

Steering Gear

Base Part Number: Base Part Number: 3D080

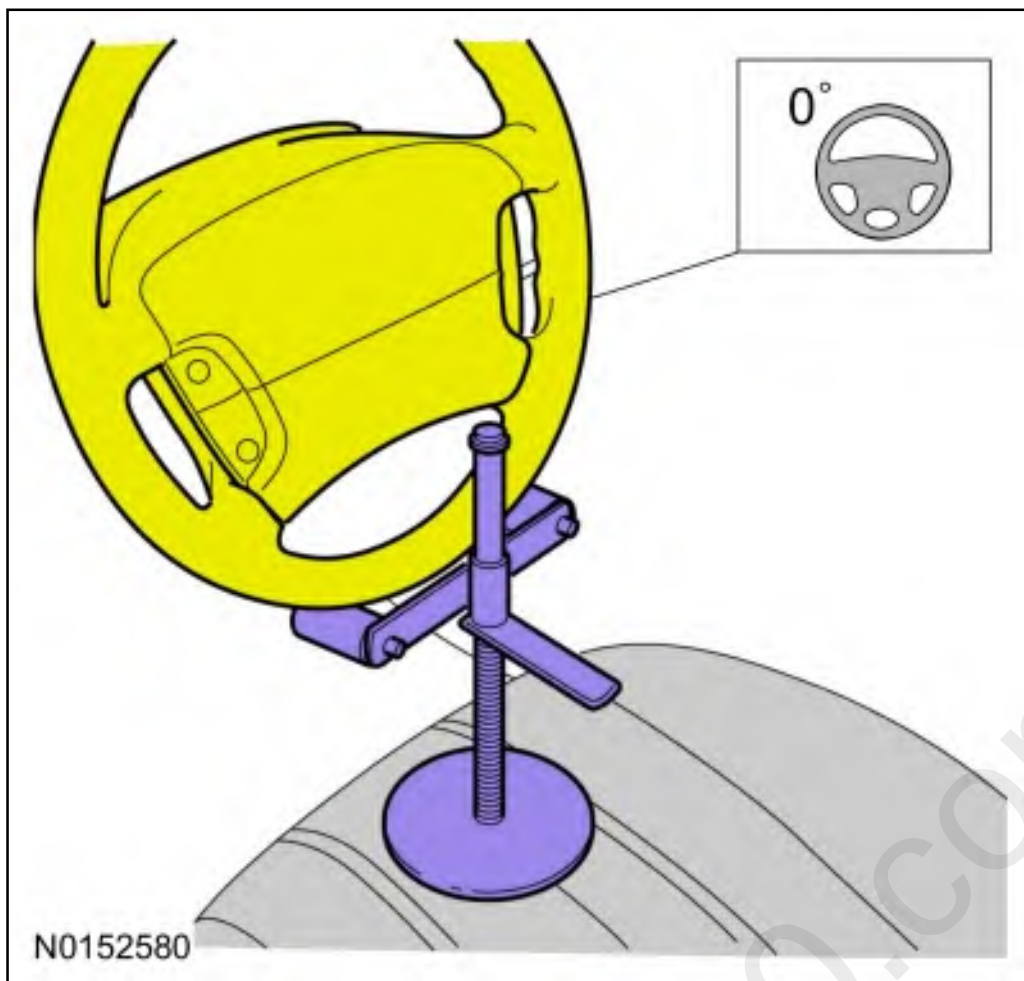
Special Tool(s) / General Equipment

Tie Rod End Remover

Removal

NOTICE: Disconnect the battery ground cable anytime the steering linkage is being serviced or damage to the steering gear may occur resulting in steering gear replacement.

1. If installing a new steering gear, connect the scan tool and upload the module configuration information from the PSCM.
Refer to: [Module Configuration - System Operation and Component Description](#) (418-01 Module Configuration, Description and Operation).
2. Disconnect the battery ground cable.
Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).
3. Using a holding device, hold the steering wheel in the straight-ahead position.



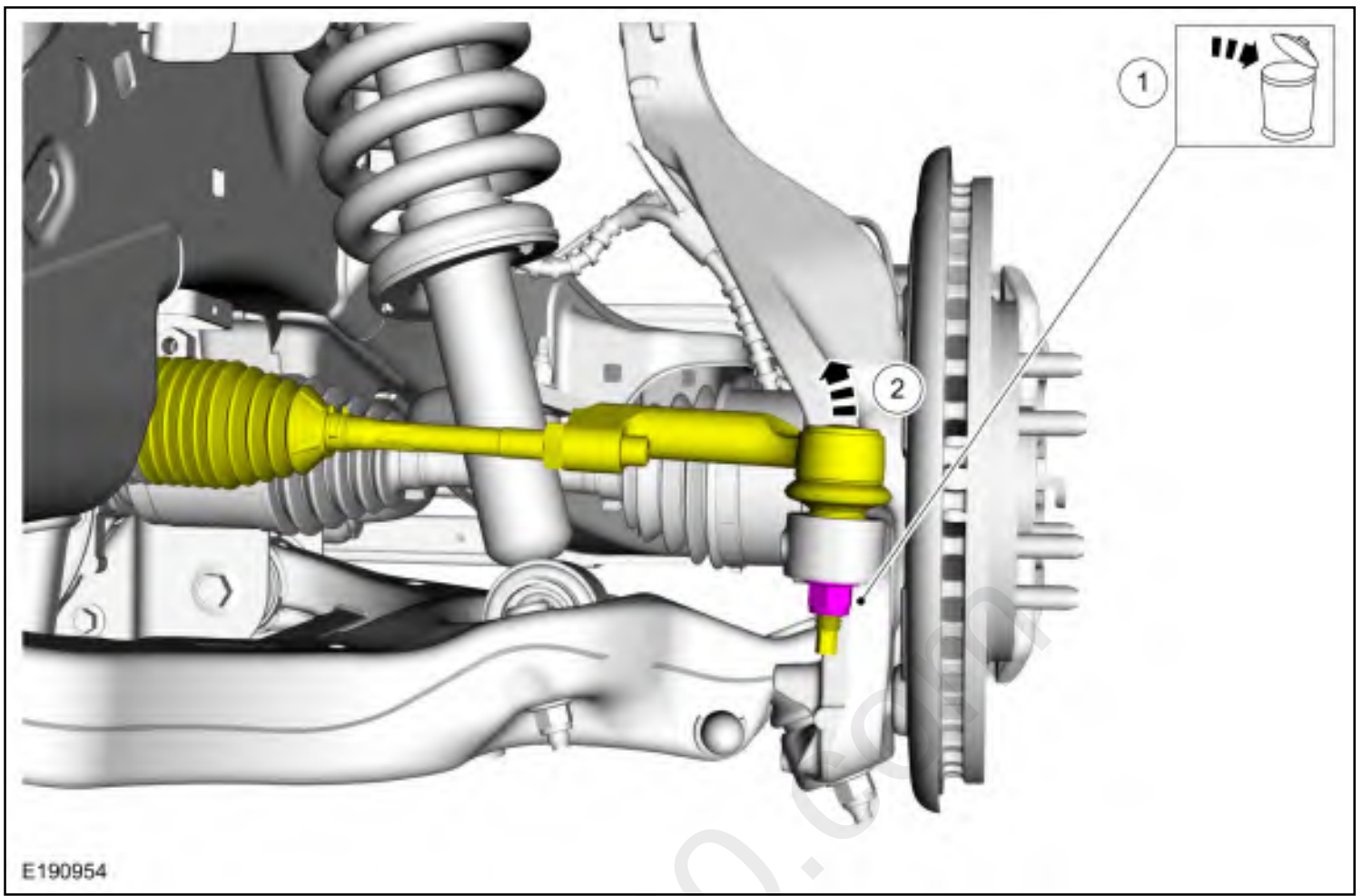
4. Remove the wheel and tire.

Refer to: [Wheel and Tire](#) (204-04A Wheels and Tires, Removal and Installation).

1. Remove and discard the outer tie rod end nut.
2. **NOTICE: Do not use a hammer to separate the outer tie-rod end from the wheel knuckle or damage to the wheel knuckle may result.**

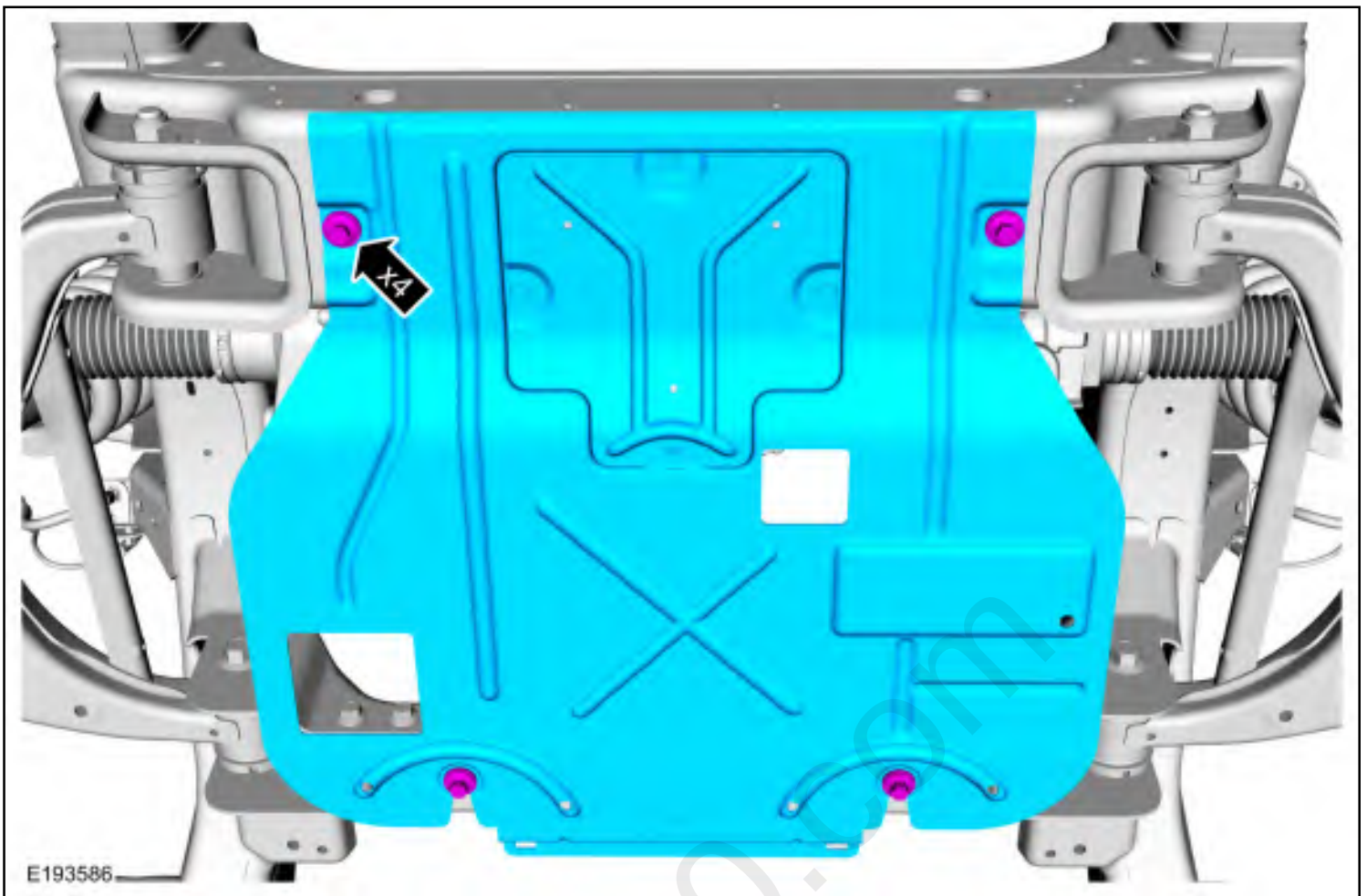
NOTICE: Use care when installing the tie rod separator or damage to the outer tie-rod end boot may occur.

Separate the outer tie rod end from the wheel knuckle.
Use the General Equipment: Tie Rod End Remover



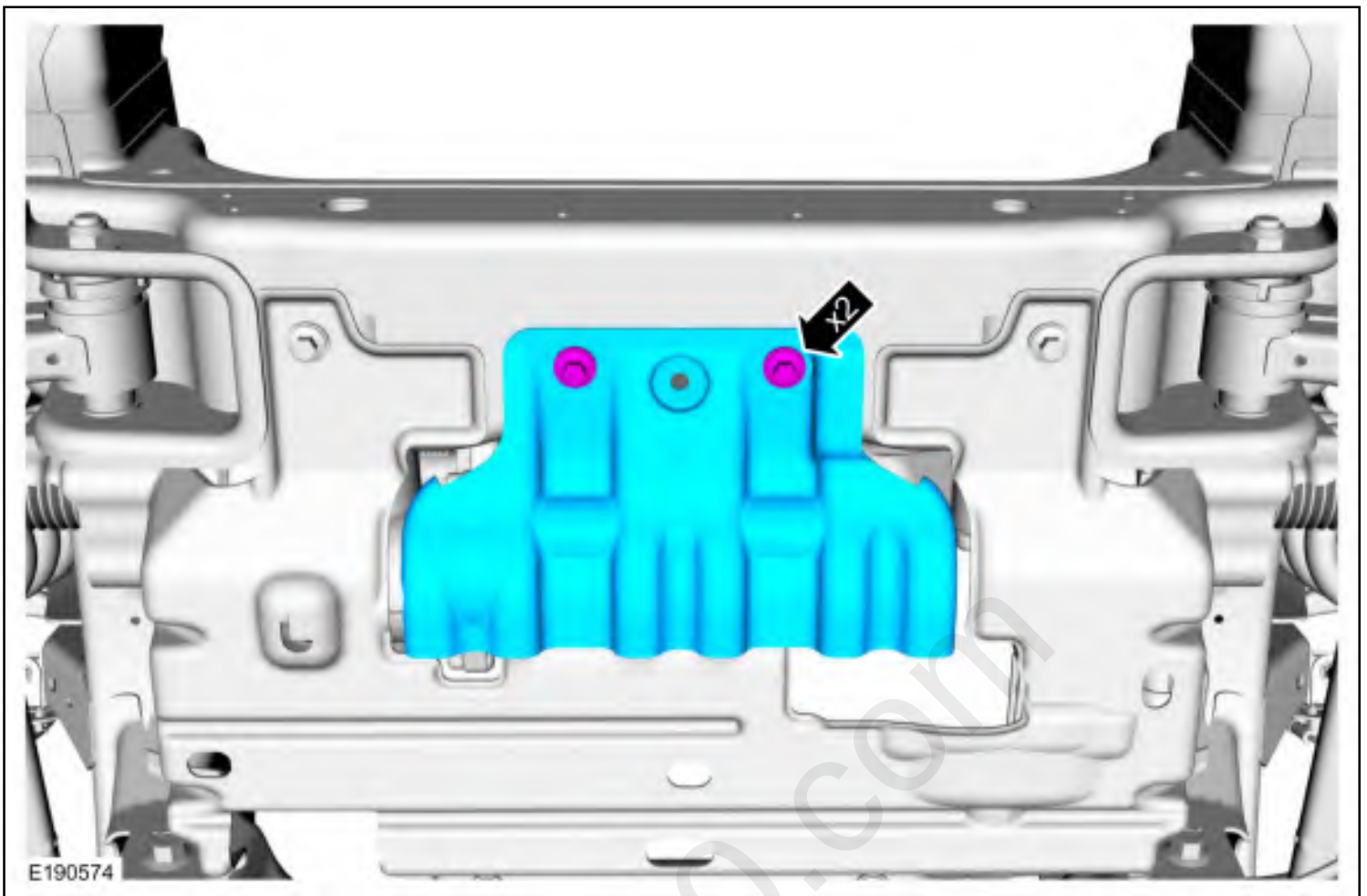
6. **NOTE:** *If equipped.*

Remove the 4 underbody shield bolts and remove the underbody shield.



7. **NOTE:** *If equipped.*

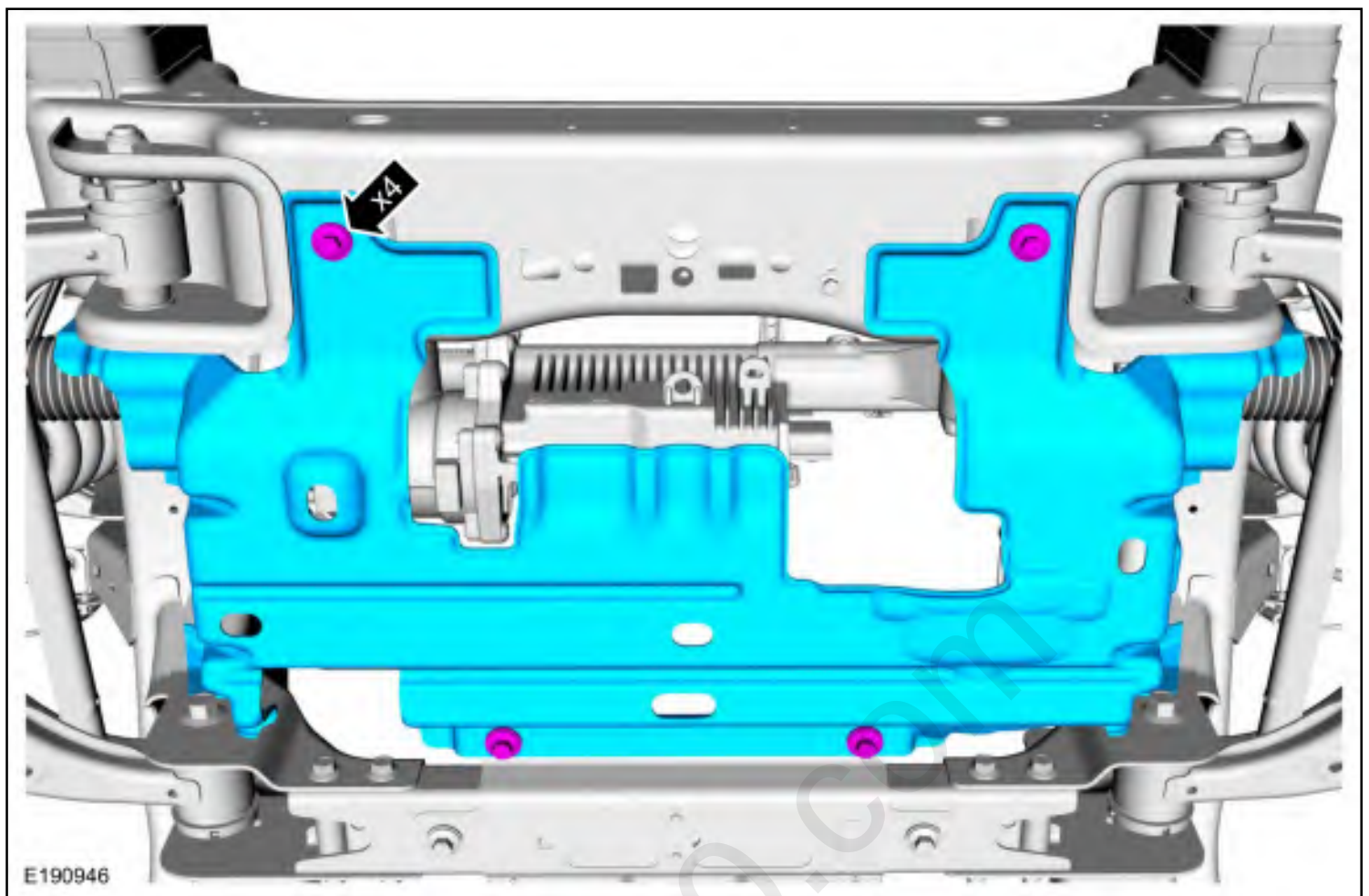
Remove the 2 underbody shield bolts and remove the underbody shield.



8. **NOTE:** *If equipped.*

NOTE: *4WD shown, RWD similar.*

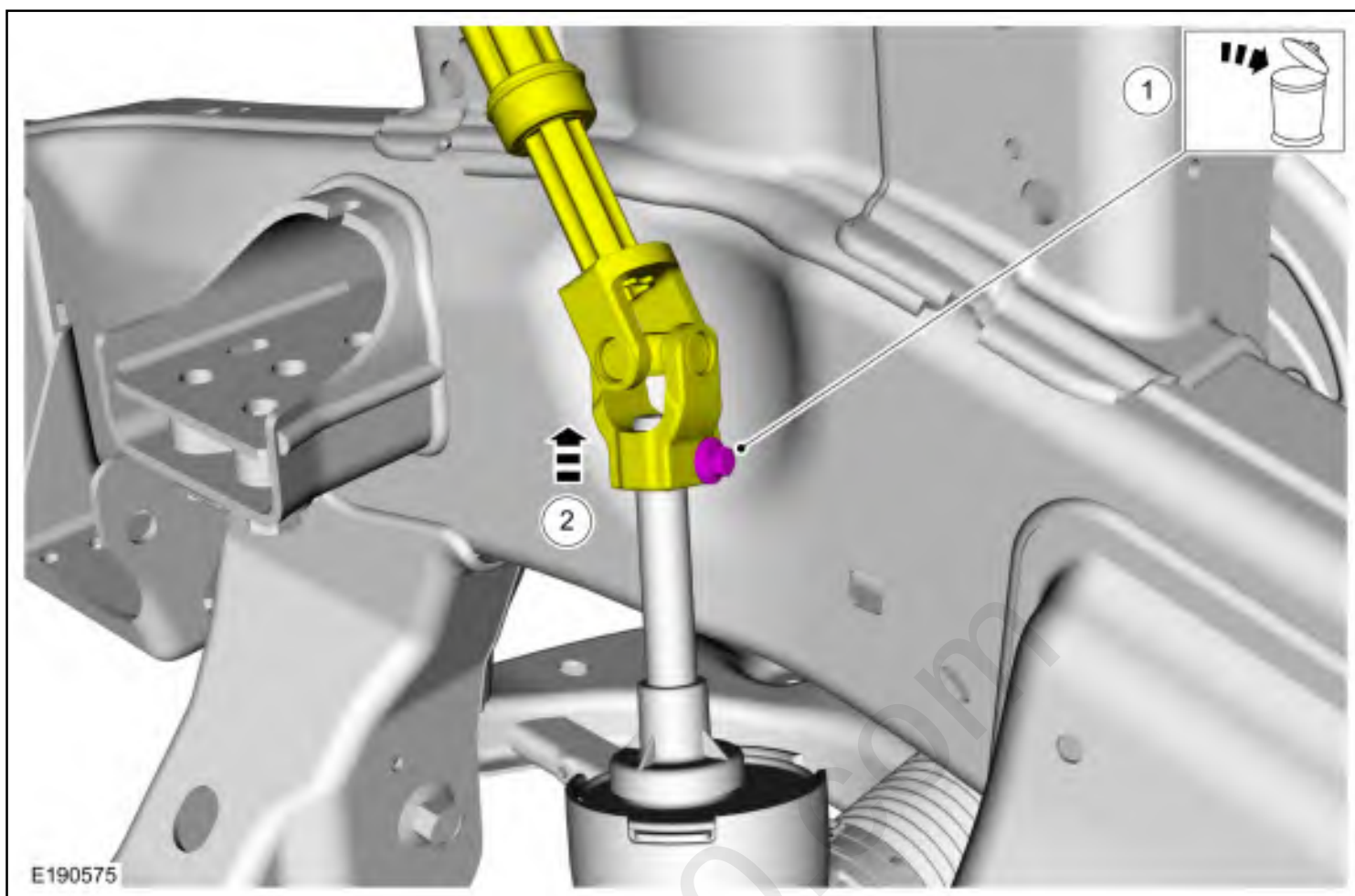
Remove the underbody shield bolts and the underbody shield.



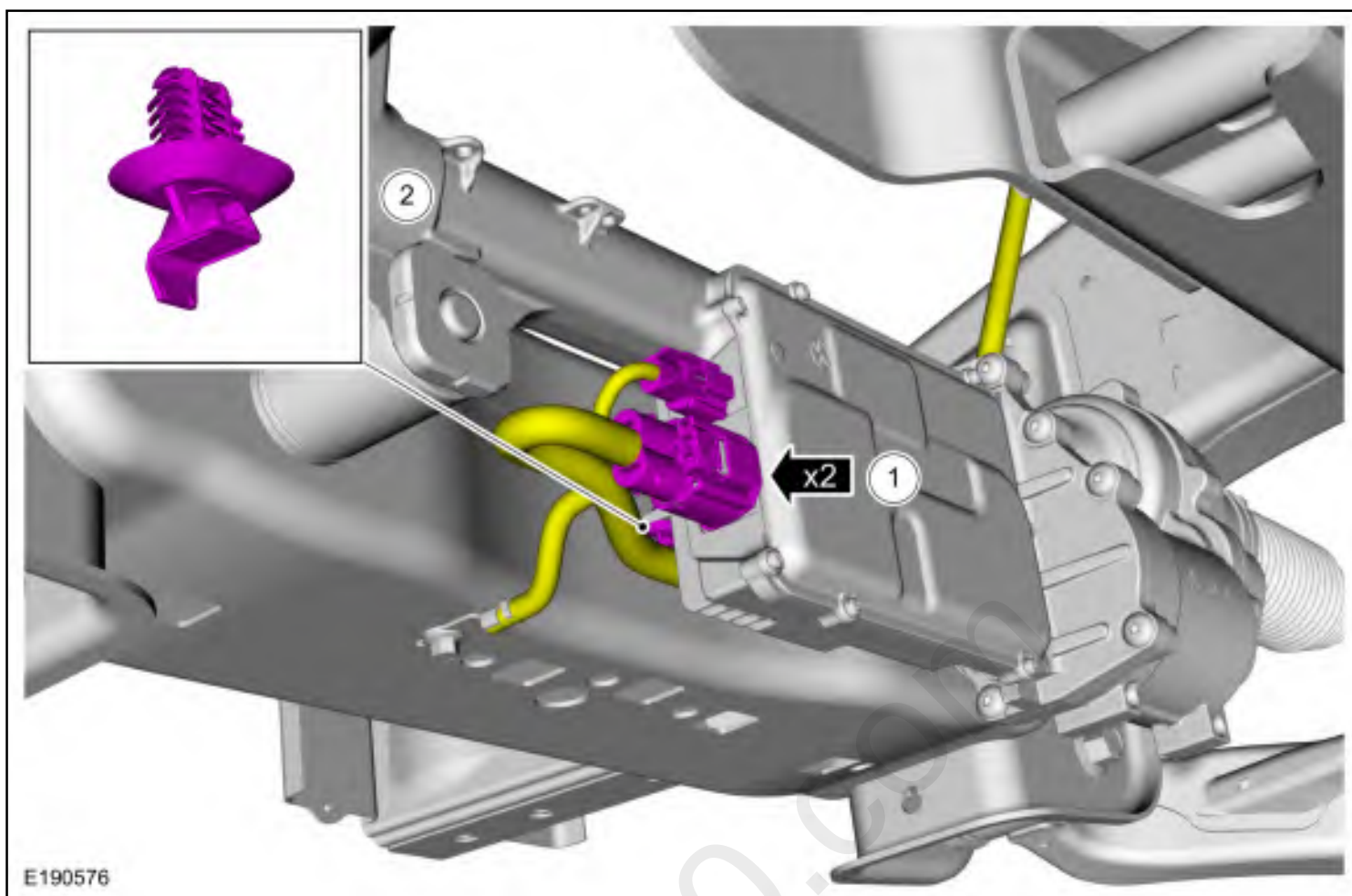
1.  **WARNING: Do not reuse steering column shaft bolts. This may result in fastener failure and steering column shaft detachment or loss of steering control. Failure to follow this instruction may result in serious injury to vehicle occupant(s).**

Remove and discard the steering column shaft bolt.

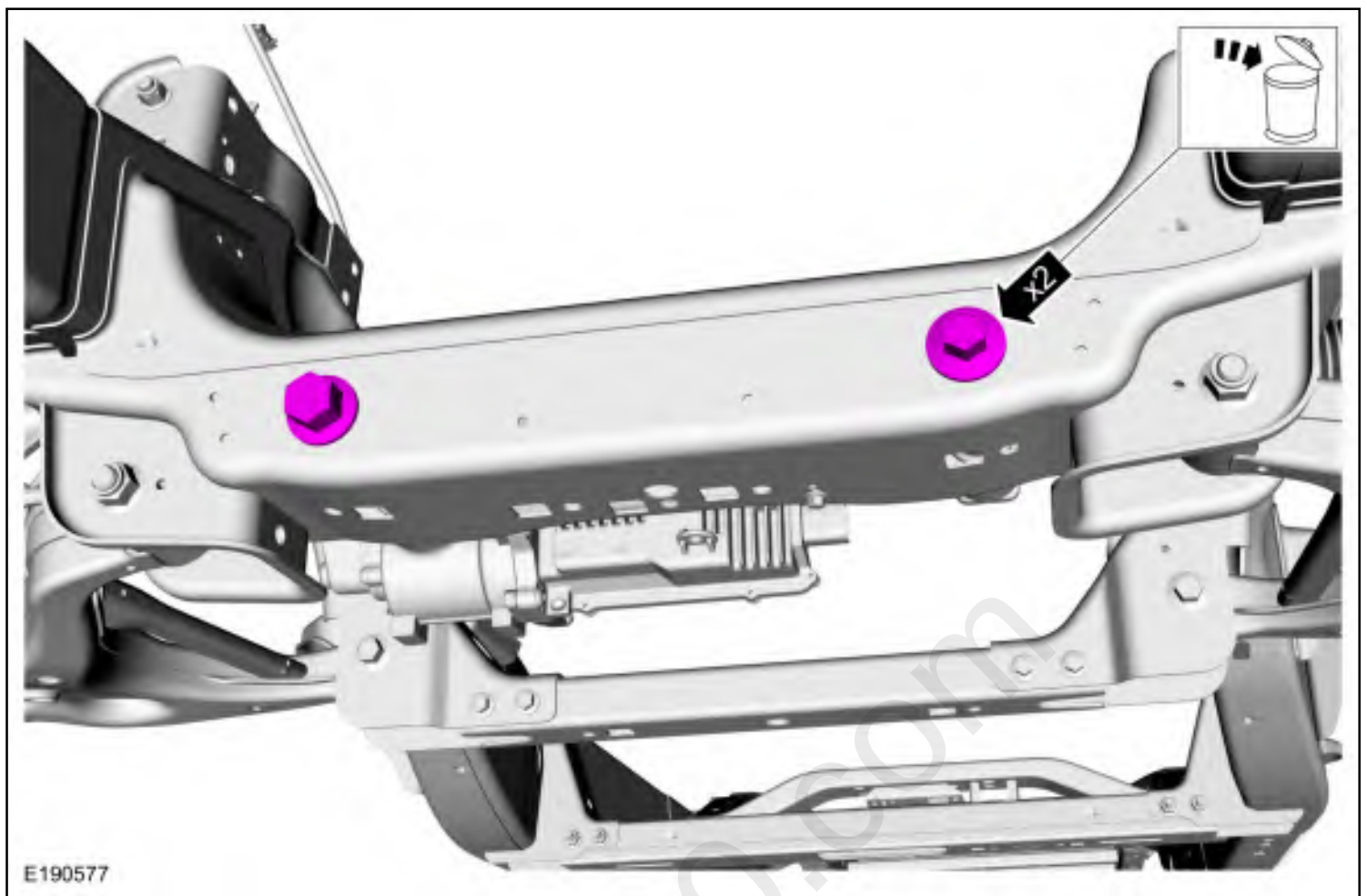
2. Separate the steering column shaft u-joint from the steering gear.



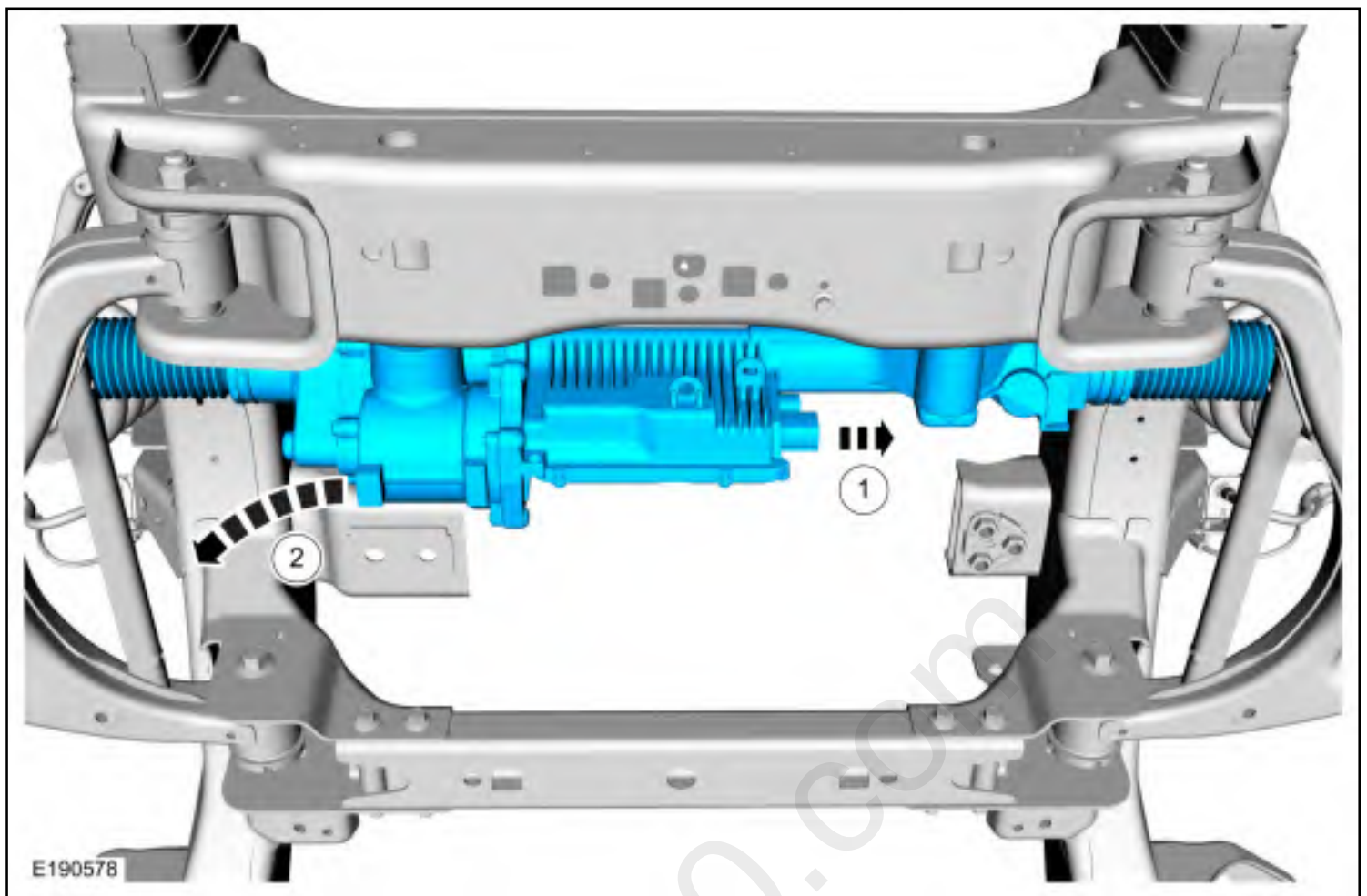
1. Disconnect the 2 EPAS gear electrical connectors.
2. Unclip an position the steering gear wire harness aside.



11. Remove and discard the 2 steering gear mounting bolts.

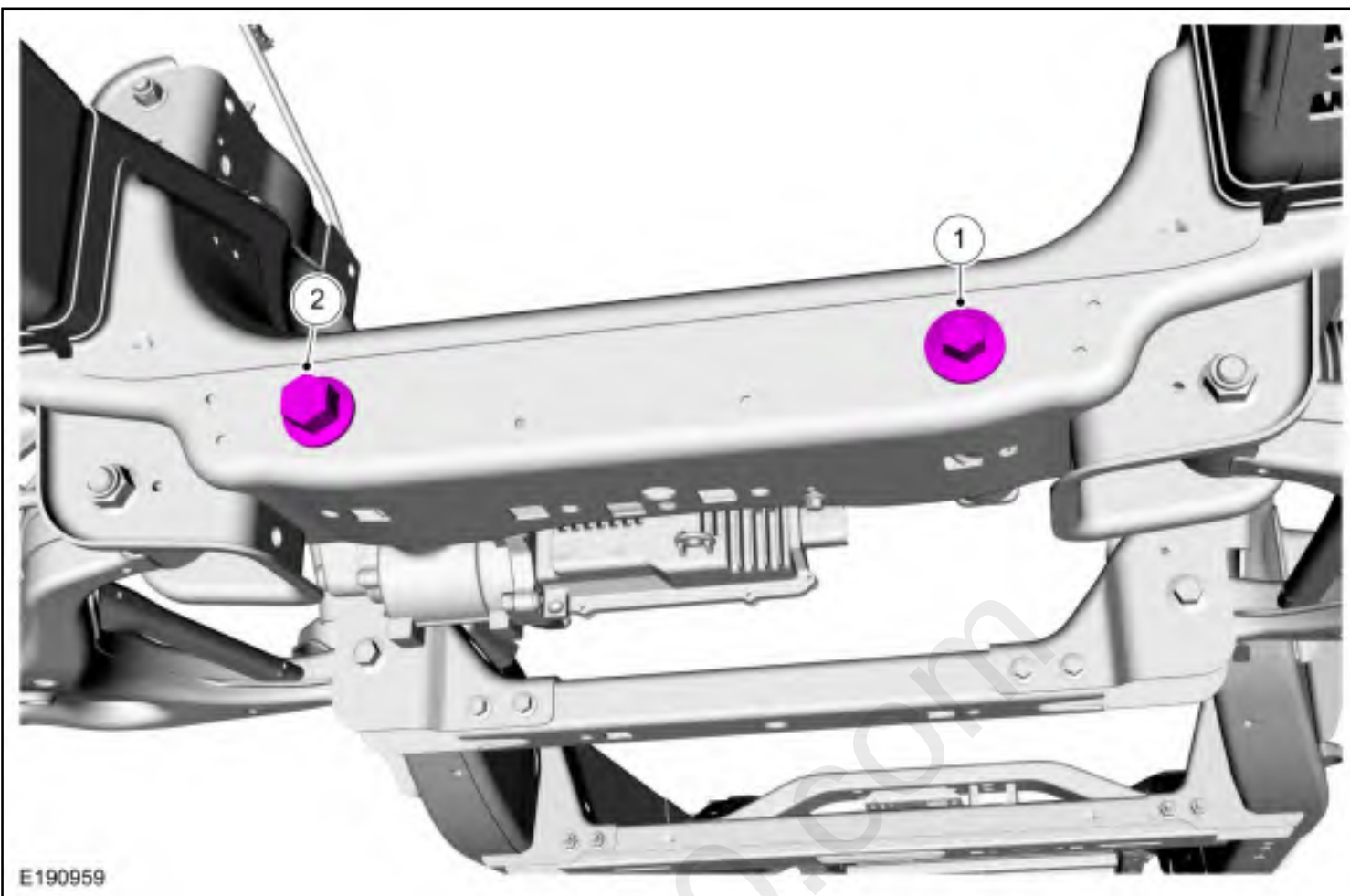


1. Shift the steering gear towards the driver side of the vehicle.
2. Remove the steering gear.

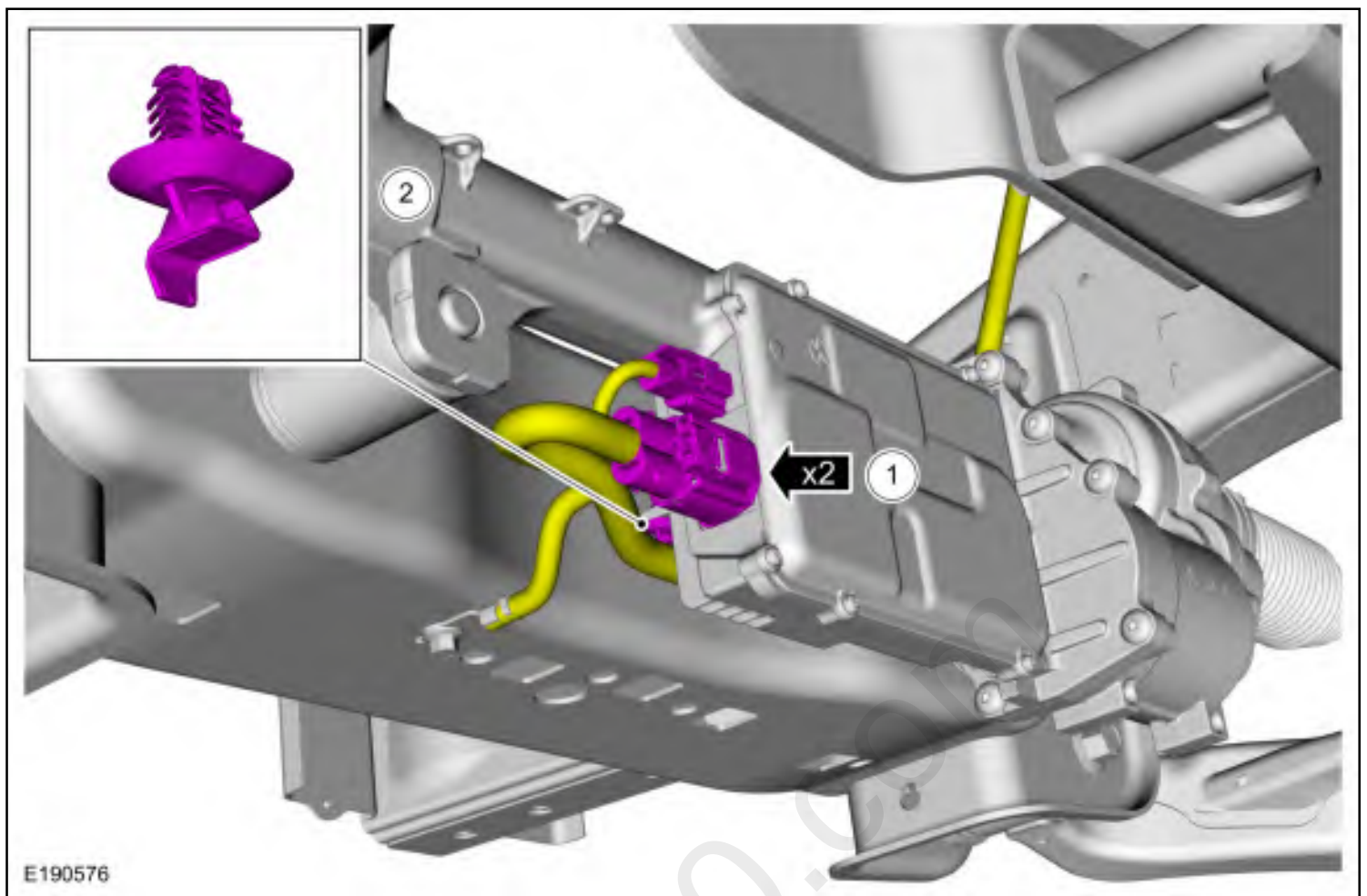


Installation

1. Position the steering gear.
2. Shift the steering towards the passenger side of the vehicle.



1. Connect the 2 EPAS gear electrical connectors.
2. Position the steering gear wire harness and install the retaining clip.

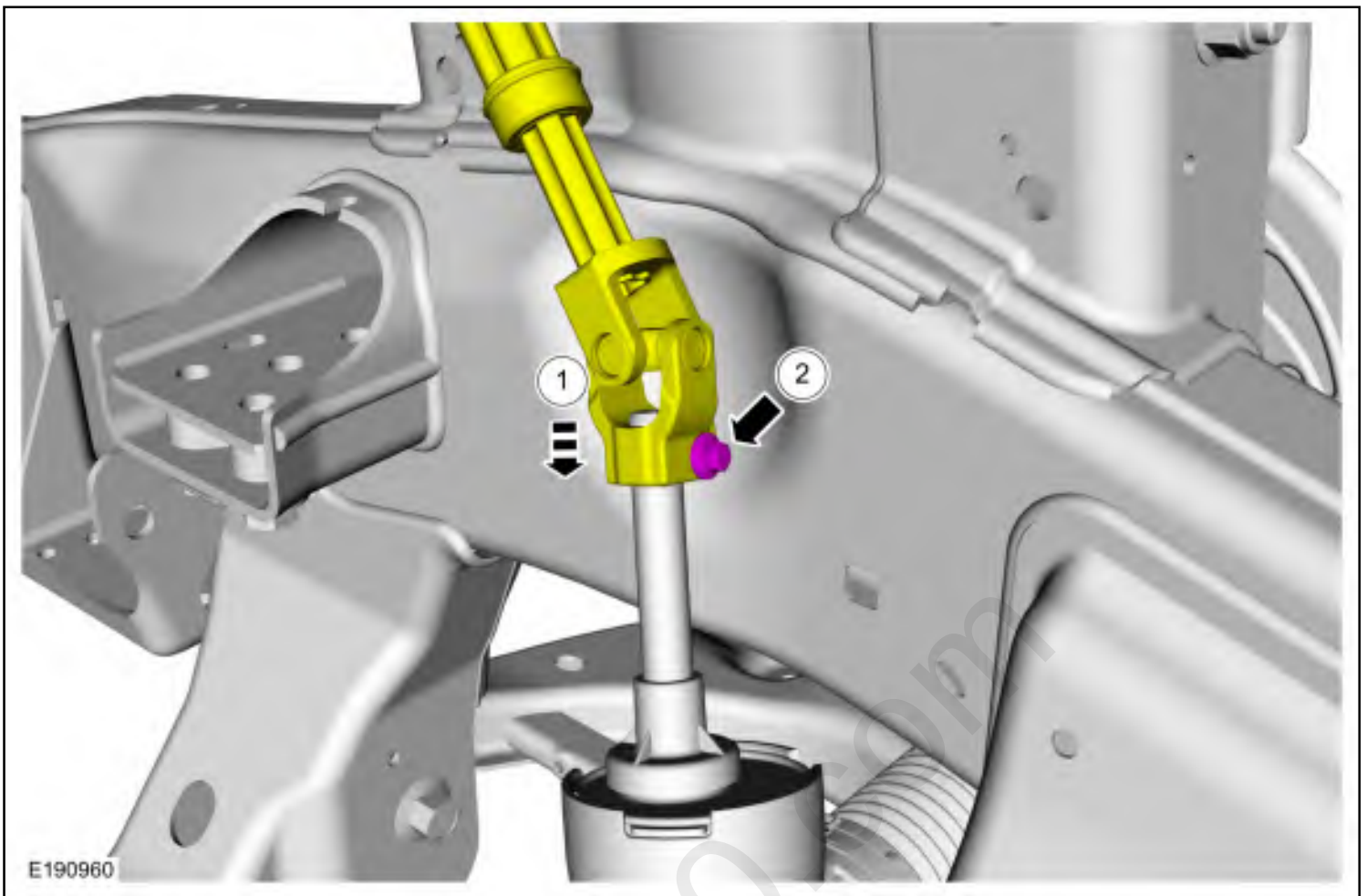


1.  **WARNING: Do not reuse steering column shaft bolts. This may result in fastener failure and steering column shaft detachment or loss of steering control. Failure to follow this instruction may result in serious injury to vehicle occupant(s).**

Connect the steering column shaft u-joint to the steering gear.

2. Install the new steering column shaft bolt.

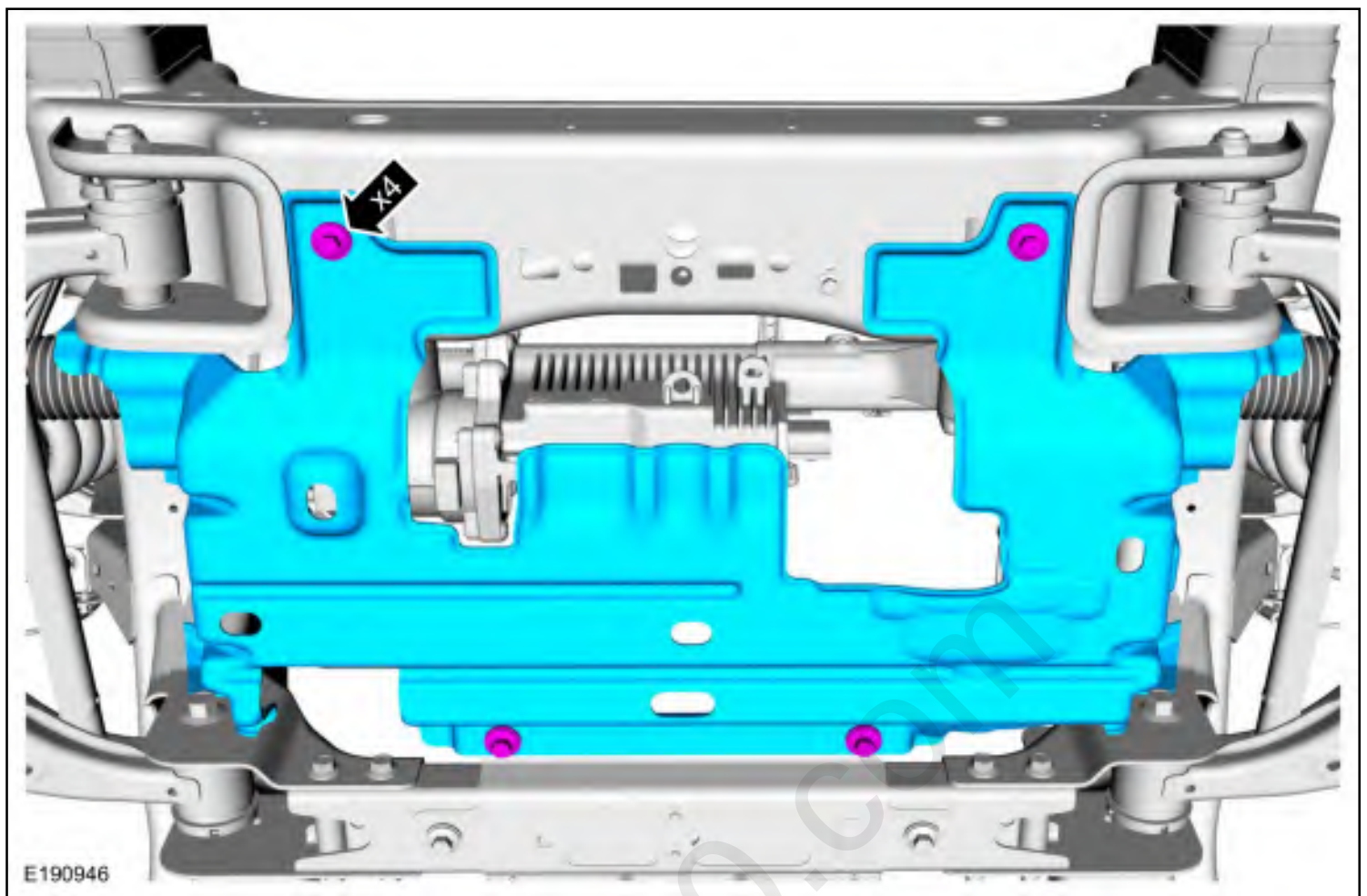
Torque: 22 lb.ft (30 Nm)



5. **NOTE:** *If equipped.*

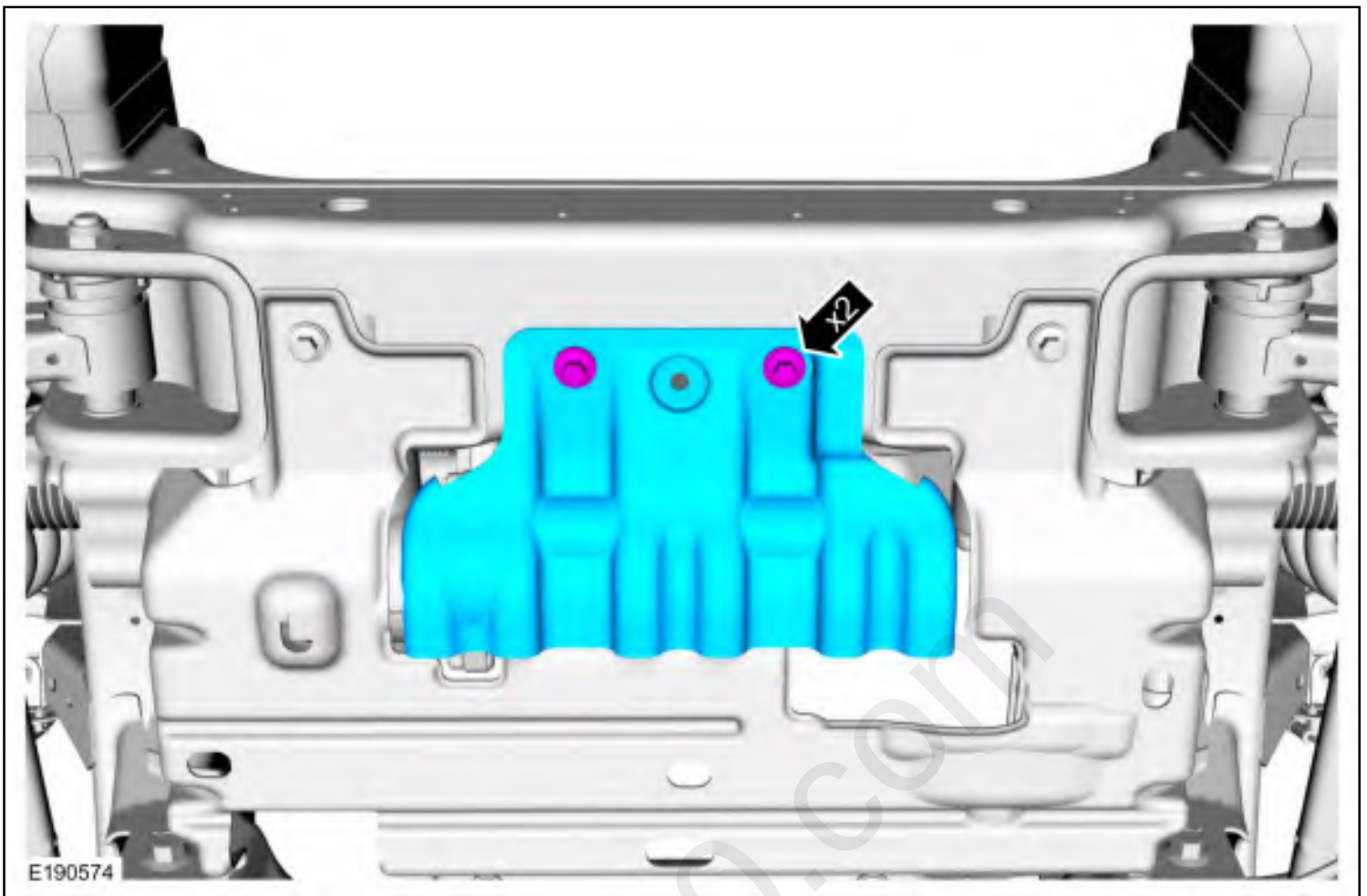
NOTE: *4WD shown, RWD similar.*

Install the underbody shield and the underbody shield bolts.
Torque: 30 lb.ft (40 Nm)



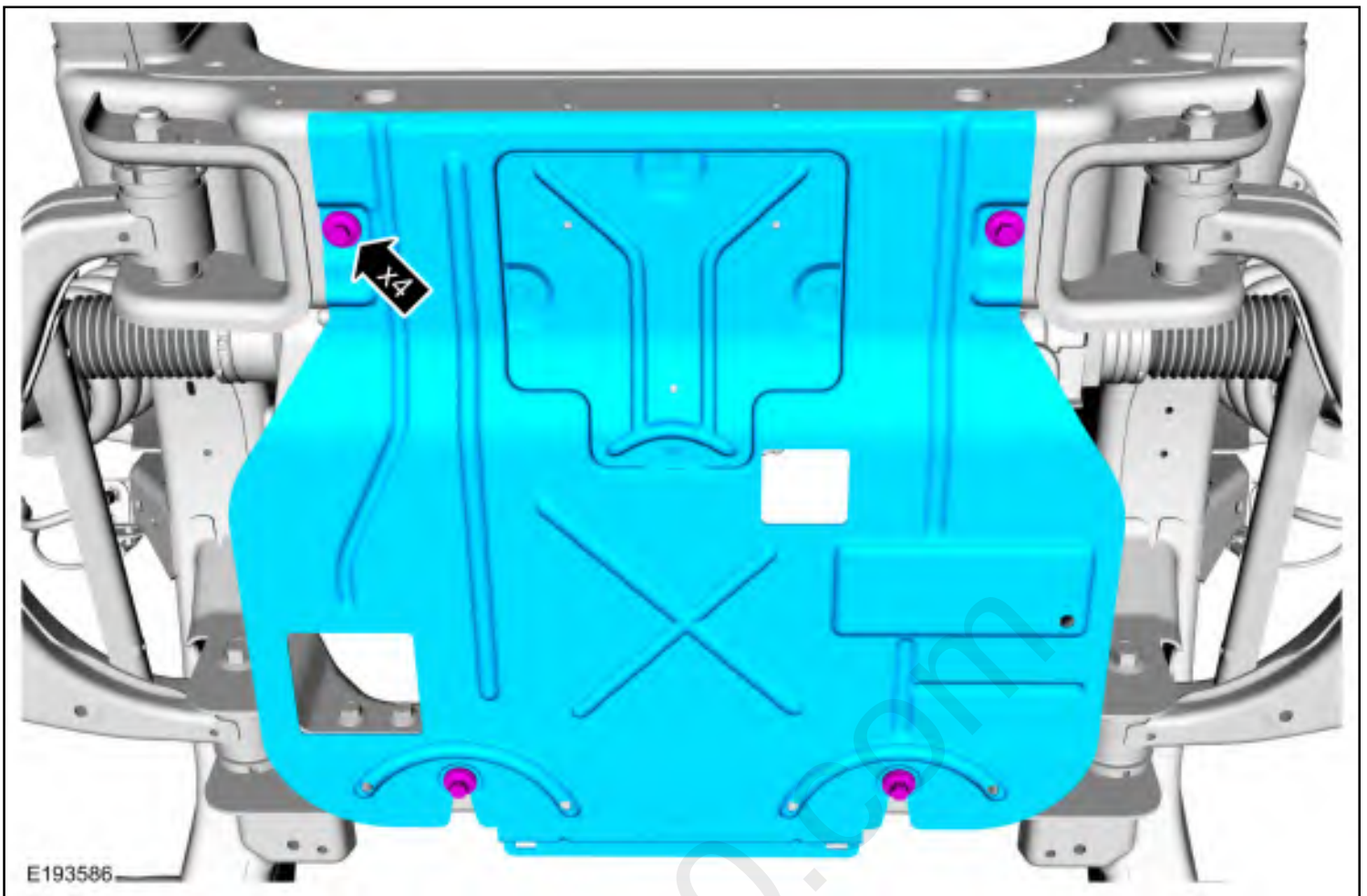
6. **NOTE:** *If equipped.*

Install the underbody shield and install the 2 underbody shield bolts.
Torque: 30 lb.ft (40 Nm)

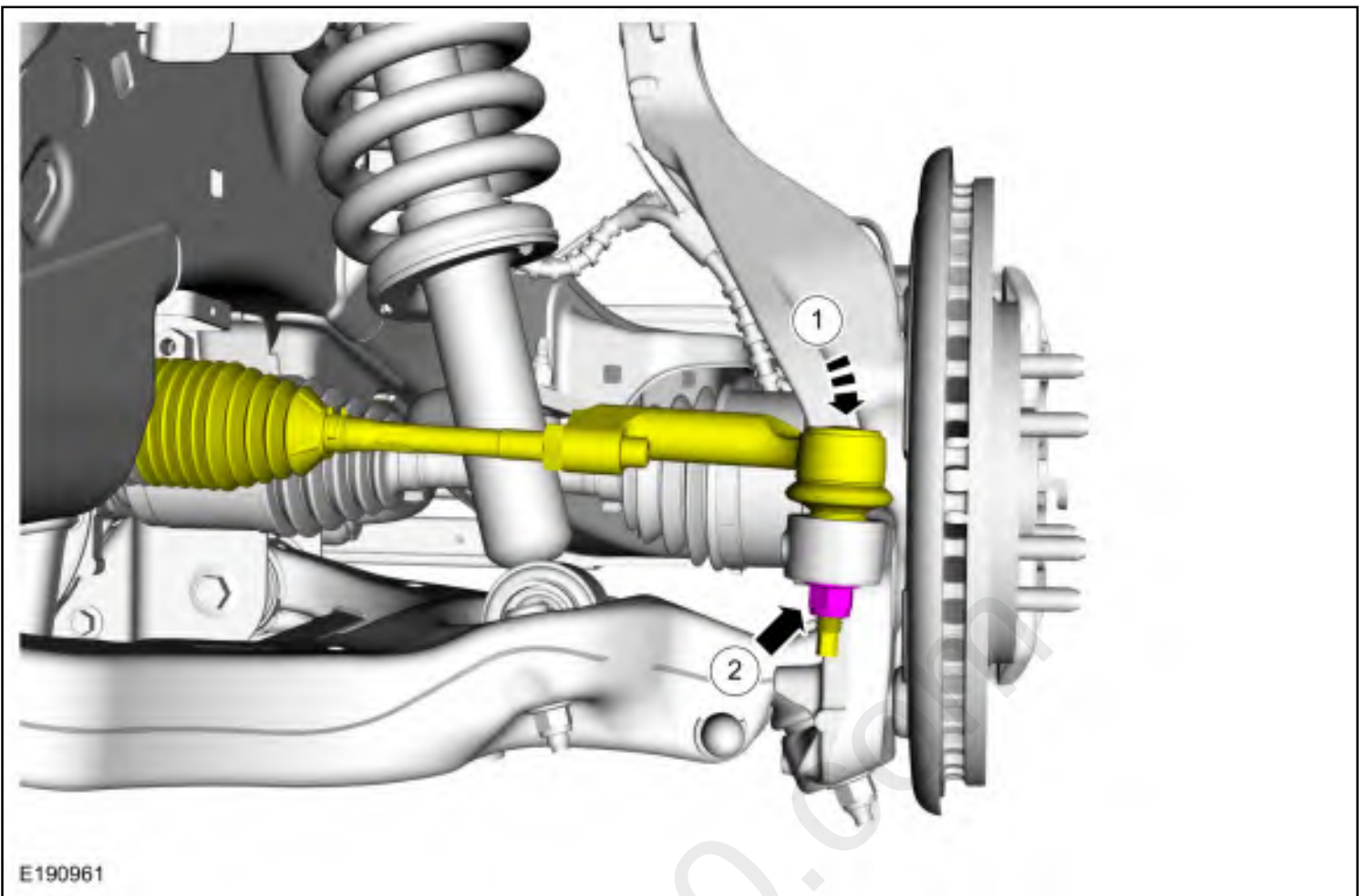


7. **NOTE:** *If equipped.*

Install the underbody shield and install the 4 underbody shield bolts.
Torque: 30 lb.ft (40 Nm)



1. Connect the outer tie rod end to the wheel knuckle.
2. Install the new outer tie rod end nut.
Torque: 76 lb.ft (103 Nm)



9. Install the wheel and tire.
Refer to: [Wheel and Tire](#) (204-04A Wheels and Tires, Removal and Installation).
10. Connect the battery ground cable.
Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).
11. When installing a new steering gear, it must be configured (using vehicle as-built data or module configuration information retrieved earlier in this procedure). Connect a scan tool and follow the scan tool instructions.
Refer to: [Module Configuration - System Operation and Component Description](#) (418-01 Module Configuration, Description and Operation).
12. Check and if necessary, adjust front toe.
Refer to: [Front Toe Adjustment](#) (204-00 Suspension System - General Information, General Procedures).