

Intermediate Steering Shaft Replacement

Removal Procedure

Notice: With wheels of the vehicle facing straight ahead, secure the steering wheel utilizing steering column anti-rotation pin, steering column lock, or 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:

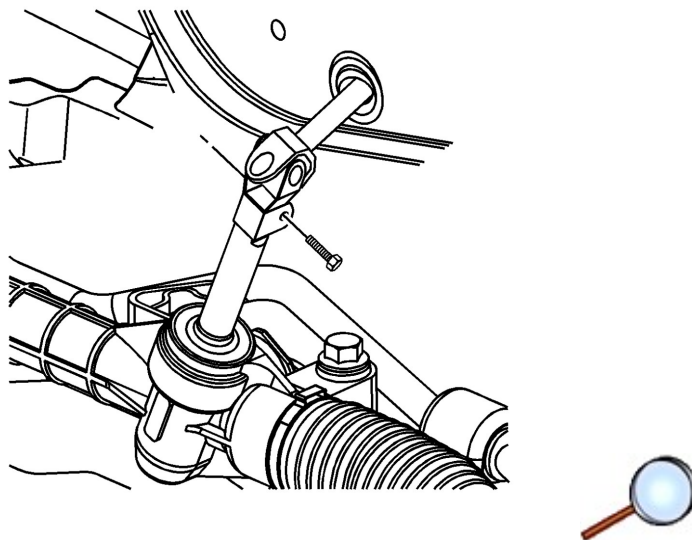
- The steering column
- The intermediate shaft(s)
- The steering gear

After disconnecting these components, do not rotate the steering wheel or move the front tires and wheels. Failure to follow this procedure may cause the SIR coil assembly to become un-centered and cause possible damage to the SIR coil. If you think the SIR coil has become un-centered, refer to your specific SIR coil's centering procedure to re-center SIR Coil.

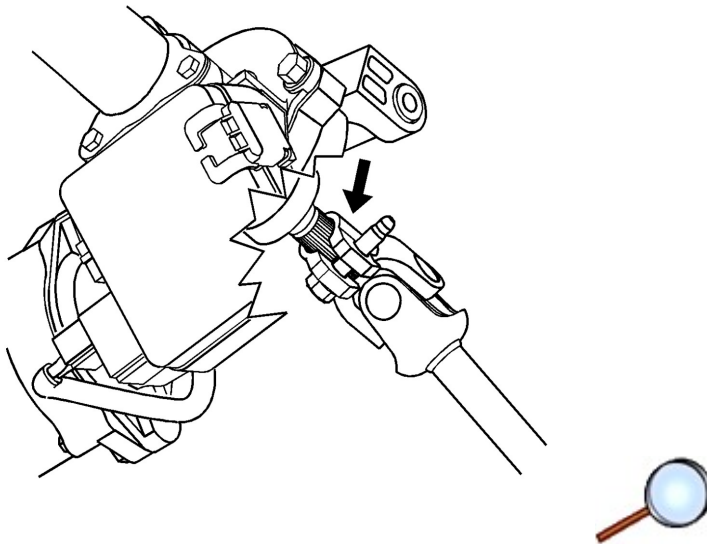
1. Place the steering wheel in the straight ahead position. Lock the steering column.
2. Remove the left front tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).

Important: Match marks are necessary for proper alignment of the intermediate steering shaft.

3. Use paint in order to place match marks on the intermediate steering shaft and on the steering gear pinion shaft.

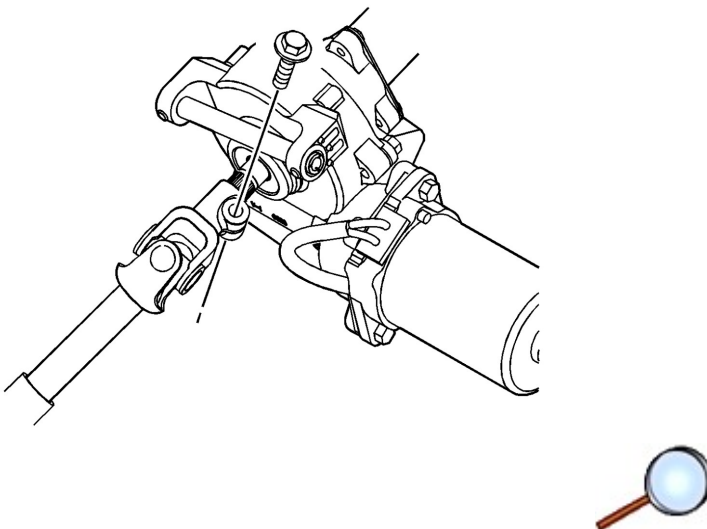


4. Remove the intermediate steering shaft bolt at the steering gear.
5. Disconnect the intermediate steering shaft from the steering gear.



6. Use paint in order to place match marks on the following components:

- The intermediate steering shaft
- The steering column shaft
- The steering column housing



7. Remove the intermediate steering shaft bolt at the steering column.
8. Disconnect the intermediate steering shaft from the steering column shaft.
9. Unseat the intermediate steering shaft seal from the body pass-through.
10. Remove the intermediate steering shaft and seal assembly from the vehicle.

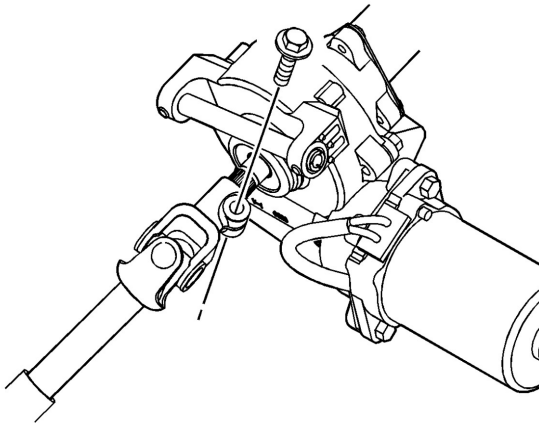
Installation Procedure

1. If you are not replacing the intermediate steering shaft bolts, perform the following procedure on each of the bolts:
 - 1.1. Remove all traces of the original adhesive patch.
 - 1.2. Clean the threads of the bolt with denatured alcohol, or equivalent, and allow to dry.
 - 1.3. Apply threadlocker GM P/N 12345493 (Canadian P/N 10953488) or blue, medium LOCTITE™ 242.

Important: Failure to transfer the match marks may result in an off-center steering wheel.

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2. If you are installing a new intermediate steering shaft, transfer the match marks from the old shaft to the new shaft.
3. Position the intermediate steering shaft and seal assembly in the vehicle.
4. Seat the intermediate steering shaft seal to the body pass-through.
5. Inspect the intermediate steering shaft seal from the engine compartment. Ensure the seal is seated properly.
6. Align the match marks on the following components:
 - The intermediate steering shaft
 - The steering column shaft
 - The steering column housing



7. Connect the intermediate steering shaft to the steering column.

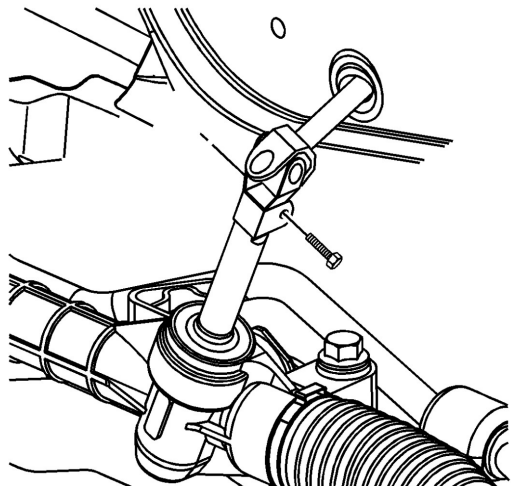
Notice: Refer to [Fastener Notice](#).

8. Install the intermediate steering shaft bolt.

Tighten

Tighten the bolt to 34 N•m (25 lb ft).

9. Align the match marks on the intermediate steering shaft and on the steering gear pinion shaft.



10. Connect the intermediate steering shaft to the steering gear.

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11. Install the intermediate steering shaft bolt.

Tighten

Tighten Tighten the bolt to 34 N•m (25 lb ft).

12. Install the left front tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).

13. If equipped with RPO JL4, calibrate the steering angle sensor. Refer to [Control Module References](#).