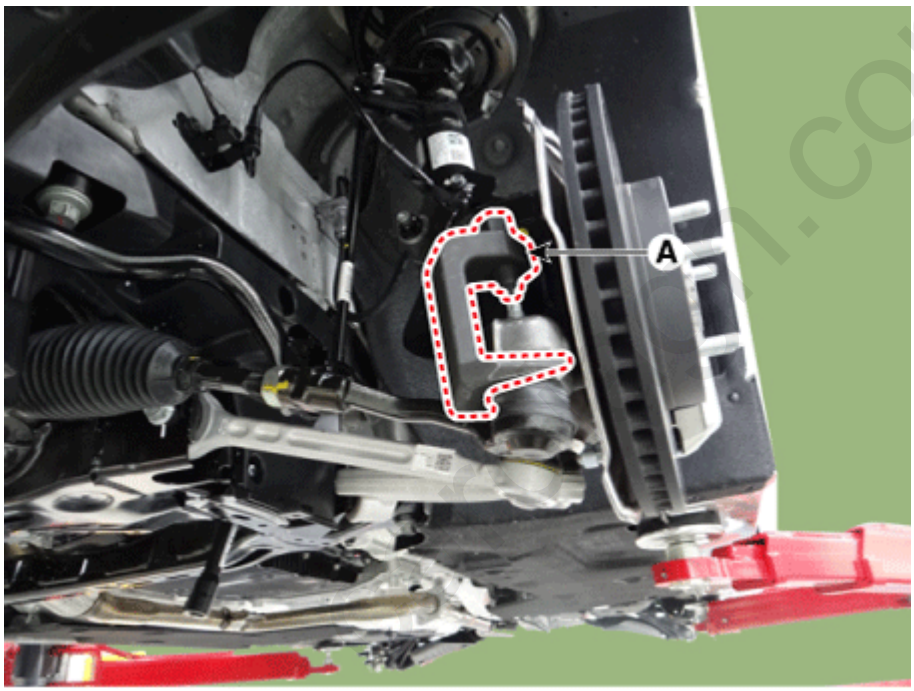


11. Remove the brake caliper.
(Refer to Brake System - "Front Disc Brake")

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 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)

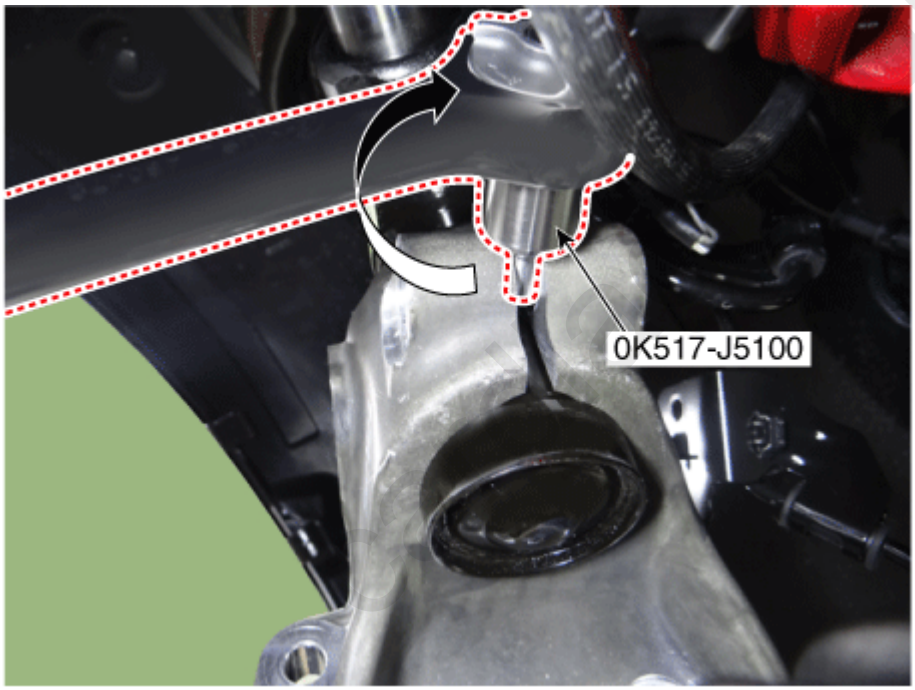
15. Loosen the brake caliper hose bracket bolt.

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

16. 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)

17. Remove the knuckle by using the SST (0K517-J5100).
    Reference value : Below 8.0 mm (0.31 in.)



> **NOTICE**
>
> Be careful not to exceed 8mm because it may cause knucle quality issues.

18. Loosen the shock absorber upper nuts and then remove the shock absorber.
    Tightening torque:
    63.7 - 78.4 N·m (6.5 - 8.0 kgf·m, 47.0 - 57.9 lb·ft)

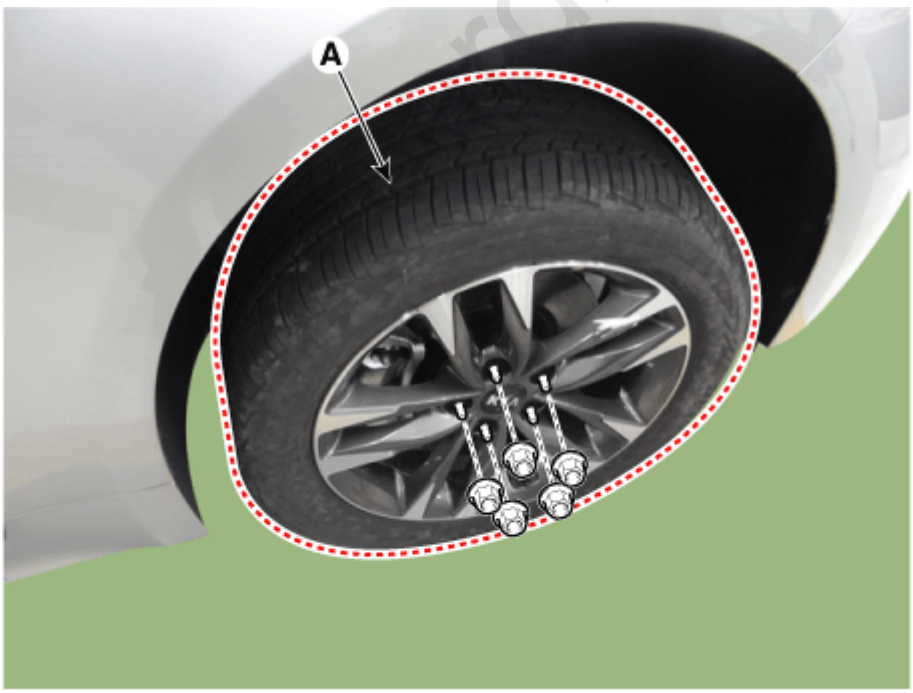
19. Install in the reverse order of removal.

> **NOTICE**
>
> Install at the empty vehicle height when it is assembled.

20. Check the front alignment.
    (Refer to Suspension System - "Alignment")

[AWD]

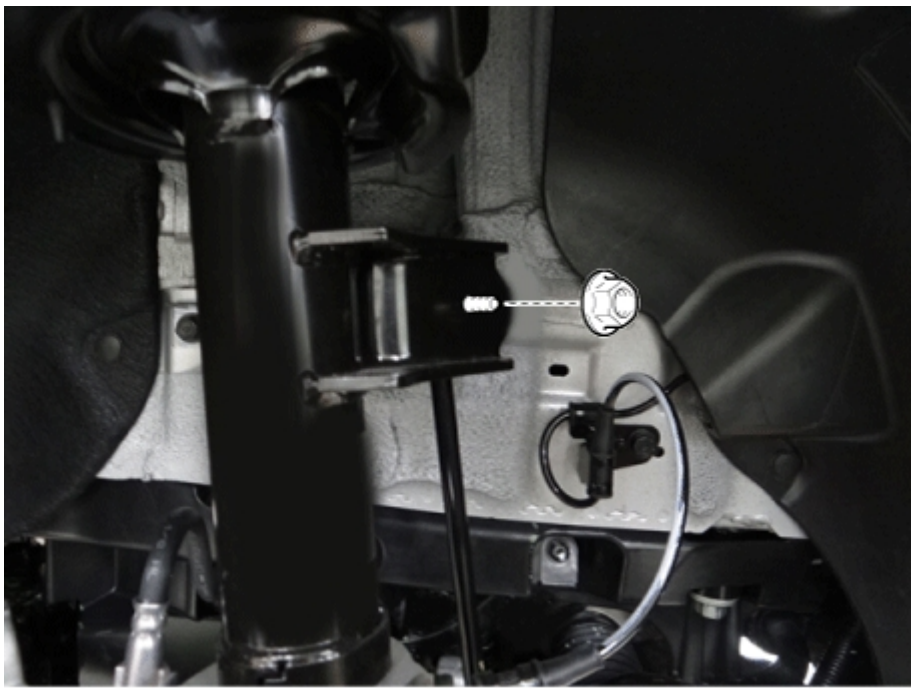
1. Remove wheel nuts, front wheel and tire (A) from front hub.
   Tightening torque:
   107.9 - 127.5 N·m (11.0 - 13.0 kgf·m, 79.6 - 94.0 lb·ft)



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

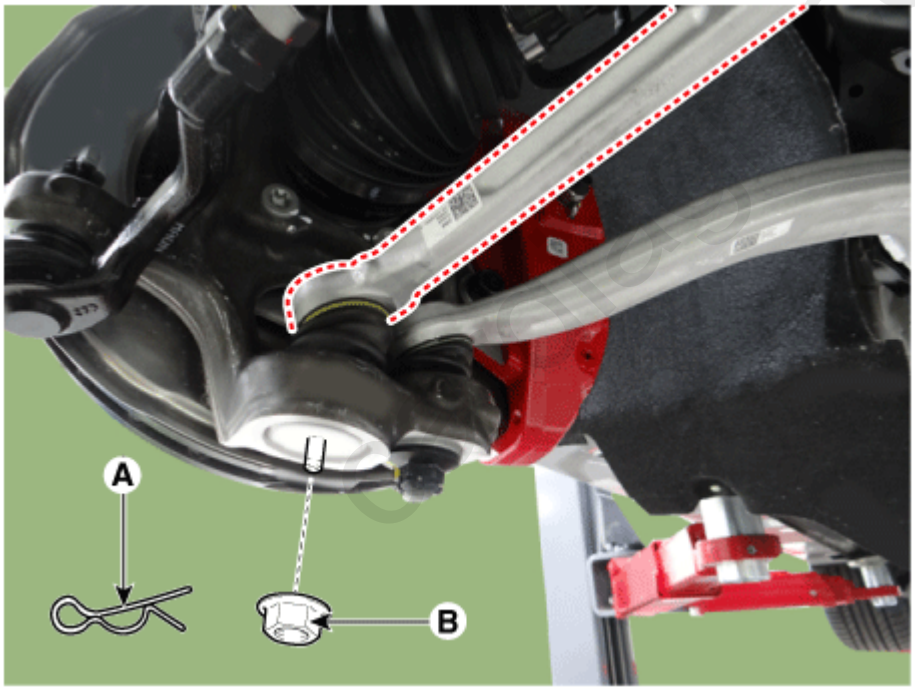
3. Loosen the nut and then separate the stabilizer link from the front shock absorber.
   Tightening torque:

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

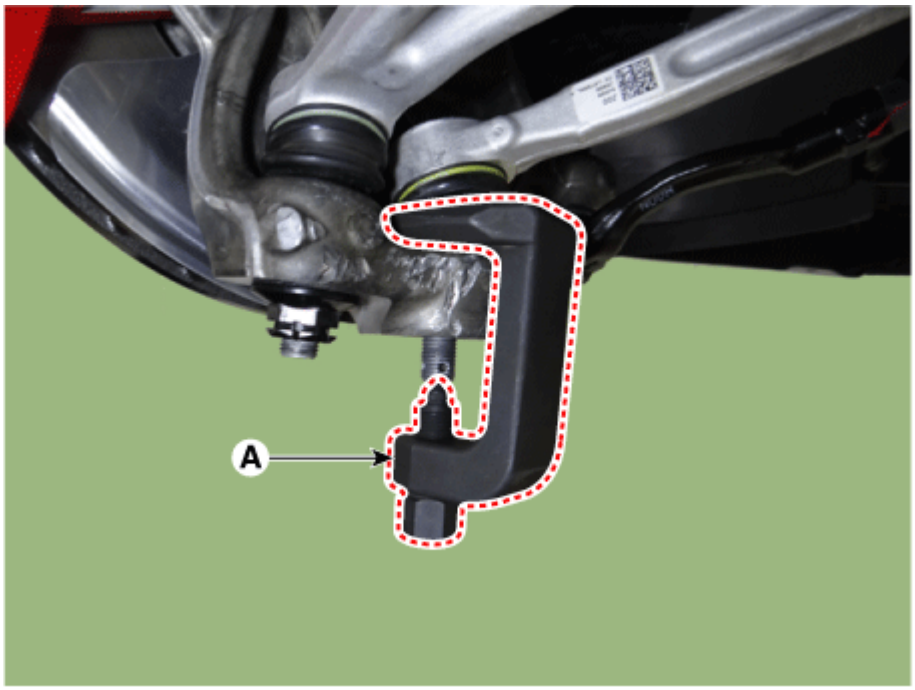


4. Loosen the lateral arm pin (A) and nut (B).

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

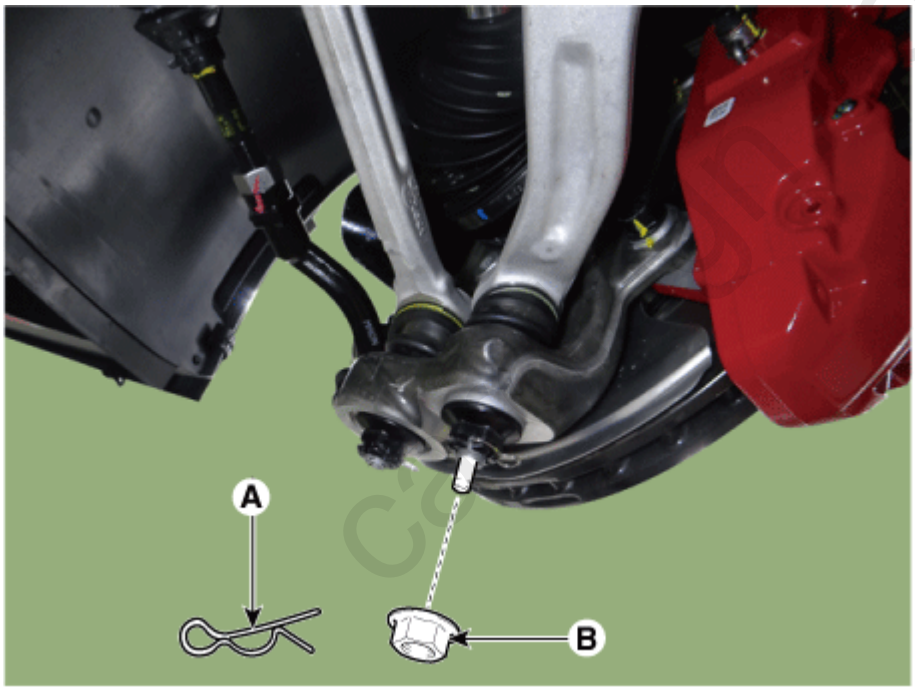


5. Remove the lateral arm by using the ball joint remover (A).

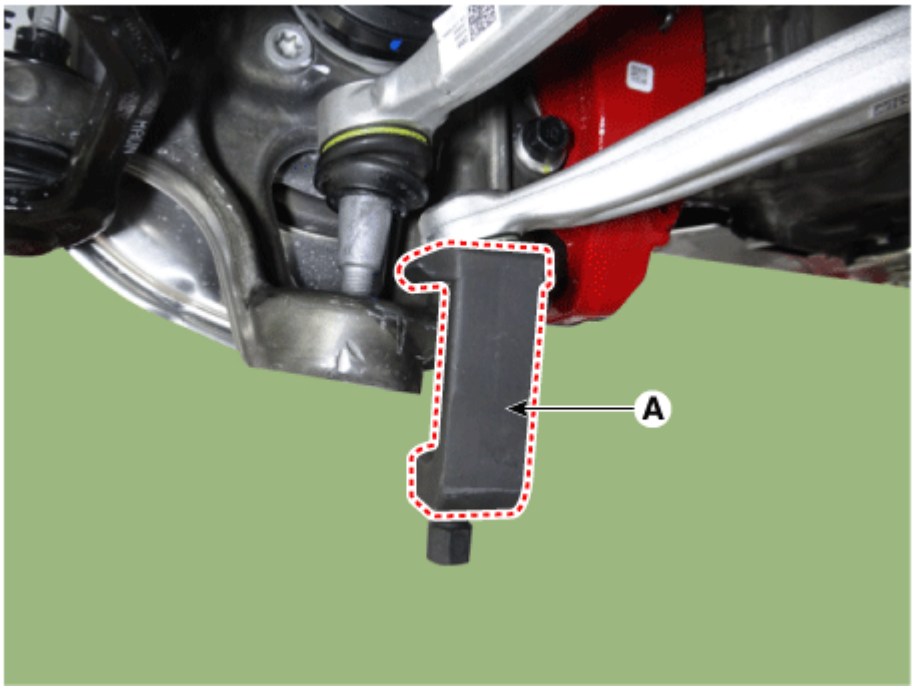


6. Loosen the compression arm pin (A) and nut (B).

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

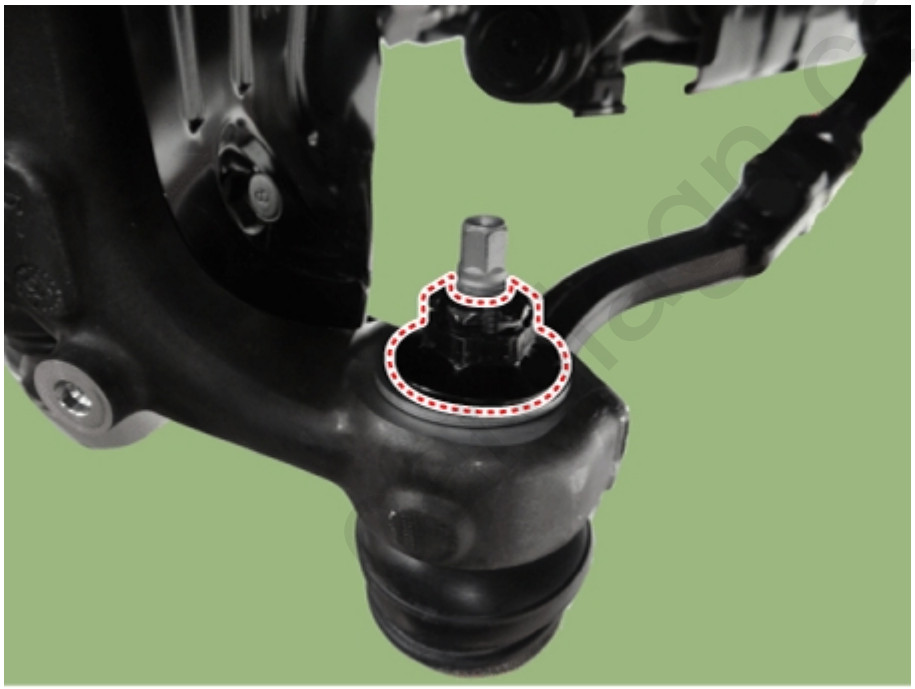


7. Remove the compression arm by using the ball joint remover (A).

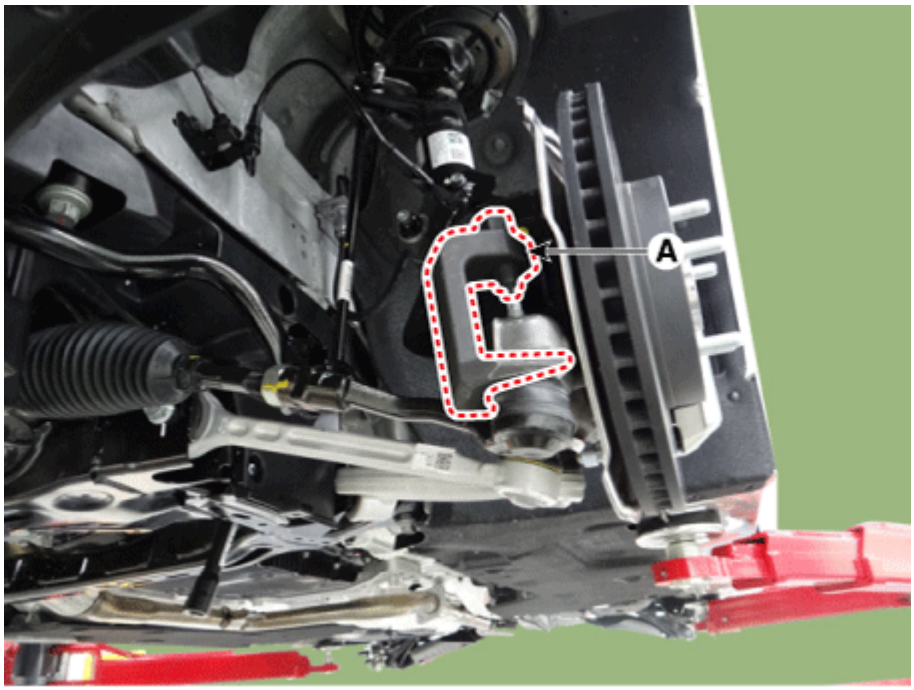


8. Remove the tie rod end nut.

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

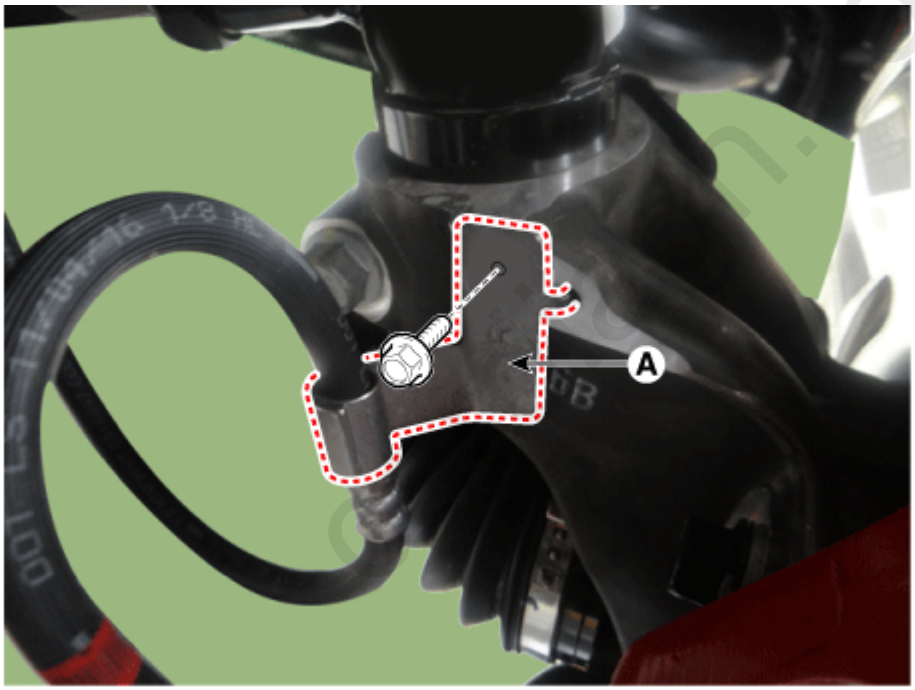


9. Remove the knuckle by using the ball joint remover (A).

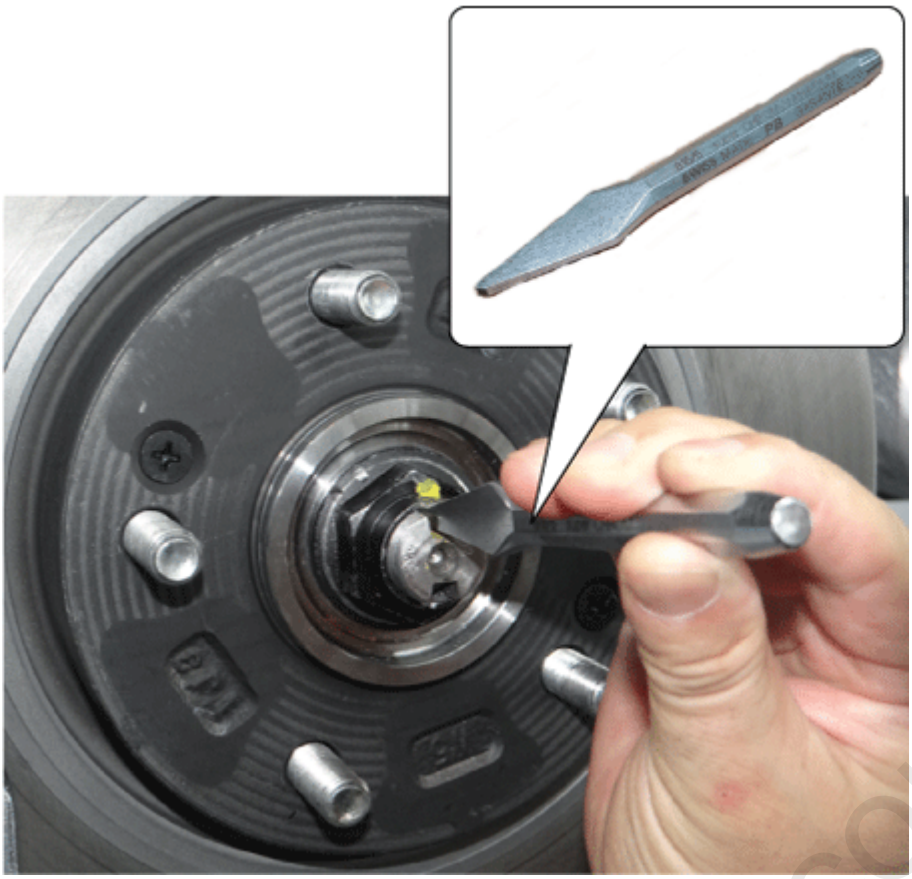


10. Remove the brake hose bracket (A).

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



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



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)

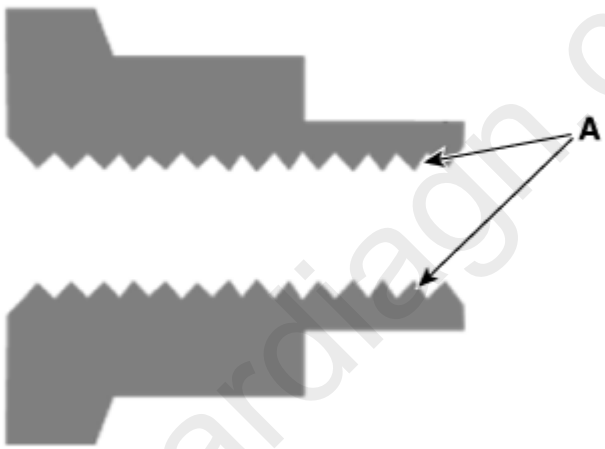
NOTICE

- 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.

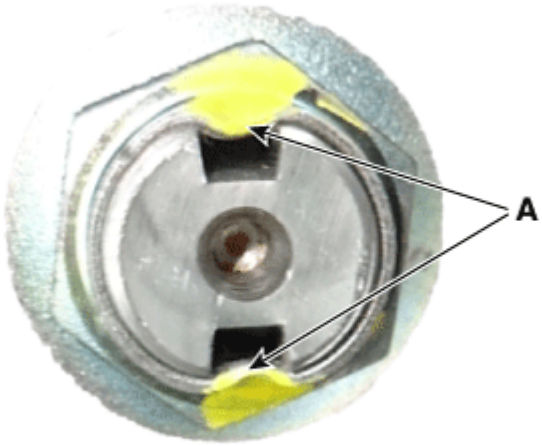
NOTICE

The driveshaft lock nut must be replaced with new one.

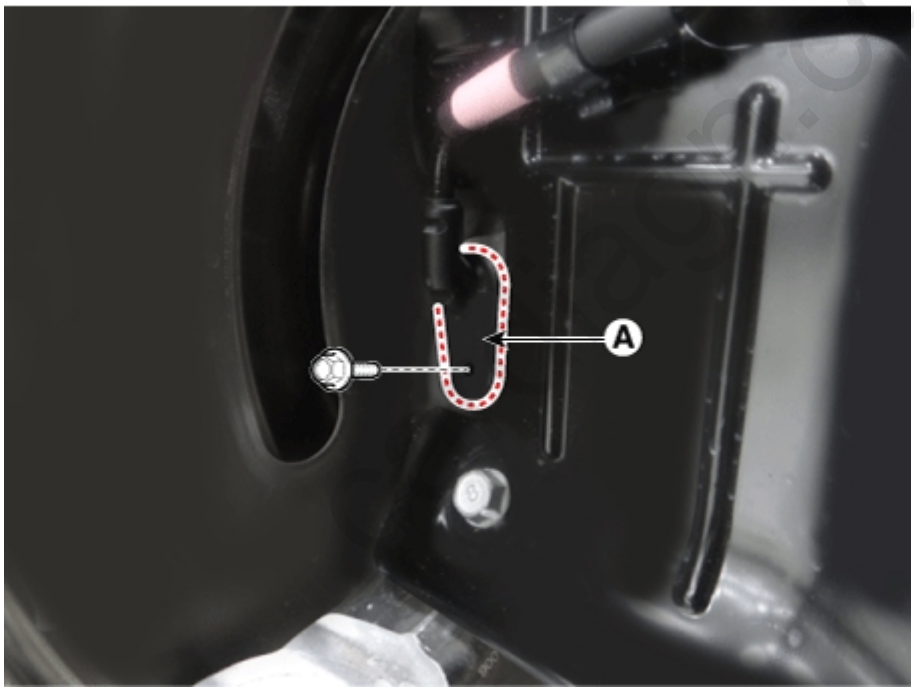
When replacing the drive lock hub nut, use only the nut with screw thread (A) on the end.



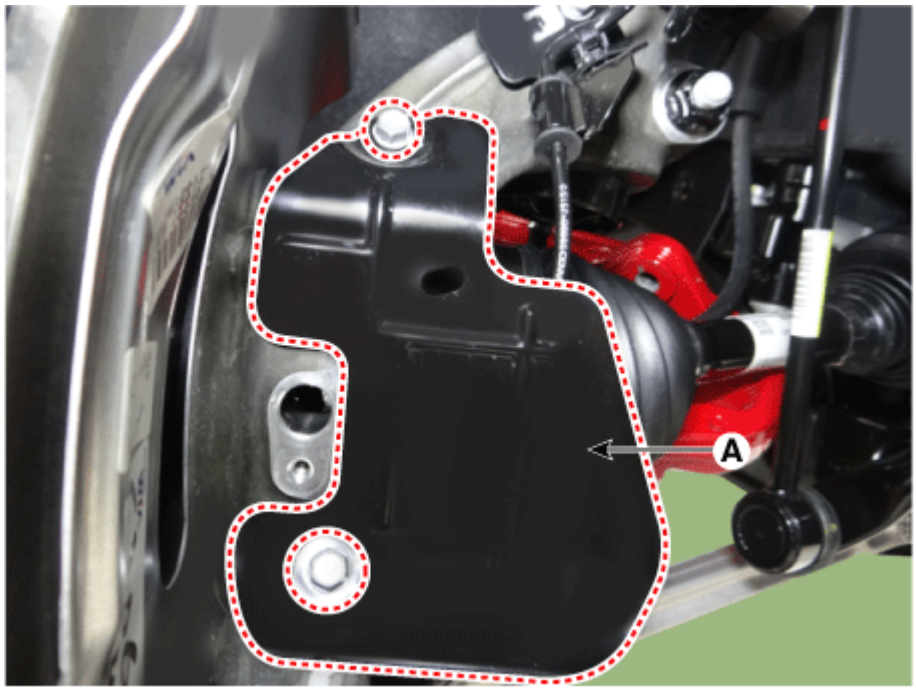
- Tighten the driveshaft lock hub nut to the specified tightening torque, and caulk by using a chisel and hammer.
- If there are two key seats, perform on all two seats.
  Caulking depth (A) : 1.5 mm (0.0591 in)



13. Loosen the 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)

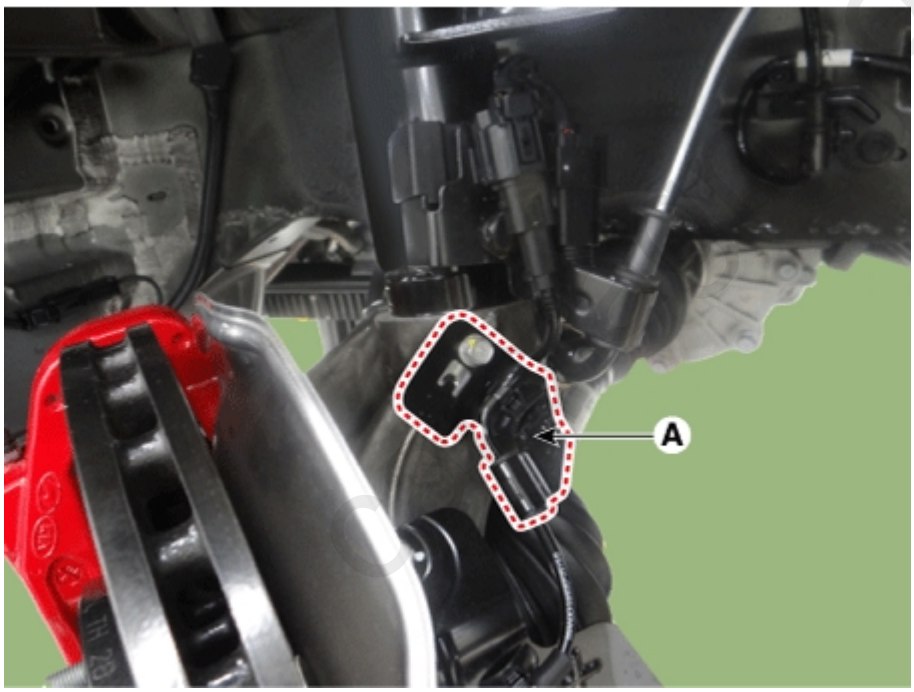


14. Remove the brake cooling cover (A).
    Tightening torque:
    7.8 - 11.8 N·m (0.8 - 1.2 kgf·m, 5.8 - 8.7 lb·ft)



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

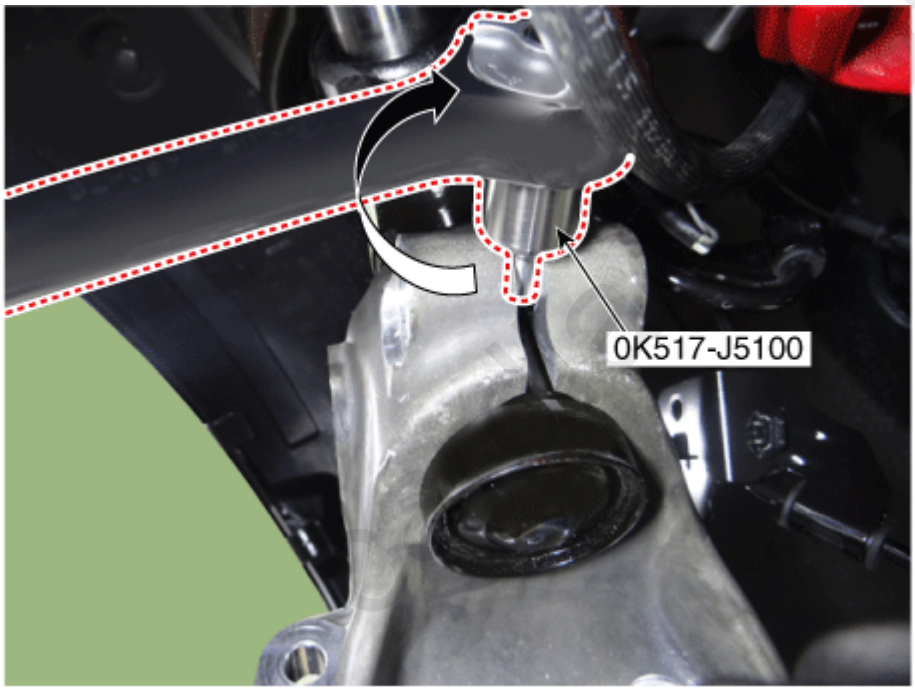
Tightening torque:
6.9 - 10.8 N·m (0.7 - 1.1 kgf·m, 5.1 - 7.9 lb·ft)



16. 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)

17. 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 knucle quality issues.

18. Loosen the shock absorber upper nuts and then remove the shock absorber.
    Tightening torque:
    63.7 - 78.4 N·m (6.5 - 8.0 kgf·m, 47.0 - 57.9 lb·ft)

19. Install in the reverse order of removal.

> **NOTICE**
>
> Install at the empty vehicle height when it is assembled.

20. Check the front alignment.
    (Refer to Suspension System - "Alignment")

DISASSEMBLY

1. Remove the front shock absorber cover.
2. Compress the coil spring (A) with a strut spring compressor. Do not compress the spring excessively.

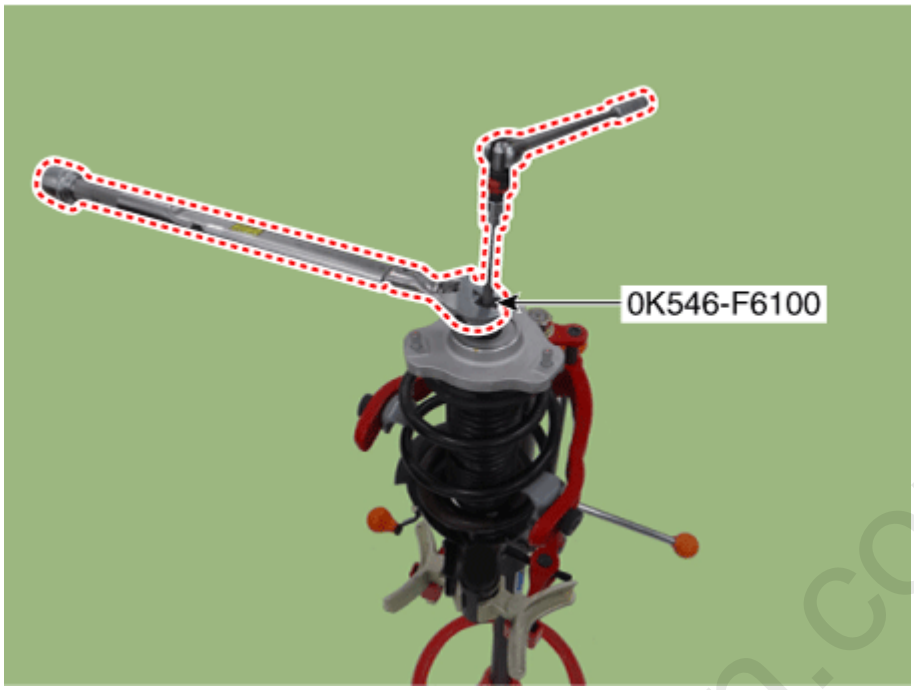
> **NOTICE**
>
> - To prevent peeling the paint of coil spring, cover the coil spring with a thin cloth or hose before installing strut

spring compressor.

- Set the compression position of strut spring compressor correctly for coil spring not to slant when compressing the coil spring.

3. Using the SST(0K546-F6100), loosen the lock nut.

   Tightening torque :
   117.7 - 127.5 N.m (12.0 - 13.0 kgf.m, 86.8 - 94.0 lb-ft)



4. Gradually turn the bolt on the spring compressor to slowly release the tension from the spring. Then, disconnect the components.
5. Install in the reverse order of removal.

INSPECTION

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