

Starter Motor

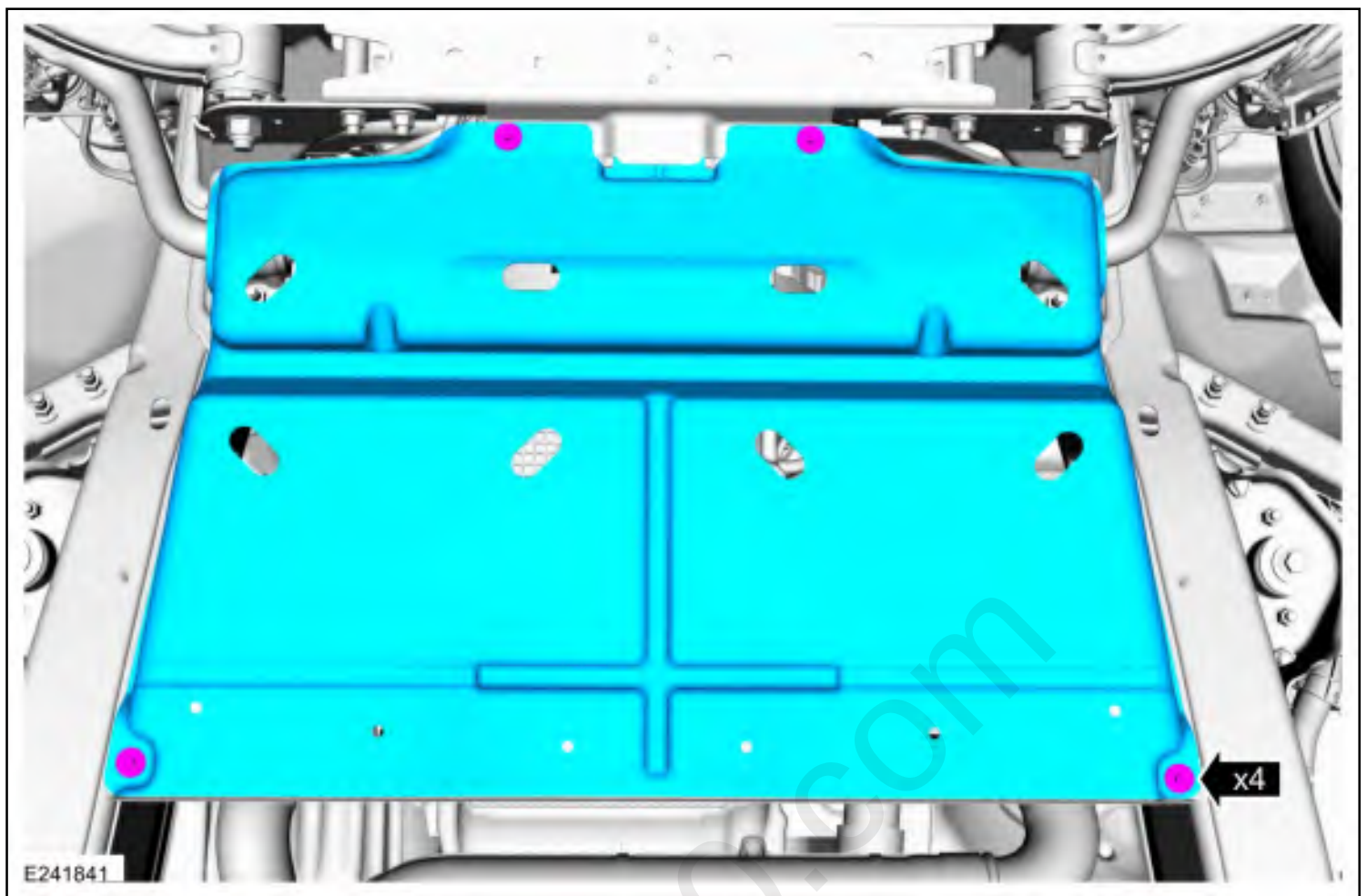
Base Part Number: Base Part Number: 11000

Removal

 **WARNING:** Always disconnect the battery ground cable at the battery before disconnecting the starter motor battery terminal lead. If a tool is shorted at the starter motor battery terminal, the tool can quickly heat enough to cause a skin burn. Failure to follow this instruction may result in serious personal injury.

NOTE: Removal steps in this procedure may contain installation details.

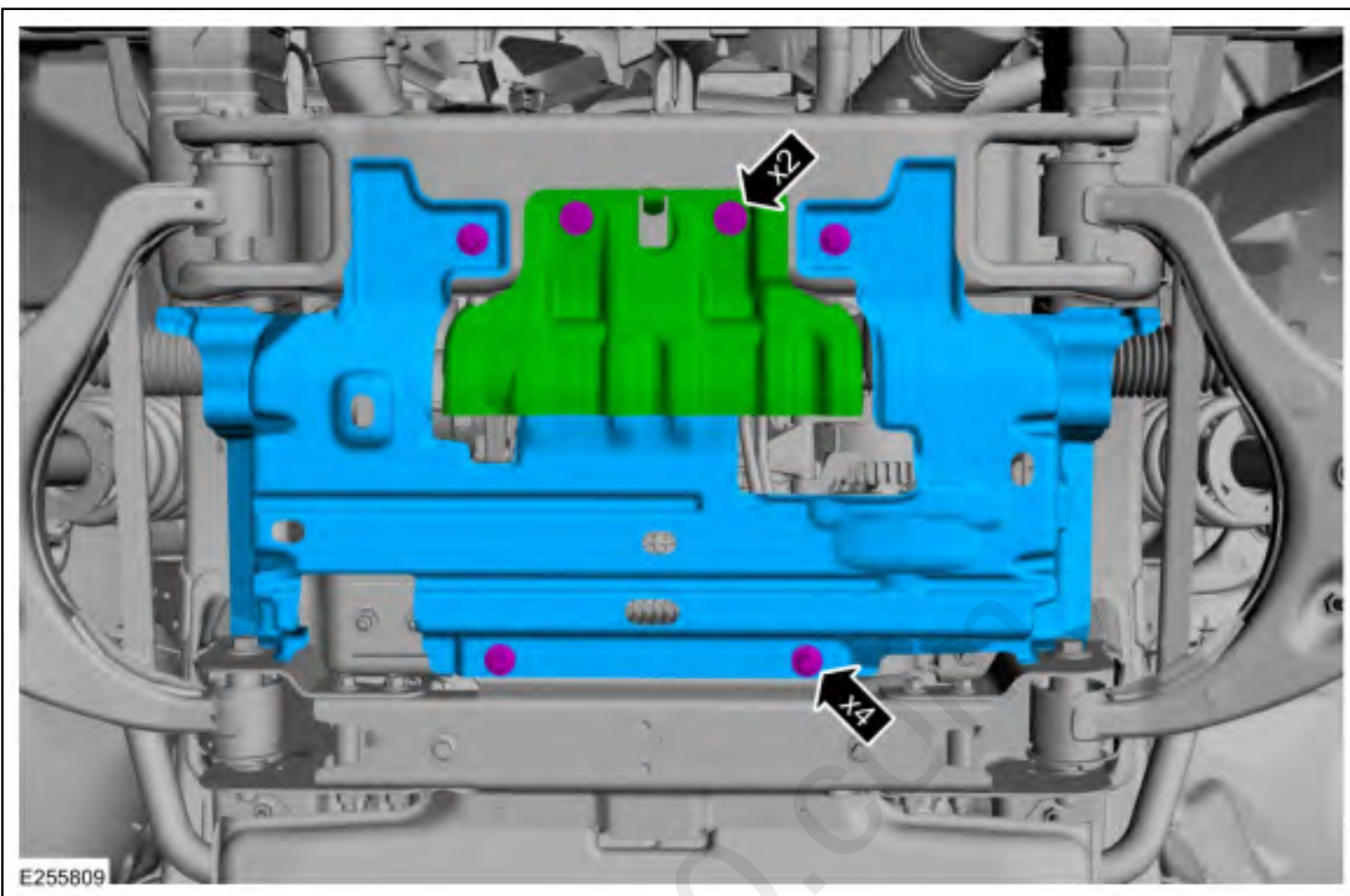
1. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: [Jacking and Lifting - Overview](#) (100-02 Jacking and Lifting, Description and Operation).
2. Disconnect the battery.
Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables) .
3. Release the bolts and remove the transmission housing cover.
Torque: 71 lb.in (8 Nm)



4. **NOTE:** Vehicles come with an underbody shield or a skid plate.

Remove the bolts and the underbody shield.

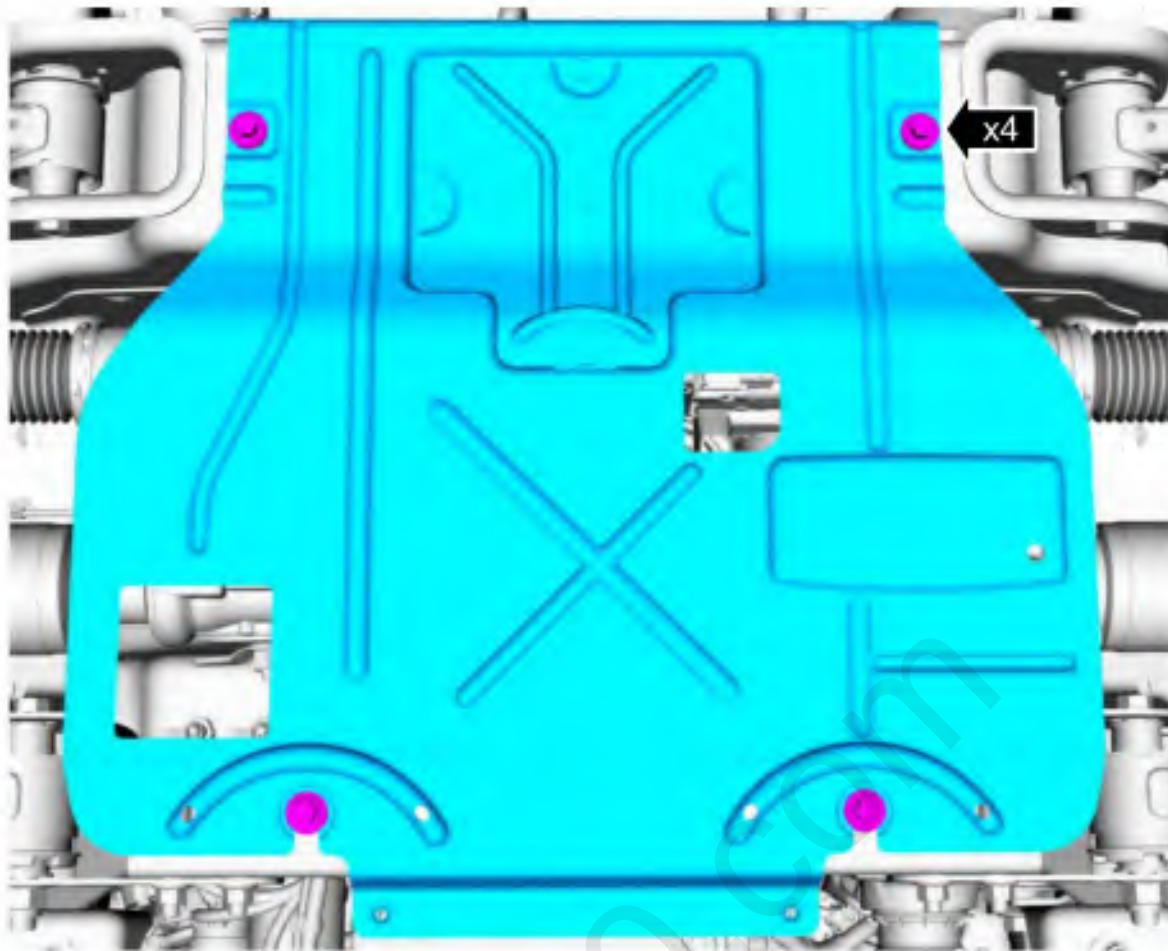
Torque: 30 lb.ft (40 Nm)



5. **NOTE:** Vehicles come with an underbody shield or a skid plate.

If equipped, remove the bolts and the skid plate.

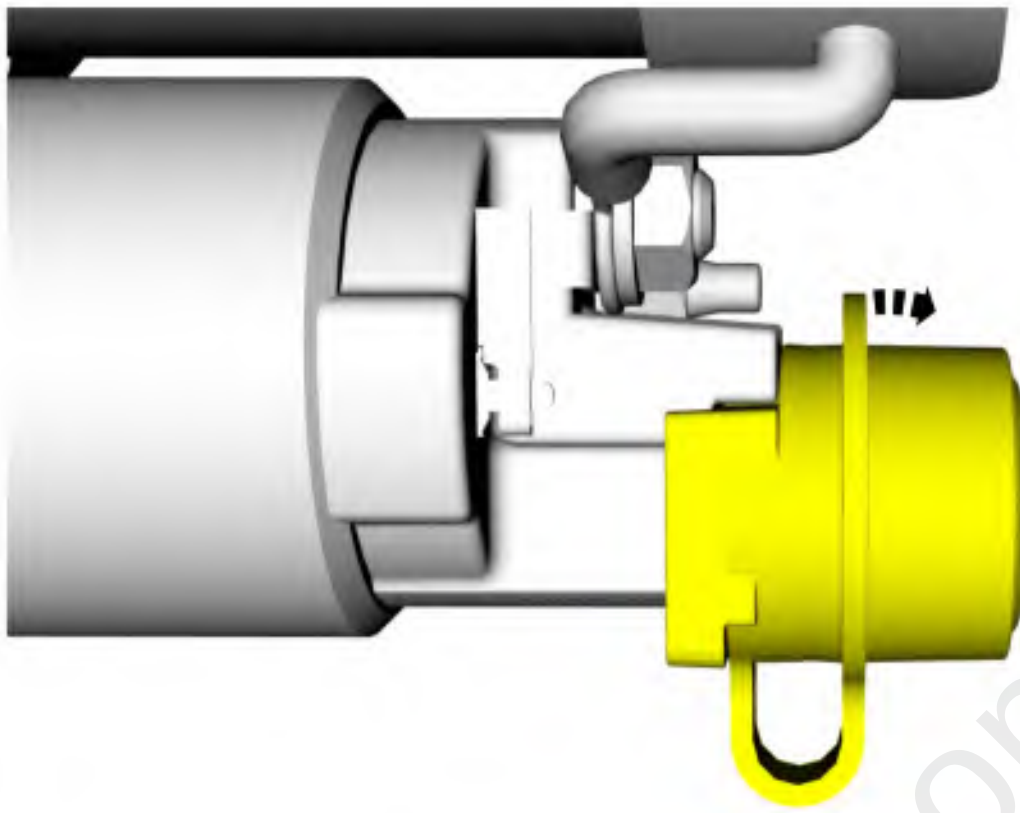
Torque: 30 lb.ft (40 Nm)



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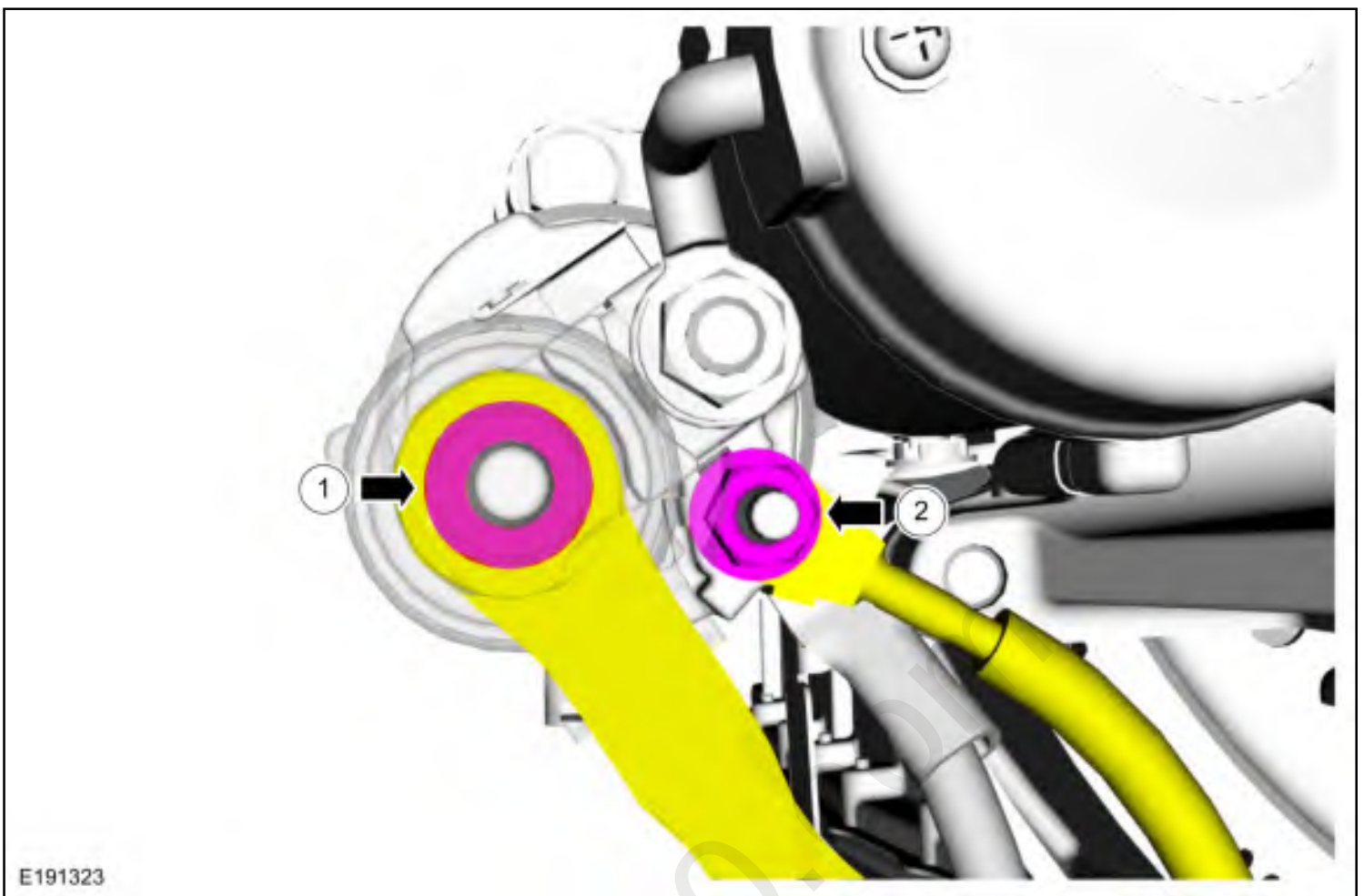
6. Open the starter motor solenoid battery cable cover.



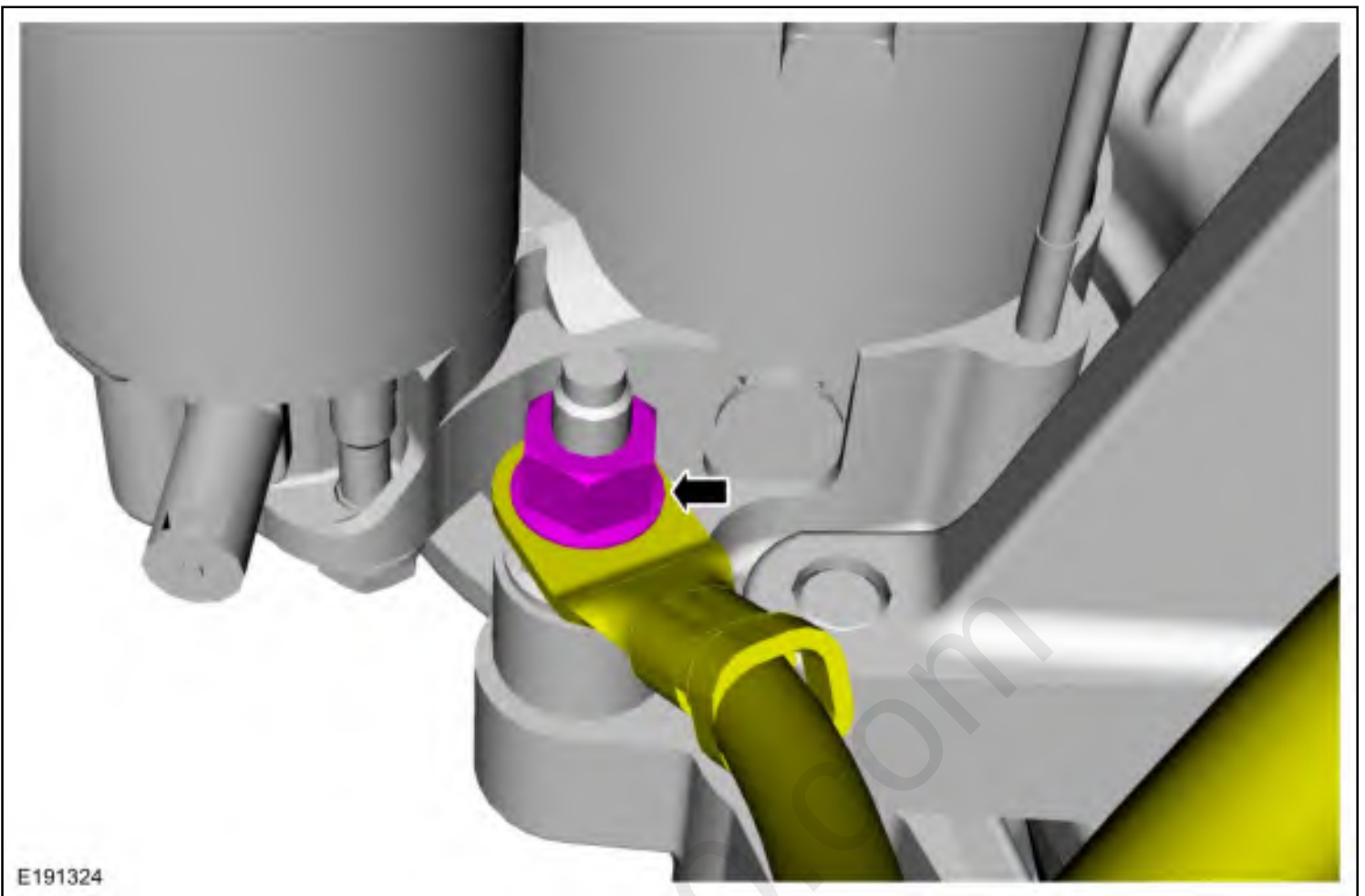
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1. Remove the starter motor solenoid battery cable nut and then disconnect the starter motor solenoid battery cable.
Torque: 106 lb.in (12 Nm)
2. Remove the starter motor solenoid control wire nut and then disconnect the starter motor solenoid control wire.
Torque: 53 lb.in (6 Nm)

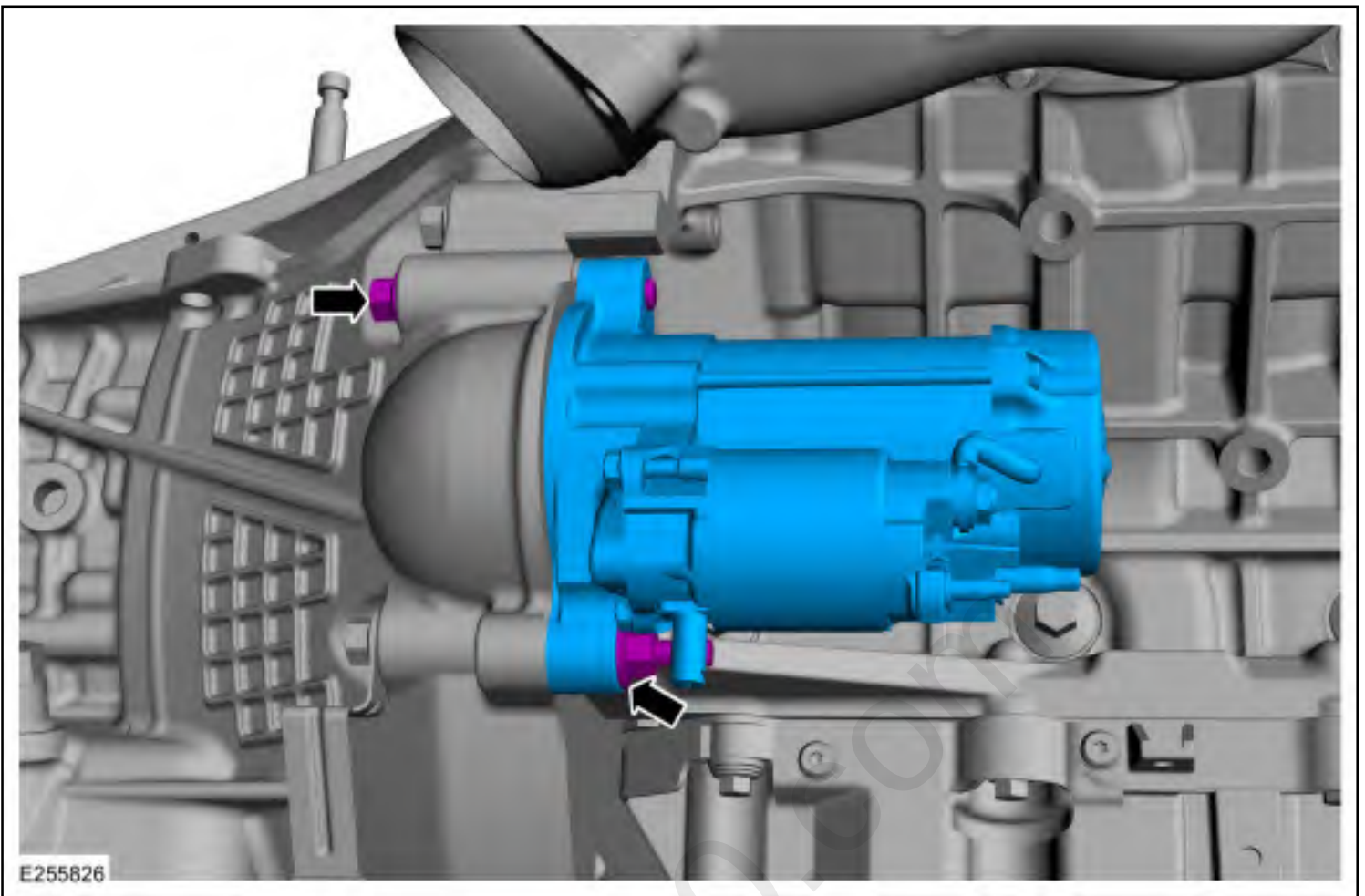


8. Remove the starter motor ground cable nut and position the cable aside.
Torque: 18 lb.ft (25 Nm)



9. Remove the starter motor retaining bolts and the starter motor retaining studbolt, then remove the starter motor.

Torque: 35 lb.ft (48 Nm)



10. Inspect the starter motor drive gear and flywheel ring gear.

Refer to: [Starter Motor Drive Gear and Flywheel Ring Gear Inspection](#) (303-06D Starting System - 5.0L 32V Ti-VCT, General Procedures).

Installation

1. To install, reverse the removal procedure.

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