

Steering Gear Replacement (Electronic Power Steering) Special Tools

[J 24319-B](#) Steering Linkage and Tie Rod Puller

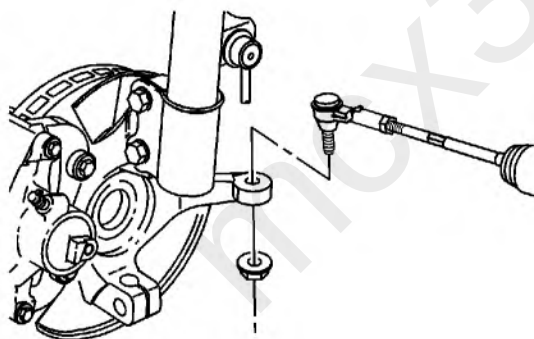
Removal Procedure

Caution: Secure the steering wheel utilizing a strap to prevent rotation. Locking of the steering column will prevent damage and a possible malfunction of the SIR system. The steering wheel must be secured in position before disconnecting the following components:

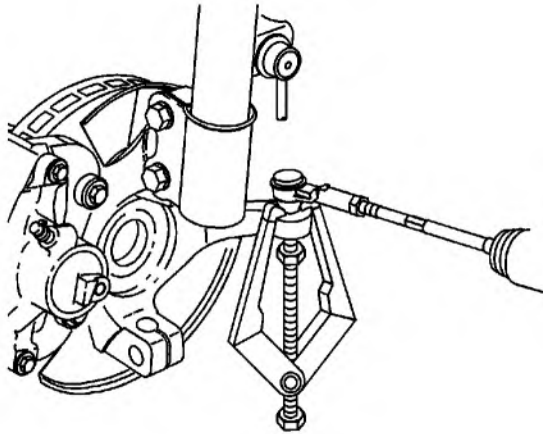
- The steering column
- The intermediate shaft
- The steering gear

After disconnecting these components, do not move the front tires and wheels. Failure to follow these procedures may cause improper alignment of some components during installation and result in possible damage to the SIR coil.

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the front tires. Refer to [Tire and Wheel Removal and Installation](#).



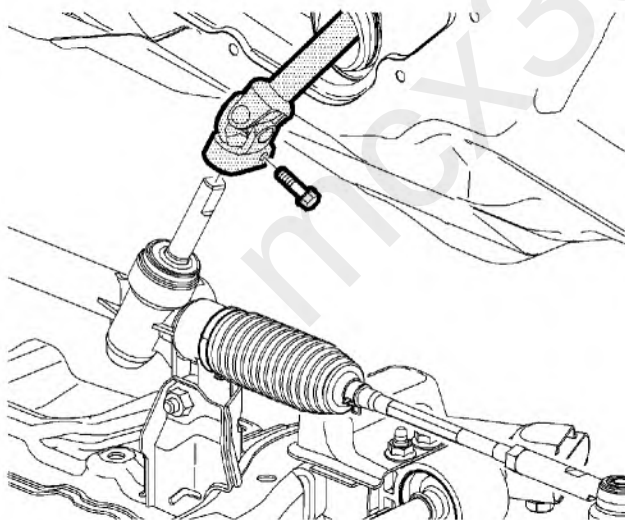
3. Remove both outer tie rod to steering knuckle nuts. Discard the nuts.



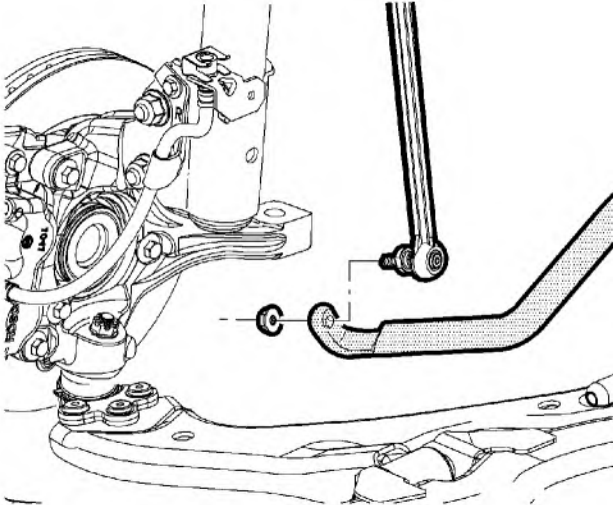
Caution: Do not free the ball stud by using a pickle fork or a wedge-type tool. Damage to the seal or bushing may result.

Note: Hold the ball stud to prevent turning during removal of the nut.

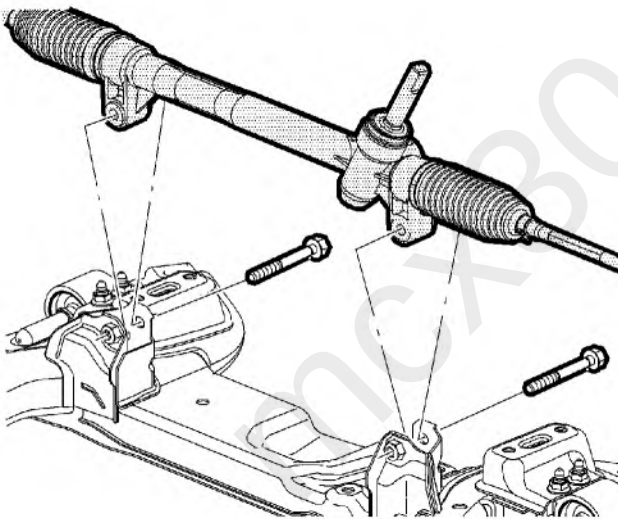
4. Using the [J 24319-B](#) , separate the tie rods from the steering knuckles.



5. Rotate the intermediate steering shaft in order to gain access to the intermediate shaft pinch bolt.
6. Remove the intermediate to steering gear pinch bolt. Discard the bolt.
7. Disconnect the intermediate shaft from the steering gear.



8. Disconnect the stabilizer links from the stabilizer bar. Refer to [Stabilizer Shaft Link Replacement](#).



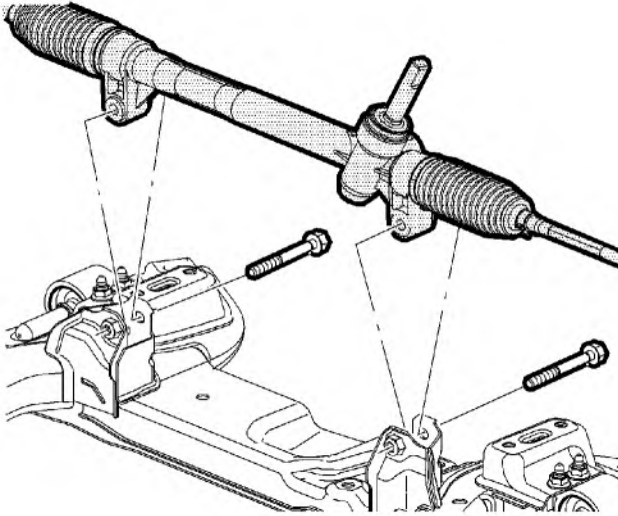
9. Remove the steering gear to cradle mounting bolts.
10. Remove the steering gear through the right side of the vehicle.
11. With heat shield equipped steering gears, remove the heat shield. Save for installation.

Installation Procedure

1. If applicable, install the heat shield.

Note: Ensure the stabilizer is swung in the upmost position for gear clearance.

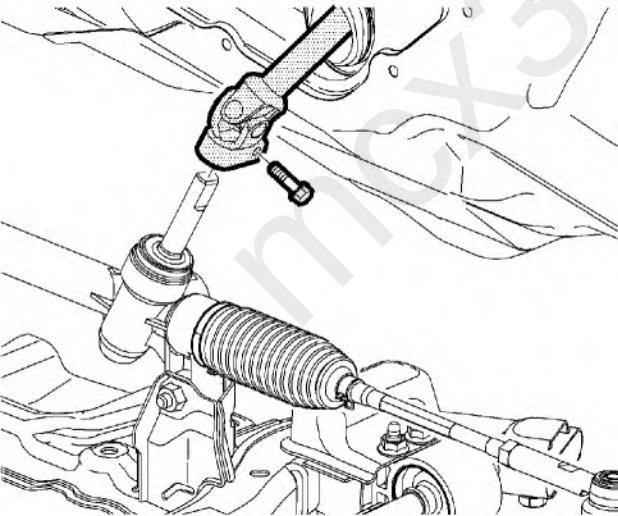
2. Install the steering gear from the right side of the vehicle.



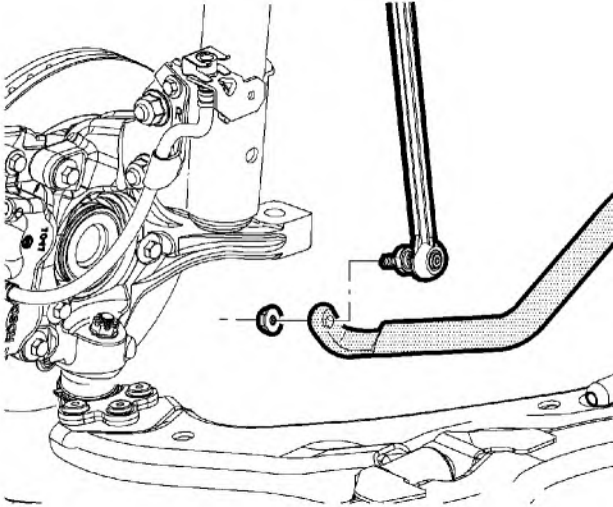
3. Center the gear mounting bushings into the cradle supports.

Caution: Refer to [Fastener Caution](#) in the Preface section.

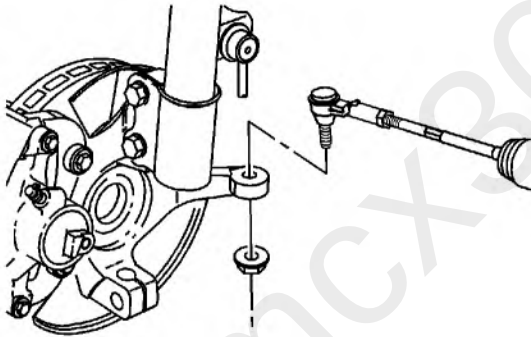
4. Hand start both steering gear to cradle mounting bolts and tighten the bolts to **110 N·m (81 lb ft)**.



5. Connect the intermediate shaft to the steering gear and install a new pinch bolt. Tighten the bolt to **34 N·m (25 lb ft)**.



6. Connect the stabilizer links to the stabilizer bar. Refer to [Stabilizer Shaft Link Replacement](#).



Note: Hold the ball stud to prevent turning during installation of the nut.

7. Connect the tie rod to the knuckle and install a new nut. Tighten the nut to **25 N·m (18 lb ft) plus 90 degrees**.
8. Install the front tires and wheels. Refer to [Tire and Wheel Removal and Installation](#).
9. Check the front wheel alignment and align as necessary. Refer to [Wheel Alignment Measurement](#).
10. Lower the vehicle.