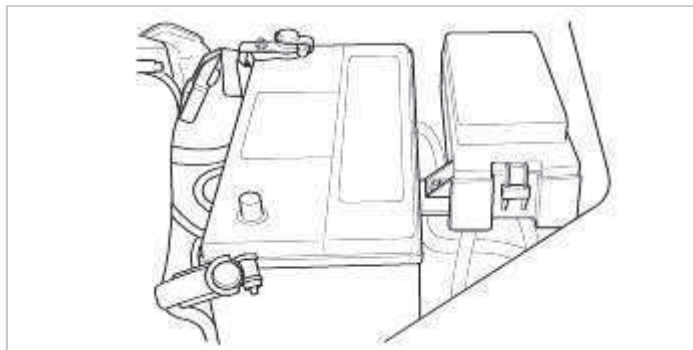
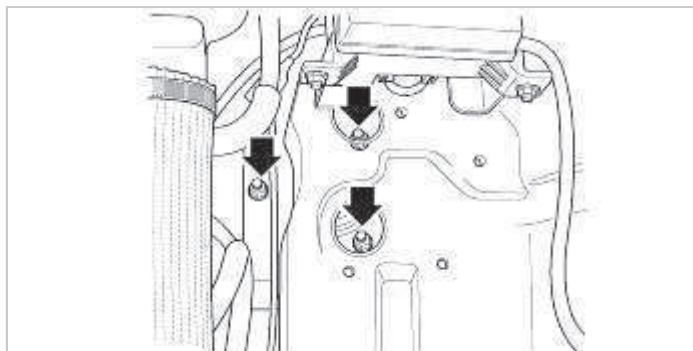


## REMOVAL

1. Loosen battery cable and mounting bolt and then remove battery.



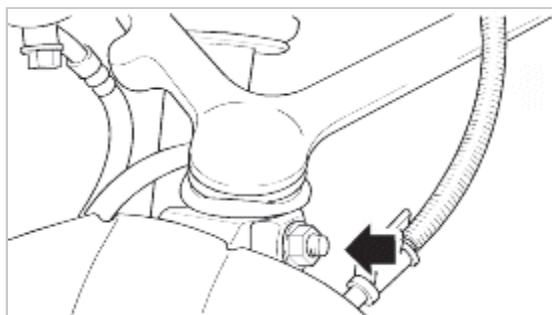
2. Remove three shock absorber mounting block nuts from the mounting block.



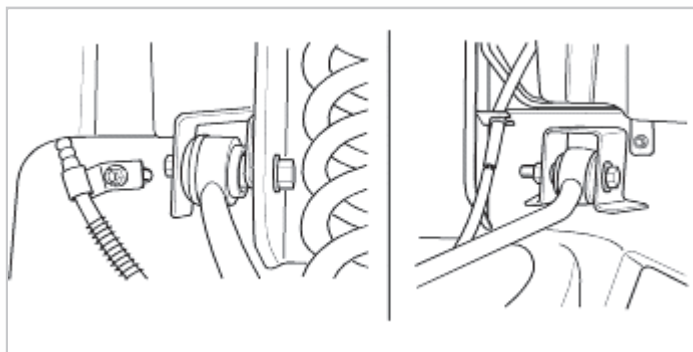
3. Raise the front of the vehicle and support it with safety stands.

4. Remove the front wheels.

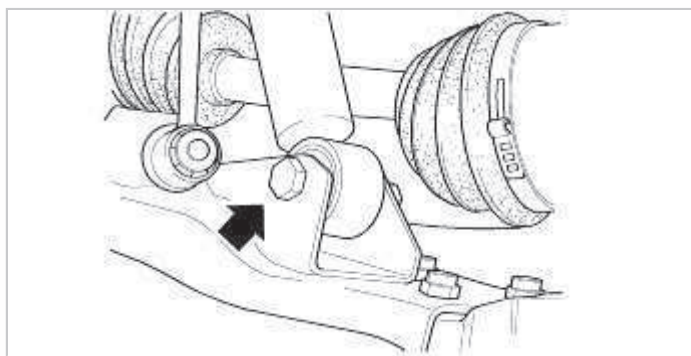
5. Remove the bolt on the steering knuckle side that secures the upper arm ball joint.



6. Remove the brake hose bracket and then the remove the upper arm bolts and nuts.



7. Remove the shock absorber lower nut.



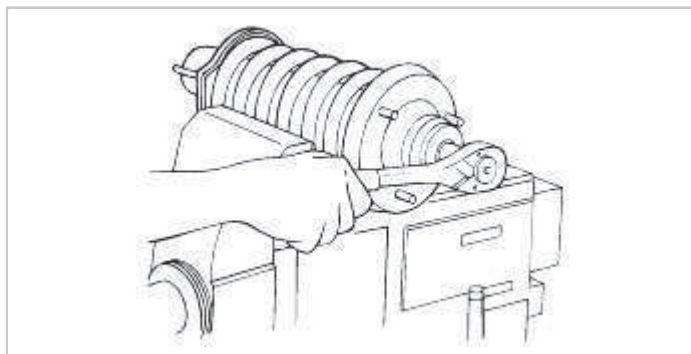
8. Remove the spring and shock absorber assembly from the vehicle as an assembly.

## DISASSEMBLY

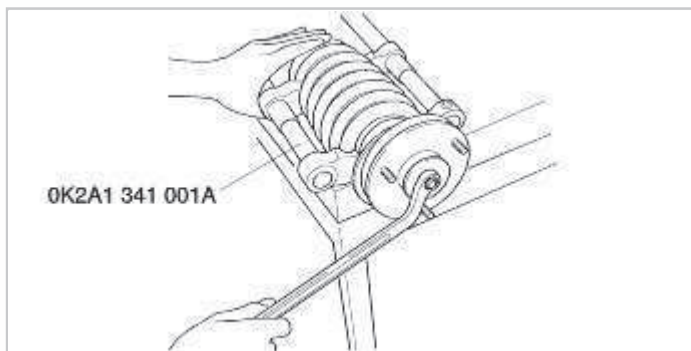
1. Secure the shock absorber in a suitable vise.
2. Loosen the piston rod nut several turns.

### NOTE

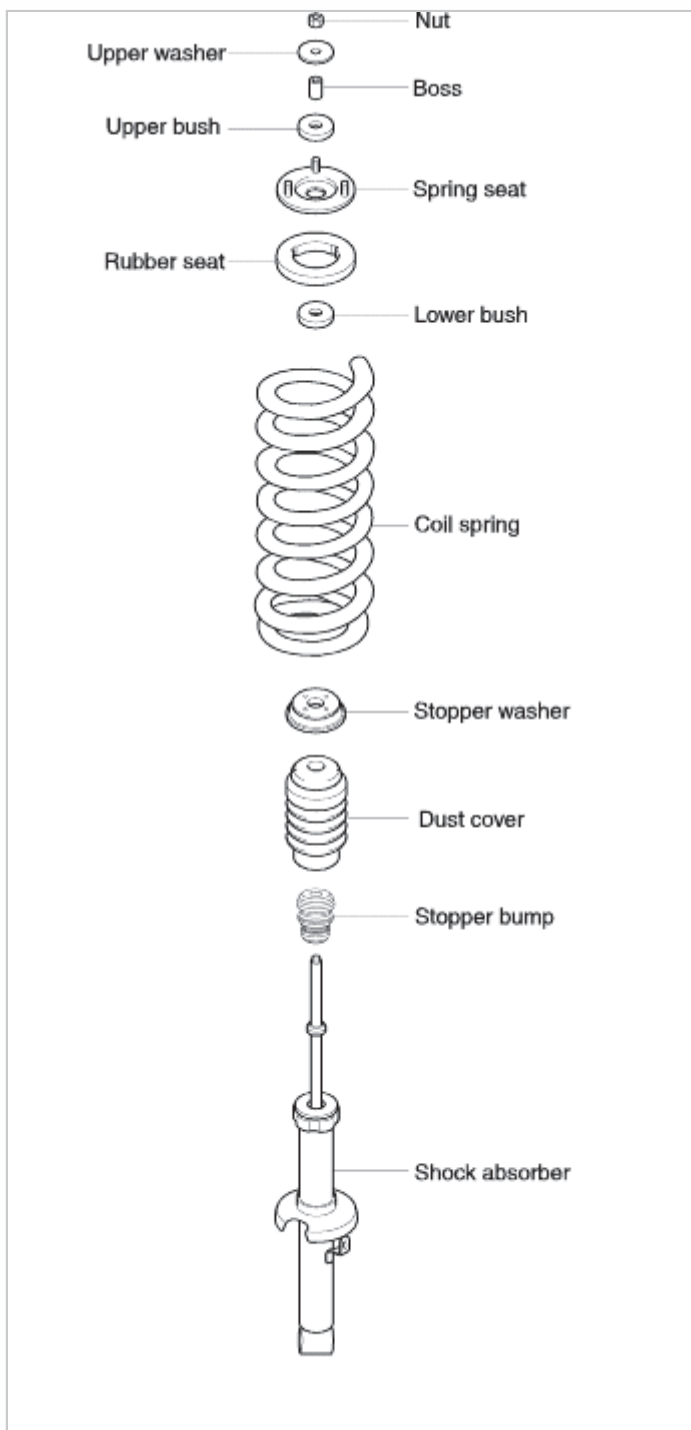
- Use copperplate in the jaws of the vise to protect the shock absorber bottom bracket.
- Remove the piston rod nut until coil spring is compressed and secured.



3. While still secured in a vise, compress the coil spring with SST.

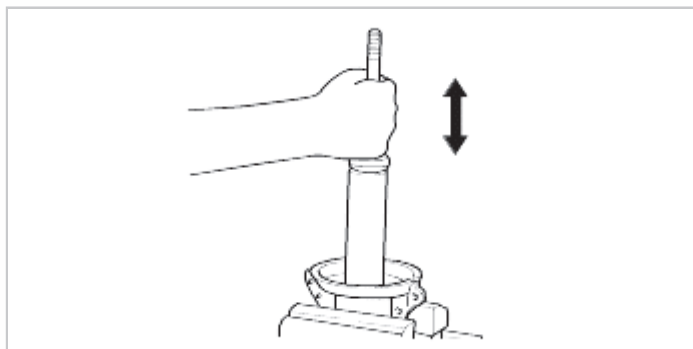


4. Remove the piston rod nut and each part as below.

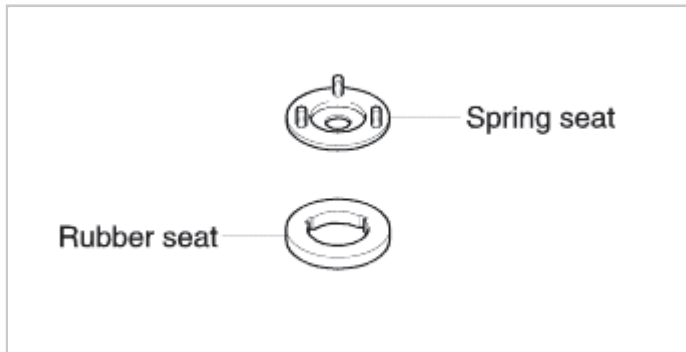


### INSPECTION/REBUILD

1. Secure a handle to the shock absorber piston rod and compress and lift the rod three times with a constant speed. Inspect for uniform working force and abnormal noise.

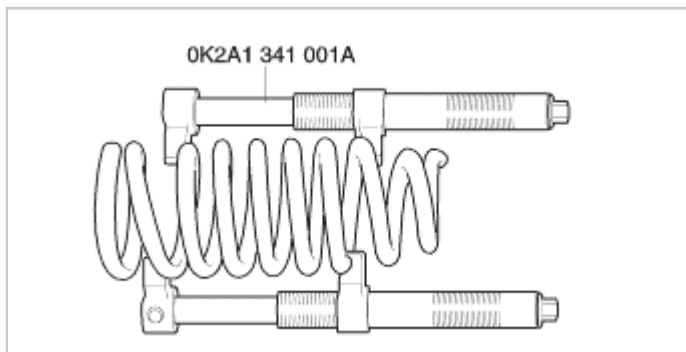


2. Inspect the entire shock absorber for signs of oil leakage; replace if required.
3. Inspect the coil spring for stress cracks and/or other damage.
4. Inspect for damage or deterioration of the upper and lower bushes.
5. Inspect for damage or tearing of the spring seat and rubber seat.



## REASSEMBLY

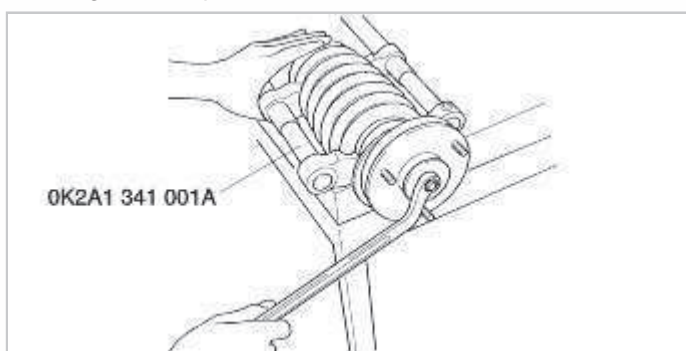
1. Secure the bottom portion of the shock absorber in a vise and compress the coil spring with SST.



### NOTE

Use copperplate in the jaws of the vise to protect the shock absorber bottom bracket.

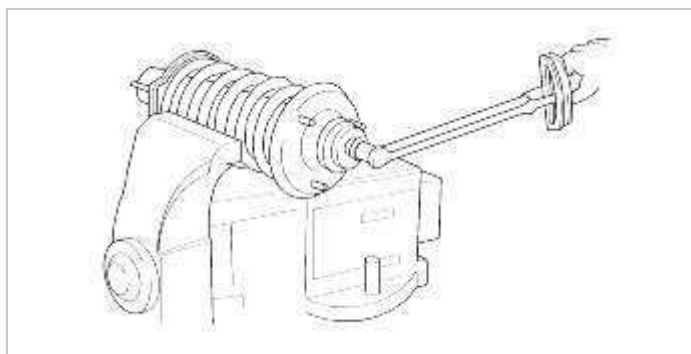
2. Set the end of the coil spring to the rubber seat and install the coil spring.
3. Assemble stopper bump, dust cover, stopper washer, lower bush, rubber seat, spring seat, boss, upper bush and upper washer in sequence.
4. Hand tighten the piston rod nut.



5. Carefully loosen the coil spring compressor and remove it.
6. With the bottom bracket of the shock absorber still in the vice, tighten the piston rod nut.

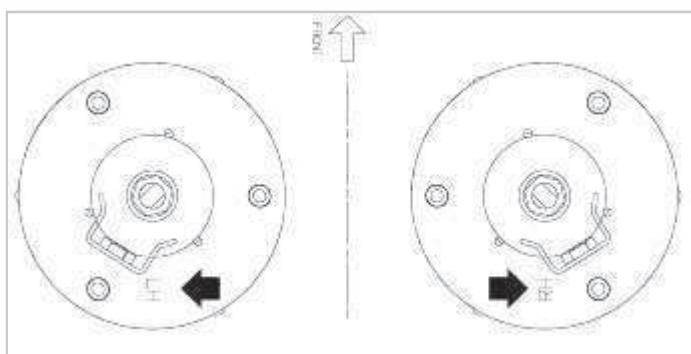
Tightening torque:

76-95 N·m (7.6-9.5 kg·m, 54-68 lb·ft).



## INSTALLATION

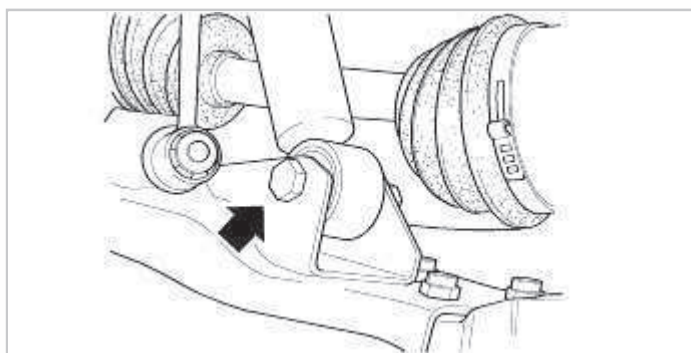
1. After making sure identification mark on the spring seat. Position the spring and shock absorber assembly into the upper mounting block.



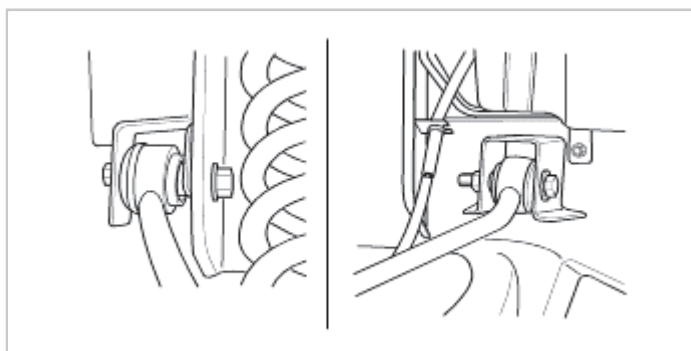
2. Install the mounting block nuts by 3-4 threads only.
3. Insure the front of the vehicle is raised and supported with safety stands.
4. Tighten the lower nut of the shock absorber.

Tightening torque:

122-140 N·m (12.2-14 kg·m, 88-101 lb·ft).



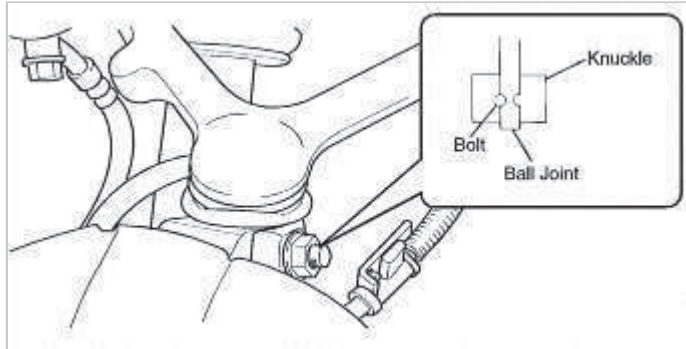
5. Position the upper arm to the frame brackets, insert the bolts and hand tighten the nuts.



6. Install the upper arm ball joint into the top of the steering knuckle and tighten the side bolt and nut.

Tightening torque:

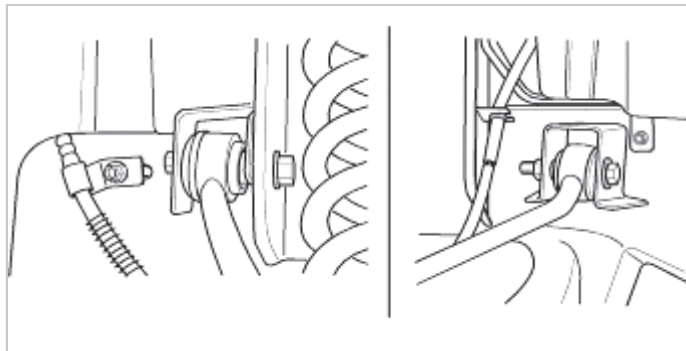
44-55 N·m (4.4-5.5 kg·m, 31-39 lb·ft).



7. Tighten the upper arm bolts and nuts and then install brake hose brackets.

Tightening ;torque:

76-95 N·m (7.6-9.5 kg·m, 54-68 lb·ft).



8. Install the wheels and secure with lock nuts.

Tightening torque:

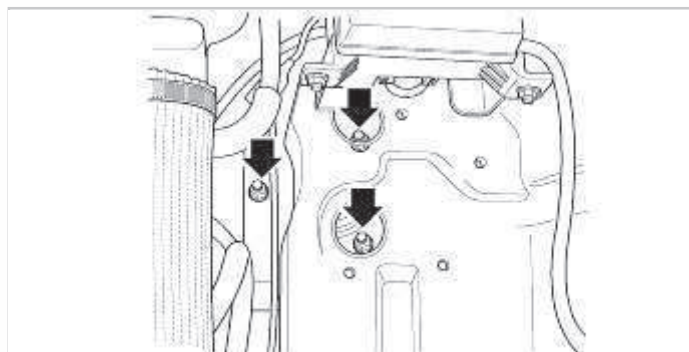
90-120 N·m (9-12 kg·m, 65-86 lb·ft).

9. Lower the vehicle.

10. Tighten the mounting block nut.

Tightening torque:

44-55 N·m (4.4-5.5 kg·m, 31-39 lb·ft).



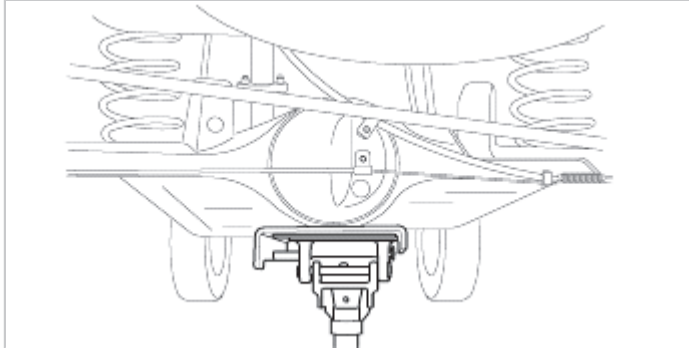
11. Install the battery mounting bracket and the battery.

12. After installing the front shock absorber and coil spring assembly, measure the wheel alignment and adjust if

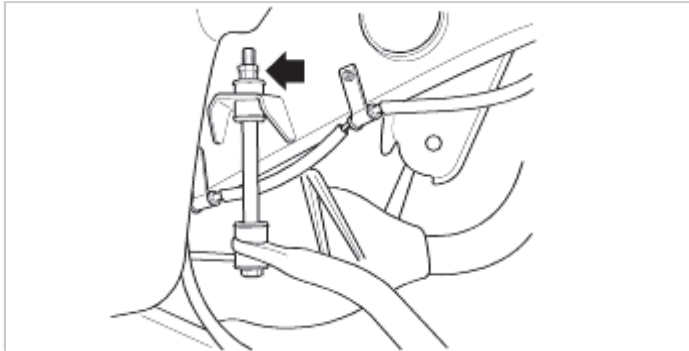
necessary.

## REMOVAL

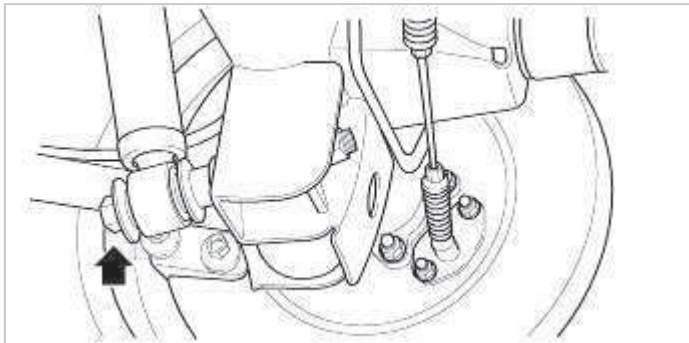
1. Raise the rear of the vehicle and support it with safety stands.
2. Remove the rear wheels.
3. Raise the rear axle housing to facilitate removal of the shock absorbers.



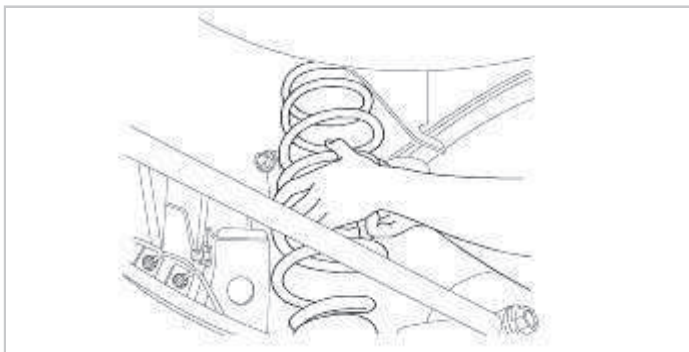
4. Remove stabilizer link upper mounting nut.



5. Remove the rear shock absorber lower nut and washer.



6. Remove the shock absorber upper bolt, and then remove the shock absorber.
7. Lower the rear axle housing slowly to facilitate removal of the coil spring.

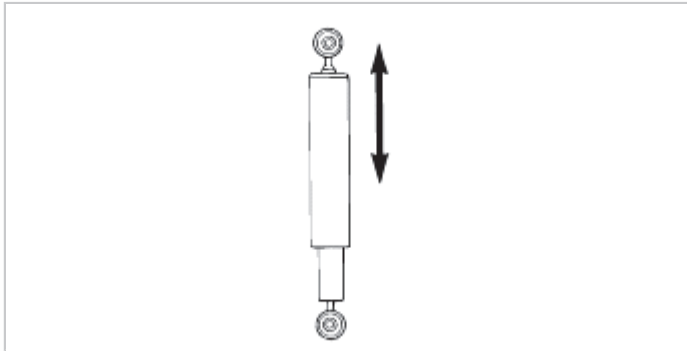


8. Remove the upper rubber seat.

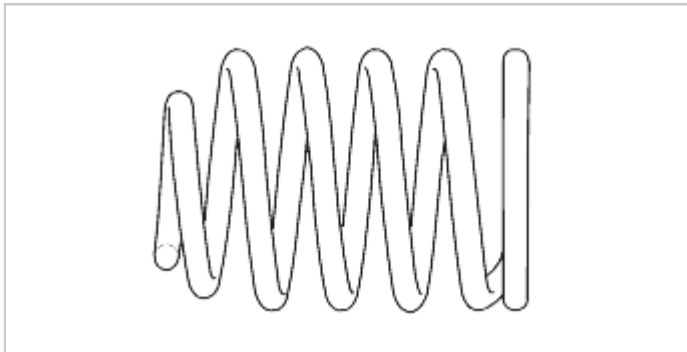


## INSPECTION

1. Compress and expand the shock absorber three to four times and analyze for uniform working force and abnormal noise.
2. Inspect for gas leakage.



3. Inspect the shock absorber for a worn or deteriorated rubber bushing.
4. Replace the rear shock absorber assembly if a problem is found.
5. Inspect the rear coil spring for bends, cracks or other damage.



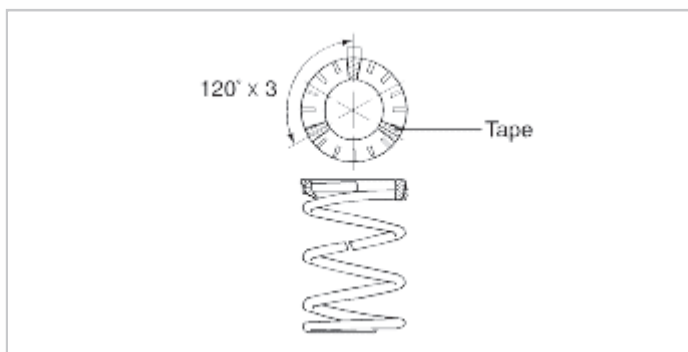
6. Inspect the upper rubber seats for tears and/or deterioration.
7. Inspect the rear jounce stop for damage and/or deterioration.
8. Replace if damaged, deformed or cracked; replace bushings if worn or deteriorated.

## INSTALLATION

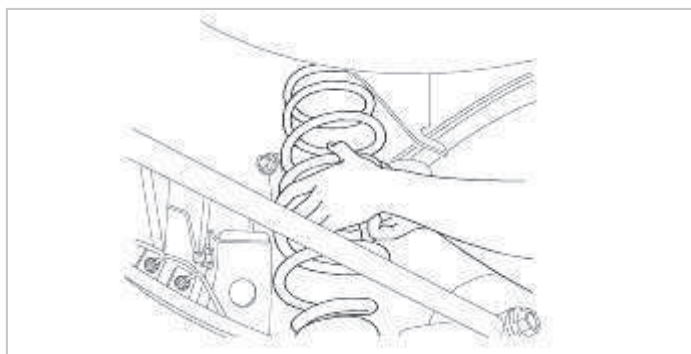
1. Position the upper rubber seat to the coil spring.

### CAUTION

Align the spring end with the groove of the spring pad and fix the spring and the spring pad by adhering the 3 parts with tape.



2. Slowly raise the rear axle housing while installing the coil spring.



3. Install the shock absorber upper nut.

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Tightening torque:  
122-140 N·m (12.2-14 kg·m, 88-101 lb·ft).

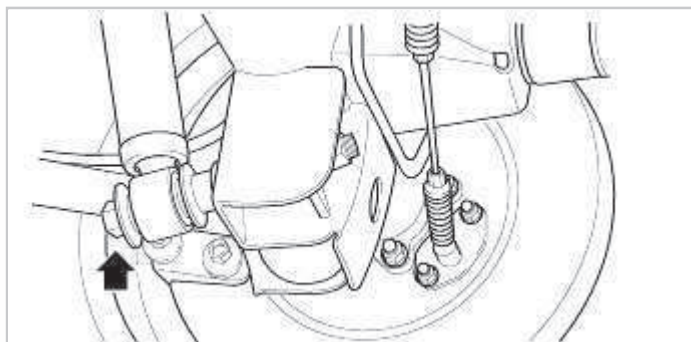
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4. Install the shock absorber lower bolt.

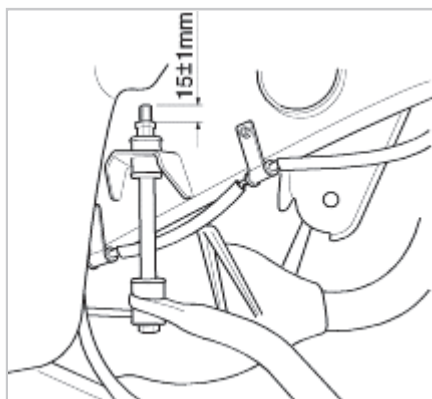
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Tightening torque:  
122-140 N·m (12.2-14 kg·m, 88-101 lb·ft).

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5. Install the stabilizer link upper mounting nut to the specified length.



6. Install the wheels and secure with lug nuts.

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Tightening torque:  
90-120 N·m (9-12 kg·m, 65-86 lb·ft).

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7. Remove the safety stands and lower the vehicle.