

# **Component Procedures: Steering Gear**

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# Component Procedures: Steering Gear

## Parts and Labor (itype\_189)

### Parts

Qualifier	Part #	Name	Price	Note
Power > Steering Gear & Link?	56531J7000	6 - With Sport	235.92	
Power > Steering Gear & Link?	56531F2000	6 - Without Sport	342.18	
Power > Steering Gear & Link?	56500F2300	1 - With Sport	1036.69	
Power > Steering Gear & Link?	56500F2000	1 - Without Sport	1238.61	

### Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Power > Steering Gear & Linkage > Steering Ge?	B	3.0	0.0
Remove & Install	Power > Steering Gear & Linkage > Steering Ge?	B	2.8	0.0
Remove & Install	Power > Steering Gear & Linkage > Steering Ge?		0.1	
Remove & Install	Power > Steering Gear & Linkage > Steering Ge?		0.6	

## Steering Gear Box - Repair Procedures (Article 44261)

- Removal
- Turn the steering wheel so that the front wheels are placed in the straight ahead position.
- Loosen the wheel nut s slightly.
- Raise the vehicle, and make sure it is securely supported.
- Remove the 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) Be careful not to damage the hub bolt s when removing the front wheel and tire (A).

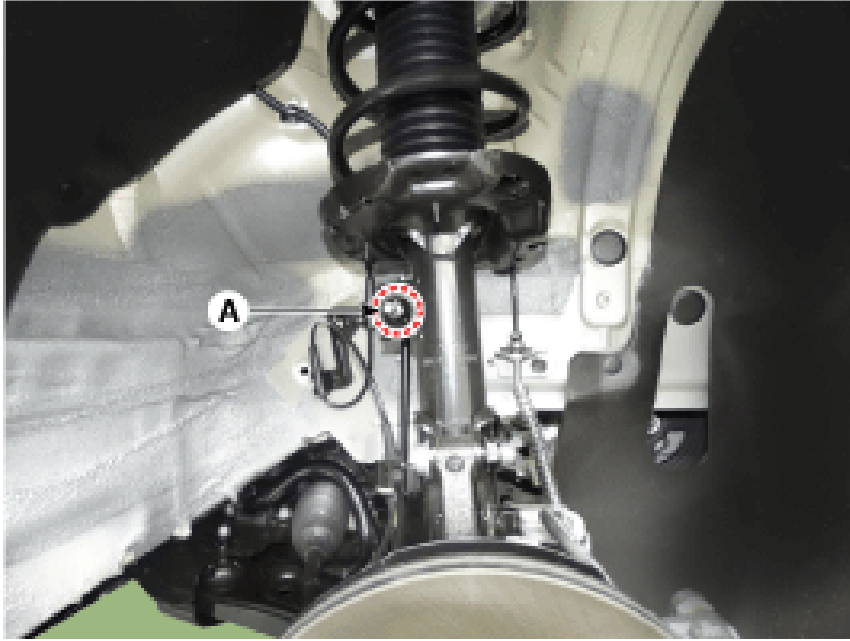


Be careful not to damage the hub bolt s when removing the front wheel and tire (A).

# NOTICE

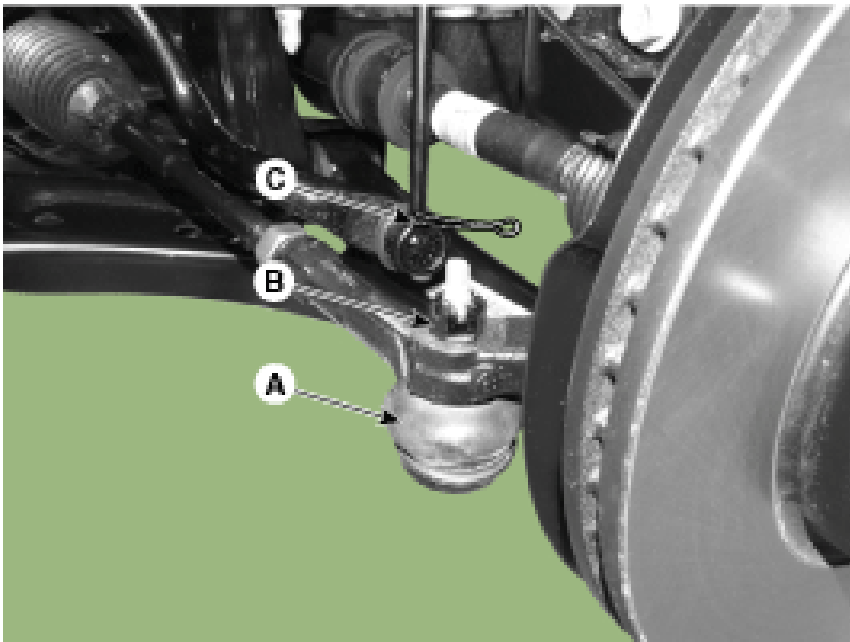
- Be careful not to damage the hub bolt s when removing the front wheel and tire (A).

- Disconnect the stabilizer link with the front strut assembly after loosening the nut (A). Tightening torque : 98.1 - 117.7 N.m (10.0 - 12.0 kgf.m, 72.3 - 86.8 lb-ft) When loosening the nut (A), fix the outer hexagon of stabilizer bar link. Be careful not to damage the stabilizer link boots.

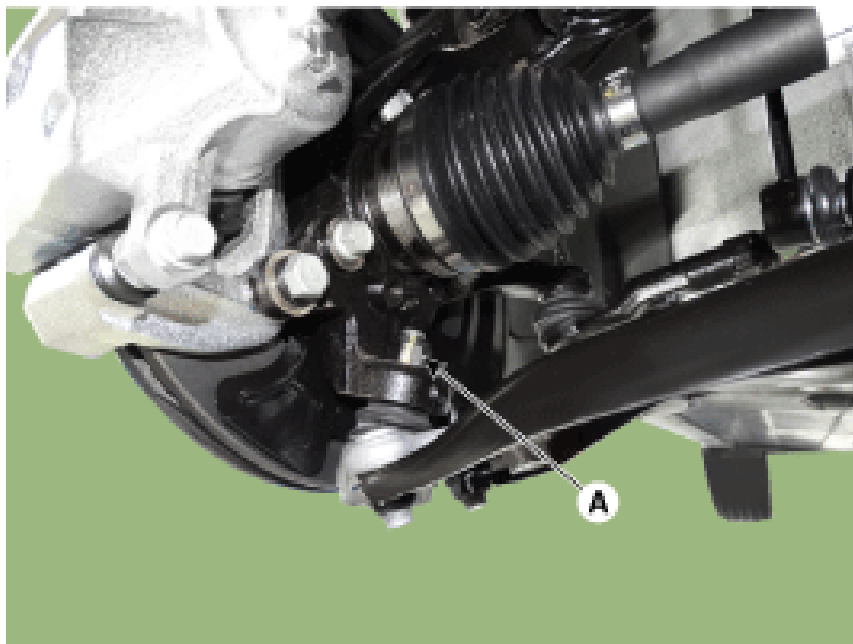


When loosening the nut (A), fix the outer hexagon of stabilizer bar link. Be careful not to damage the stabilizer link boots.

- When loosening the nut (A), fix the outer hexagon of stabilizer bar link.
- Be careful not to damage the stabilizer link boots.
- Remove the tie rod end ball joint . Remove the split pin (C). Loosen the nut (B). Using SST(09568-1S100), separate the ball joint (A) from the knuckle . Tightening torque : 23.5 - 33.3 N.m (2.4 - 3.4 kgf.m, 17.4 - 24.6 lb-ft)
- Remove the split pin (C).
- Loosen the nut (B).
- Using SST(09568-1S100), separate the ball joint (A) from the knuckle . Tightening torque : 23.5 - 33.3 N.m (2.4 - 3.4 kgf.m, 17.4 - 24.6 lb-ft)

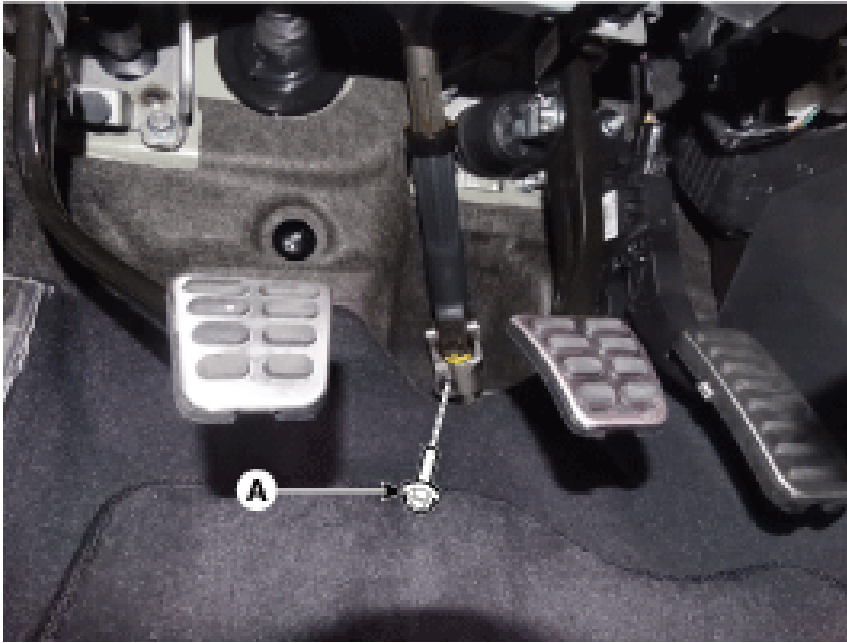


- Loosen the lower arm nut (A) and then remove the lower arm ball joint by using SST(09568-1S100). Tightening torque : 58.8 - 70.6 N.m (6.0 - 7.2 kgf.m, 43.4 - 52.1 lb-ft) Do not reuse the lower arm lock nut (A).



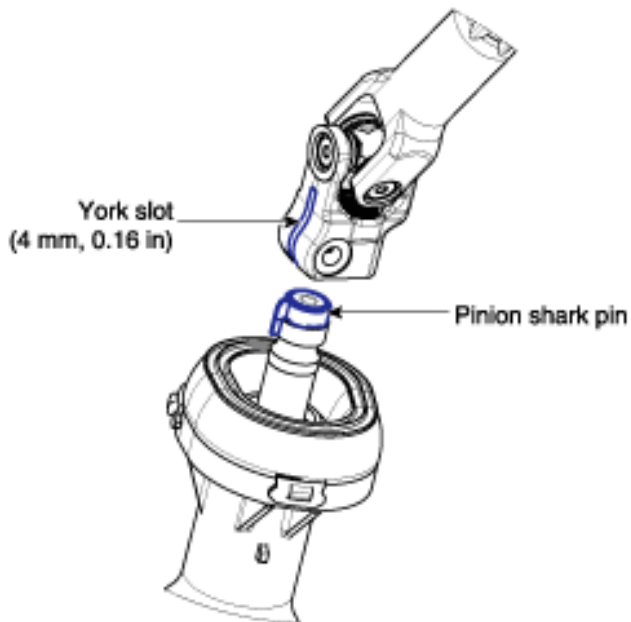
Do not reuse the lower arm lock nut (A).

- Do not reuse the lower arm lock nut (A).
- Loosen the bolt (A) and then disconnect the universal joint assembly from the pinion of the steering gear box . Tightening torque : 32.4 - 37.3 N.m (3.3 - 3.8 kgf.m, 23.9 - 27.5 lb-ft) Keep the steering wheel stationary. Do not reuse the bolt. Lock the steering wheel in the straight ahead position to prevent the damage of the clock spring inner cable. When assembling, insert the shark pin into the universal joint yoke slot as the below illustration.

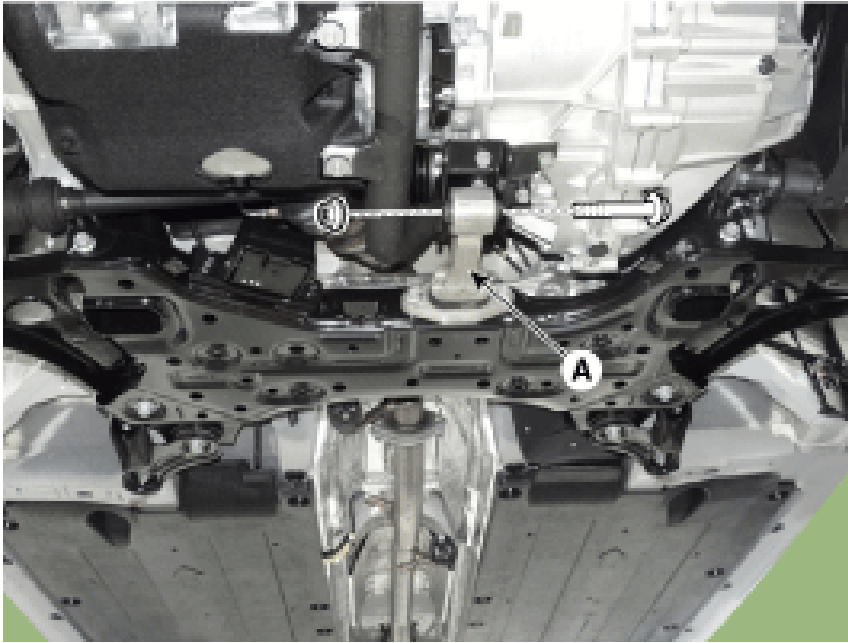


Keep the steering wheel stationary. Do not reuse the bolt. Lock the steering wheel in the straight ahead position to prevent the damage of the clock spring inner cable. When assembling, insert the shark pin into the universal joint york slot as the below illustration.

- Keep the steering wheel stationary.
- Do not reuse the bolt.
- Lock the steering wheel in the straight ahead position to prevent the damage of the clock spring inner cable.
- When assembling, insert the shark pin into the universal joint york slot as the below illustration.



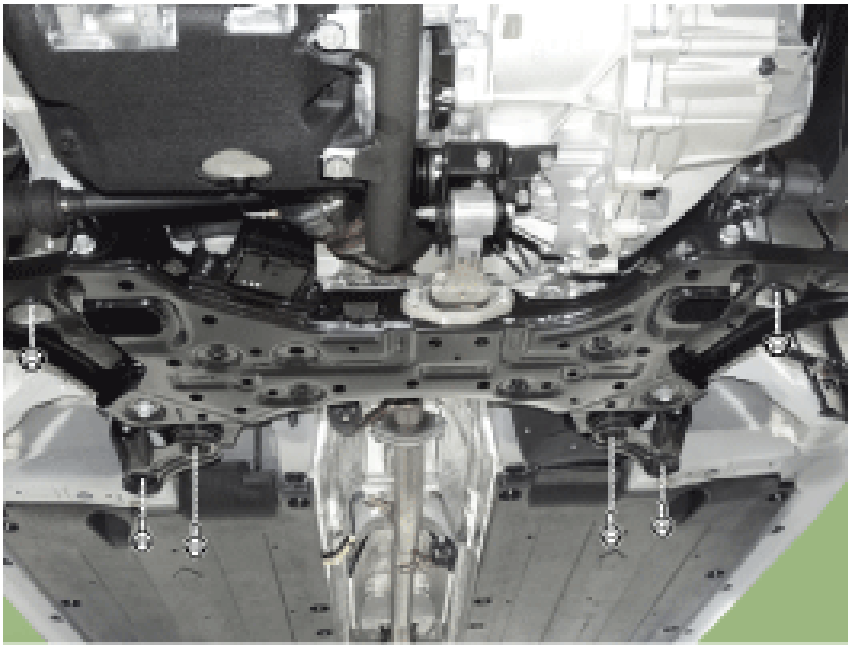
- Remove the roll rod stopper (A) by loosening the bolt and nut. Tightening torque : 107.9 - 127.5 N.m (11.0 - 13.0 kgf.m, 79.6 - 94.0 lb-ft)



- Remove the muffler rubber hanger (A).



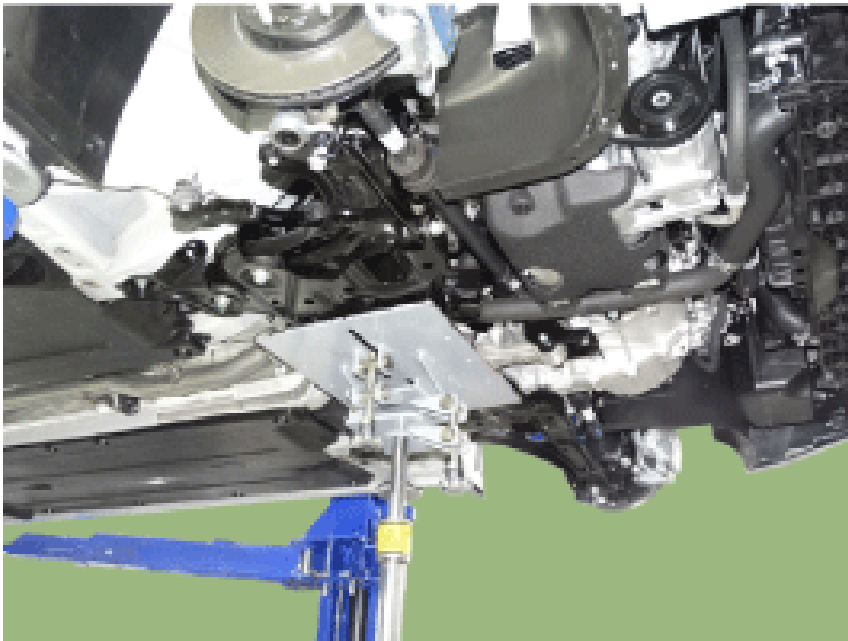
- Remove the subframe by loosening the mounting bolts and nuts. Tightening torque Sub frame mounting bolts and nut : 156.9 - 176.5 N.m (16.0 - 18.0 kgf.m, 115.7 - 130.2 b-ft) Sub frame stay mounting bolt : 44.1 - 53.9 N.m (4.5 - 5.5 kgf.m, 32.5 - 39.8 lb-ft) Set a transmission jack for safety.



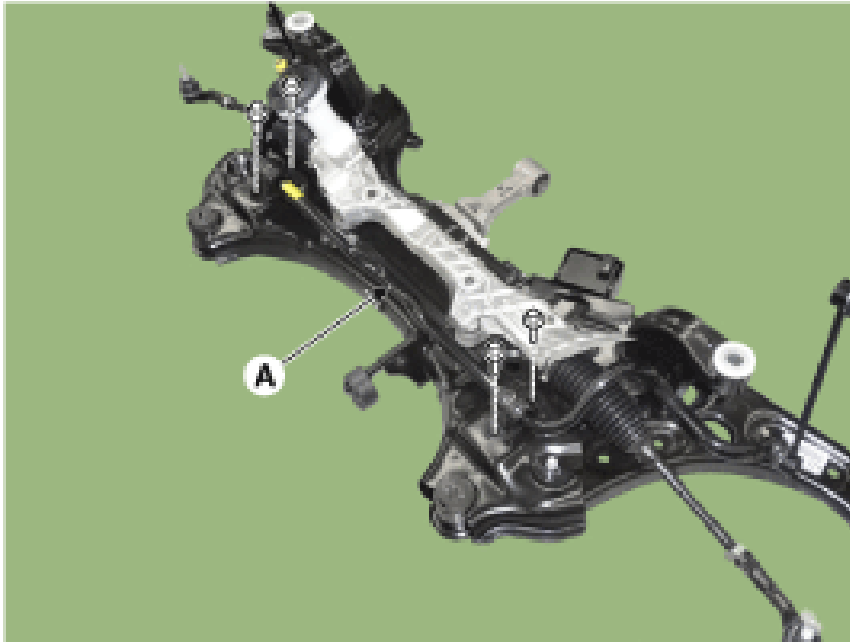
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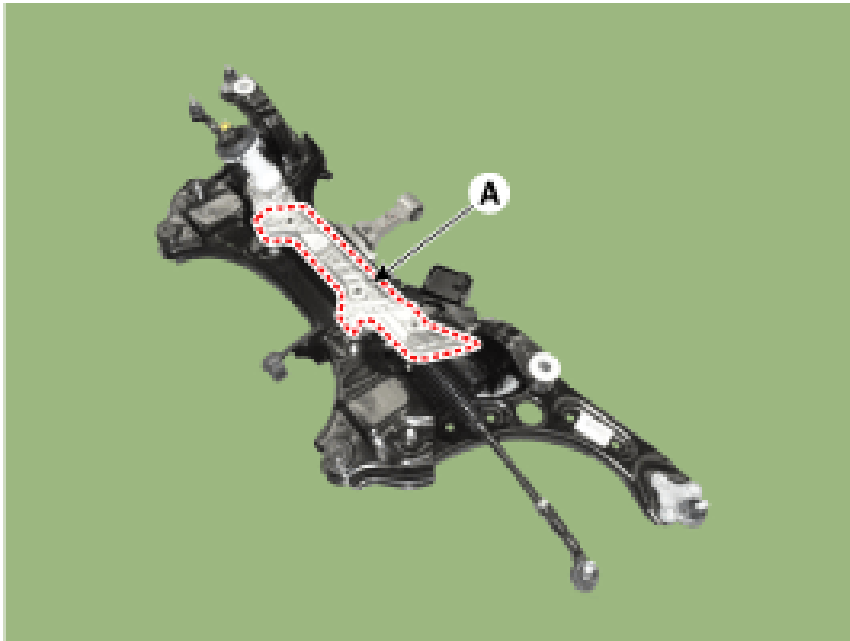
- Set a transmission jack for safety.



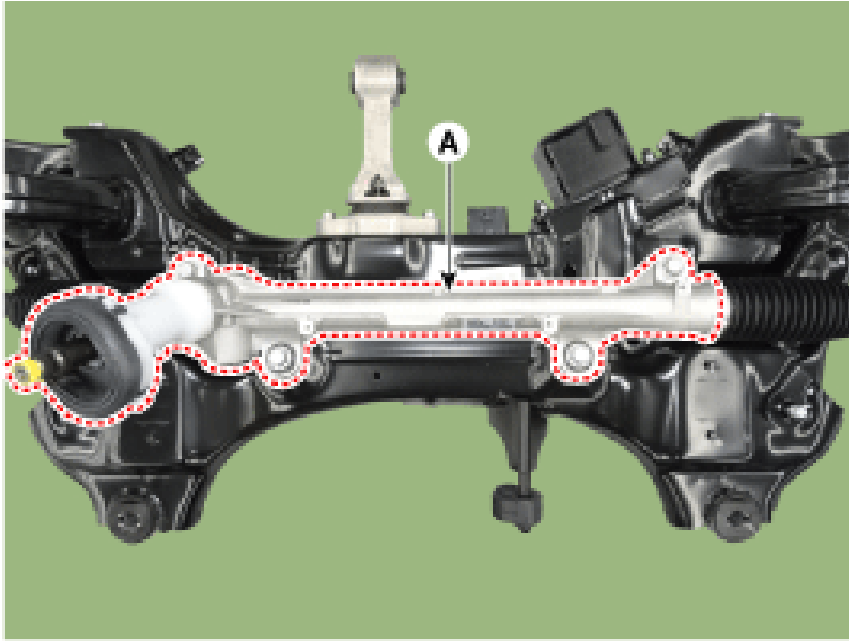
- Loosen the mounting bolts and then remove the stabilizer bar (A). Tightening torque : 44.1 - 53.9 N.m (4.5 - 5.5 kgf.m, 32.5 - 39.8 lb-ft)



- Remove the protector (A). Tightening torque : 6.9 - 10.8 N.m (0.7 - 1.1 kgf.m, 5.1 - 8.0 lb-ft)



- Remove the steering gearbox from the front sub frame by loosening the mounting bolts. Tightening torque : 88.2 - 107.8 N.m (9.0 - 11.0 kgf.m, 65.0 - 79.5 lb-ft)

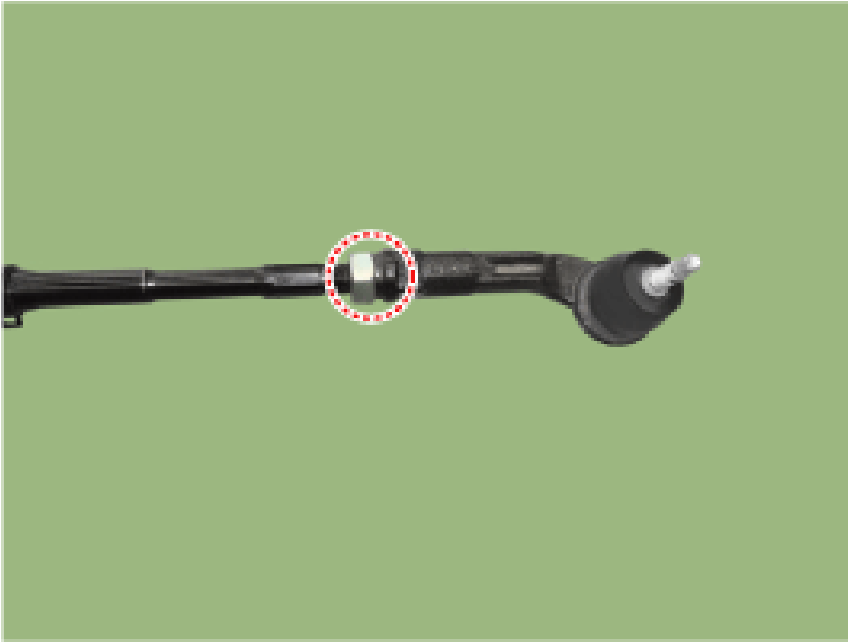


- Install in the reverse order of removal. Set the front tires straight-ahead before assembling the steering gear box. If the steering wheel and the front tires are not set straight ahead together, it may affect the number of circulation of steering wheel and damage the cable inside the clock spring.
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  - If the steering wheel and the front tires are not set straight ahead together, it may affect the number of circulation of steering wheel and damage the cable inside the clock spring.
  - Check the front alignment. (Refer to Suspension System - "Front Alignment")
  - Replacement
- Do not disassembly the steering gear box. If disassembly the steering gear box , the quality(Noise / cleanliness / functions) is not guaranteed.
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**Tie rod end**

- Remove the tie rod end after loosening the nut. Tightening torque : 49.0 - 53.9 N.m (5.0 - 5.5 kgf.m, 36.2 - 39.8 lb-ft) Before removing the tie rod end, note by measuring the length of the thread or marked with paint.



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- Before removing the tie rod end, note by measuring the length of the thread or marked with paint.
- Replace with new parts.
- Check the alignment. (Refer to Tires/ Wheels - "Alignment")