


204-01B Front Suspension - 4WD
Removal and Installation

2019 Ranger
Procedure revision date: 11/27/2018

Wheel Knuckle

Base Part Number: 3K170

Special Tool(s) / General Equipment

	204-592 Separator, Lower Arm Ball Joint TKIT-2006C-FFMFLM TKIT-2006C-LM TKIT-2006C-ROW
Tie Rod End Remover	

Removal

NOTICE: Replace the component with the same or equivalent parts to prevent component failure.

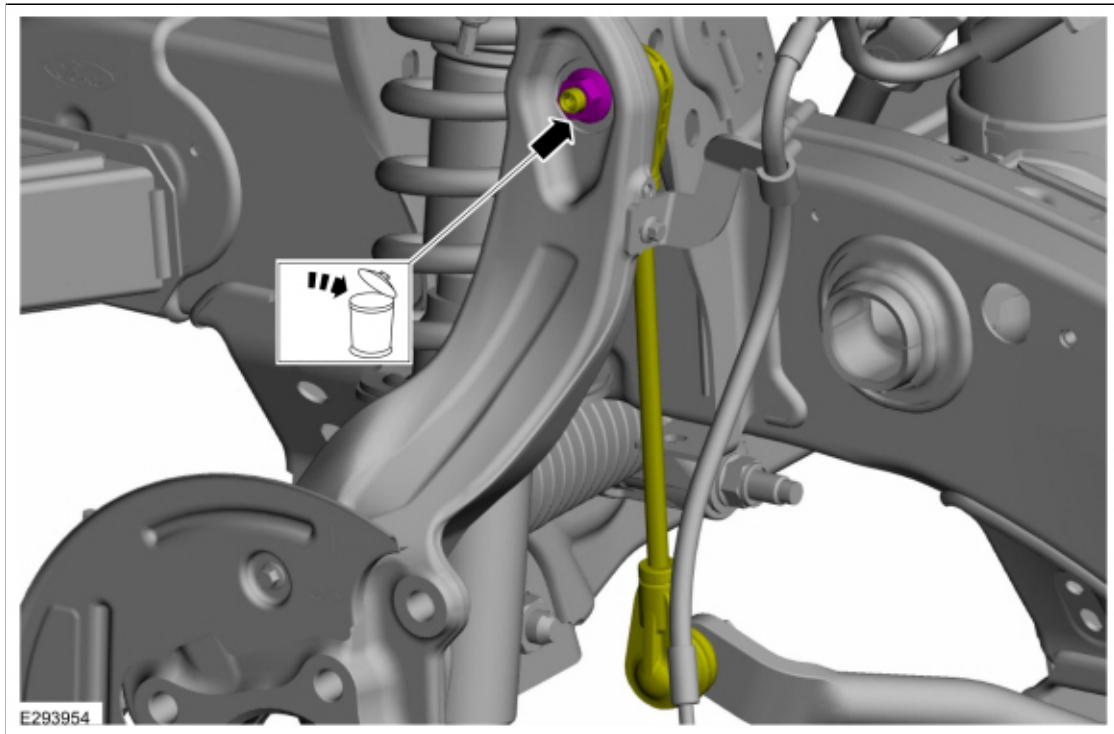
NOTICE: Suspension fasteners are critical parts that affect the performance of vital components and systems. Failure of these fasteners may result in major service expense. Use the same or equivalent parts if replacement is necessary. Do not use a replacement part of lesser quality or substitute design. Tighten fasteners as specified.

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

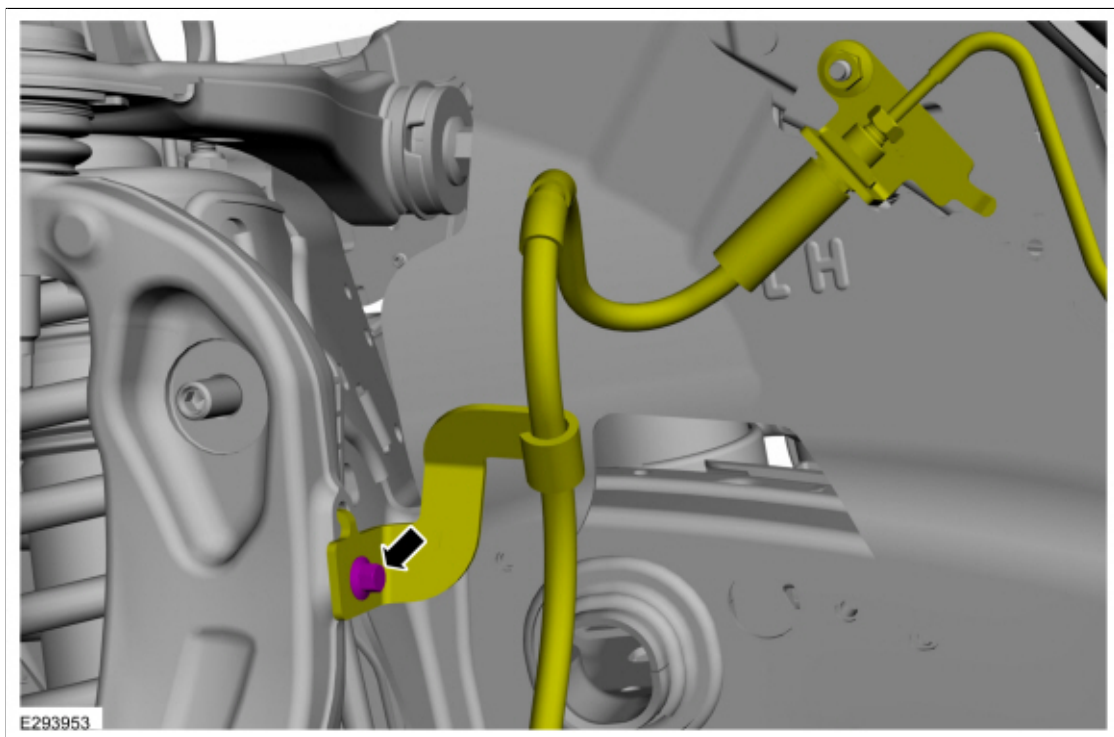
1. Remove the front wheel bearing and wheel hub.
Refer to: [Front Wheel Bearing and Wheel Hub](#) (204-01B Front Suspension - 4WD, Removal and Installation).
2. **NOTE:** Use the hex-holding feature to prevent the stud from turning while removing the nut.

Remove and discard the front stabilizer bar link upper nut and separate the front stabilizer bar link from the wheel knuckle.





3. Disconnect the brake tube fitting and remove the front brake hose assembly.



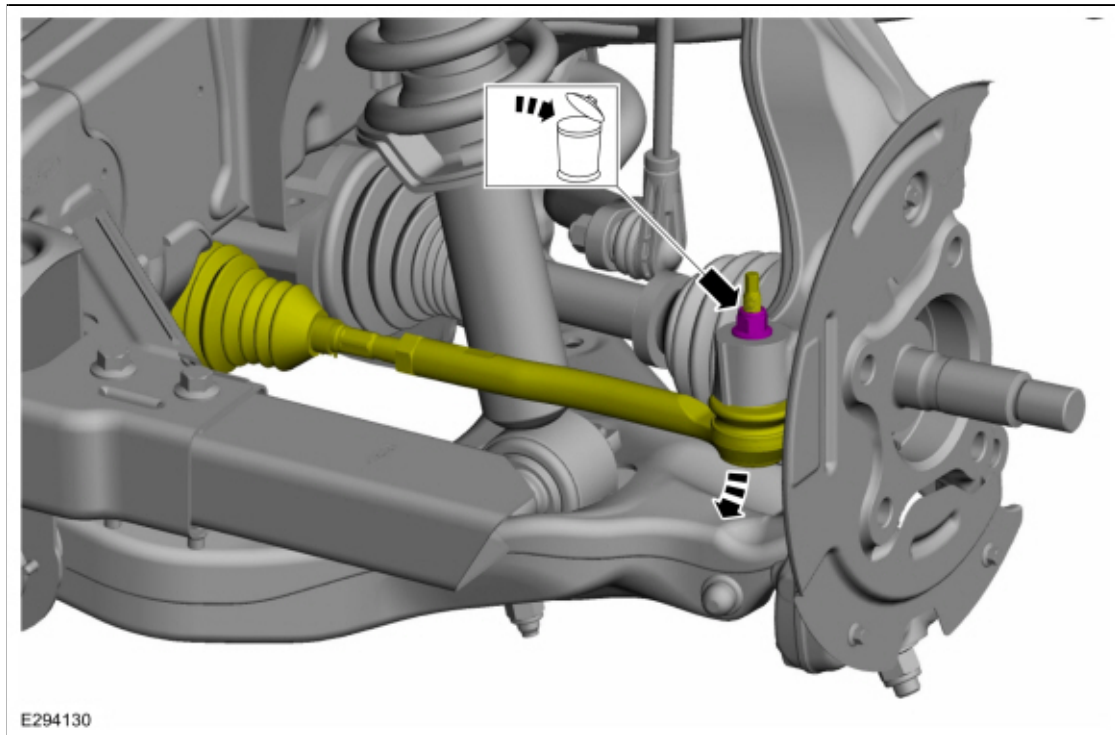
4. **NOTICE:** Do not use a hammer to separate the outer tie-rod end from the wheel knuckle or damage to the wheel knuckle may result.

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

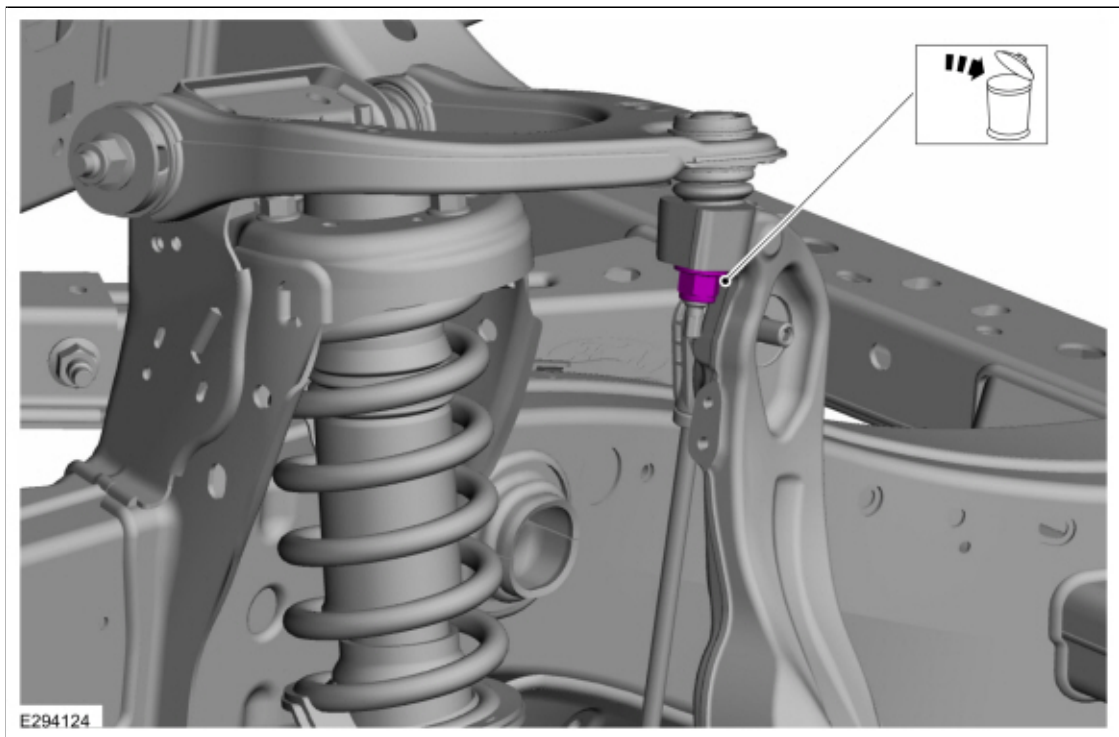
may occur.

NOTE: Use the hex-holding feature to prevent the stud from turning while removing the nut.

Remove and discard the tie rod end nut and separate the tie rod end from the wheel knuckle.
Use the General Equipment: Tie Rod End Remover



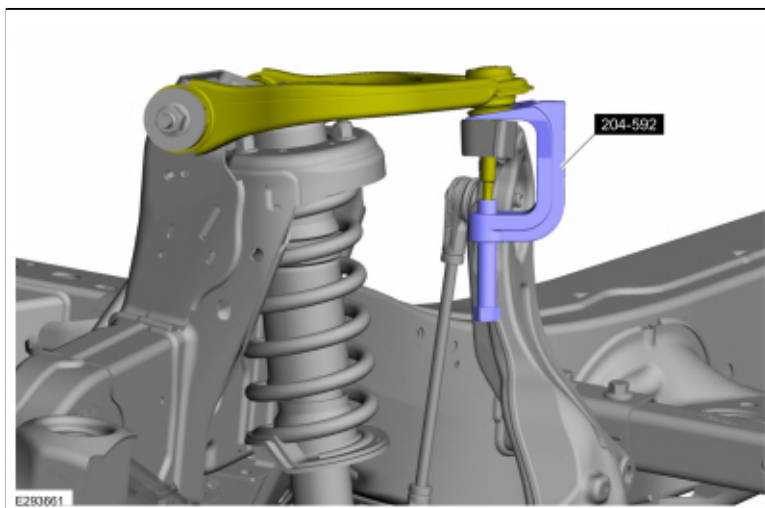
5. Remove and discard the upper arm ball joint nut.



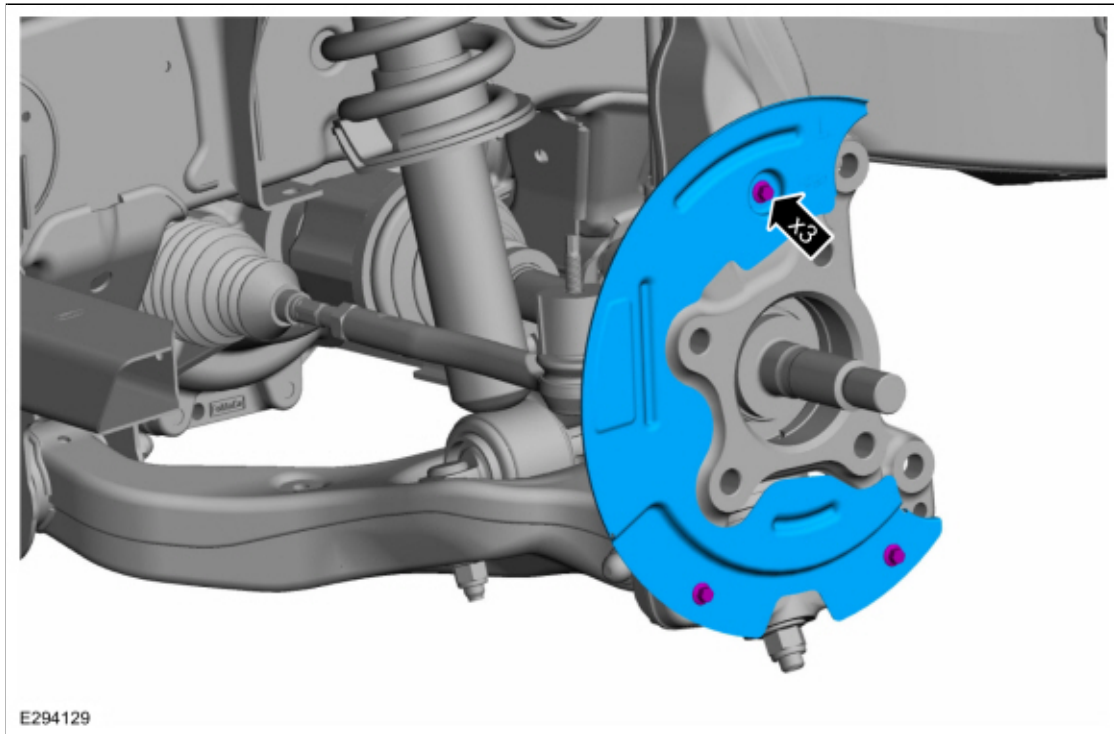
6. **NOTE:** Be sure not to damage the ball joint boot when installing the Ball Joint Separator.

Separate the upper ball joint from the wheel knuckle.

Use Special Service Tool: [204-592 Separator, Lower Arm Ball Joint](#).

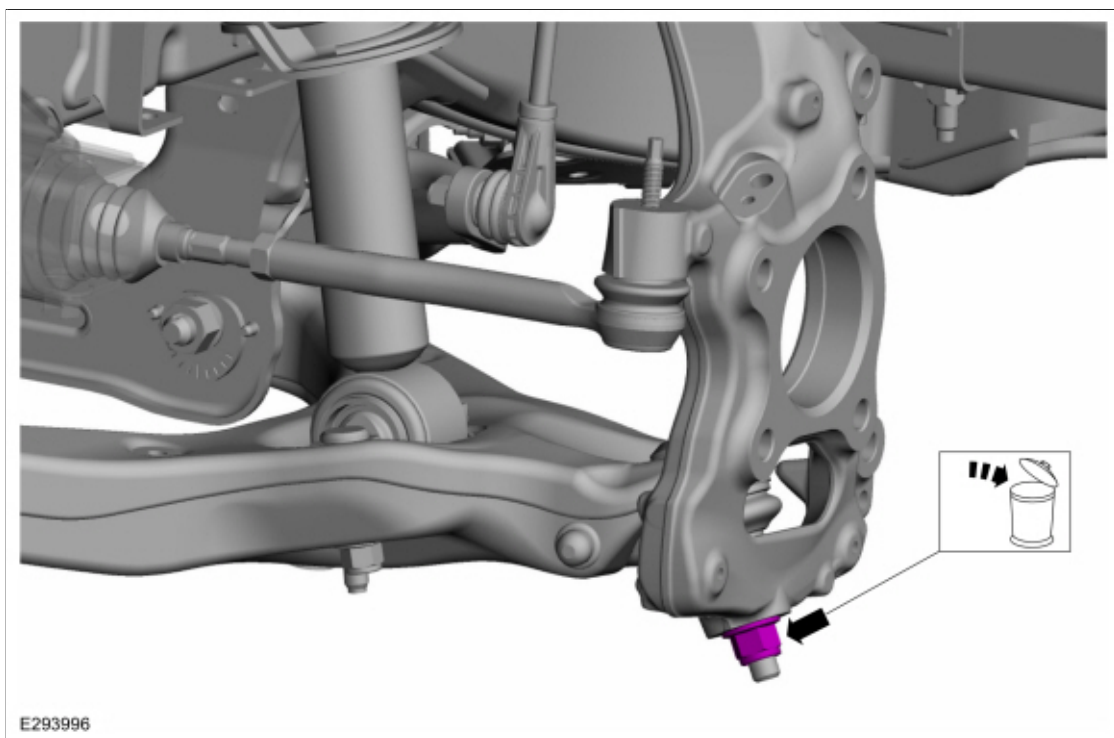


7. Remove the brake disc shield bolts and the brake disc shield.



8. **NOTE:** Use the hex-holding feature to prevent the stud from turning while removing the nut.

Remove and discard the lower ball joint nut.

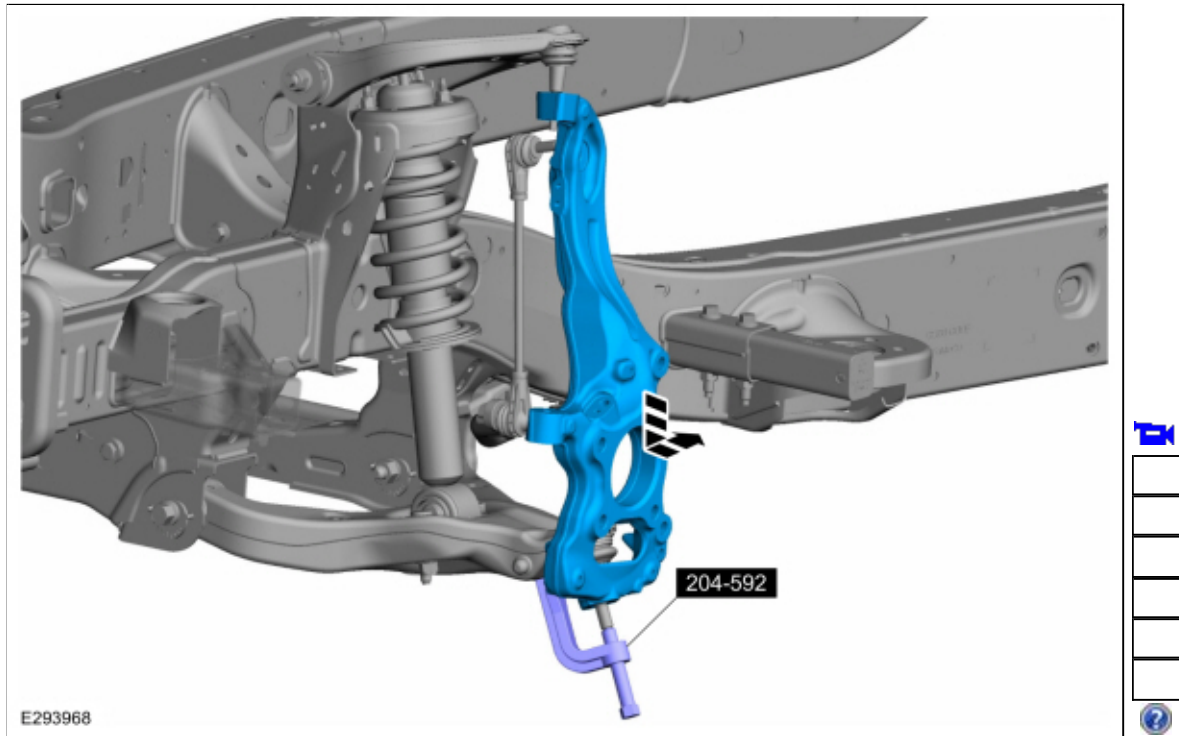


9. **NOTICE:** Do not use a prying device or separator fork between the ball joint and the wheel knuckle. Damage to the ball joint or ball joint seal may result.

NOTICE: Use care when releasing the lower arm and wheel knuckle into the resting position or damage to the ball joint seal may occur.

NOTICE: Do not damage the ball joint boot while installing the special tool.

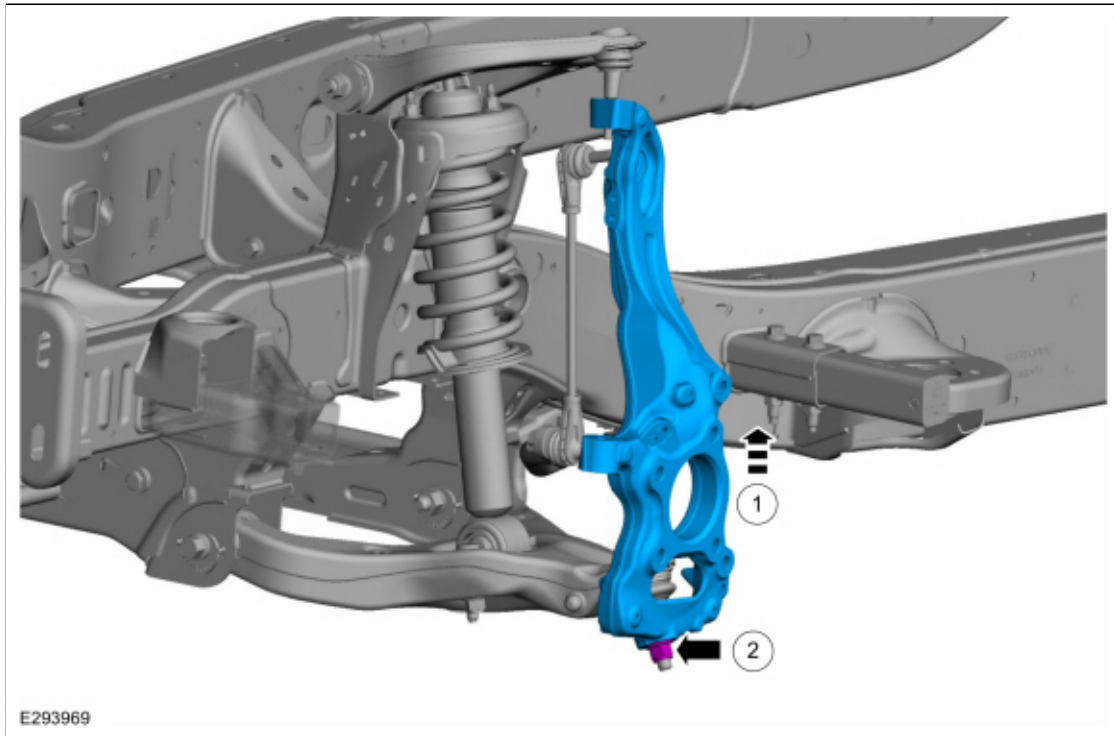
Separate the wheel knuckle from the lower ball joint and remove the wheel knuckle.
Use Special Service Tool: [204-592 Separator, Lower Arm Ball Joint](#).



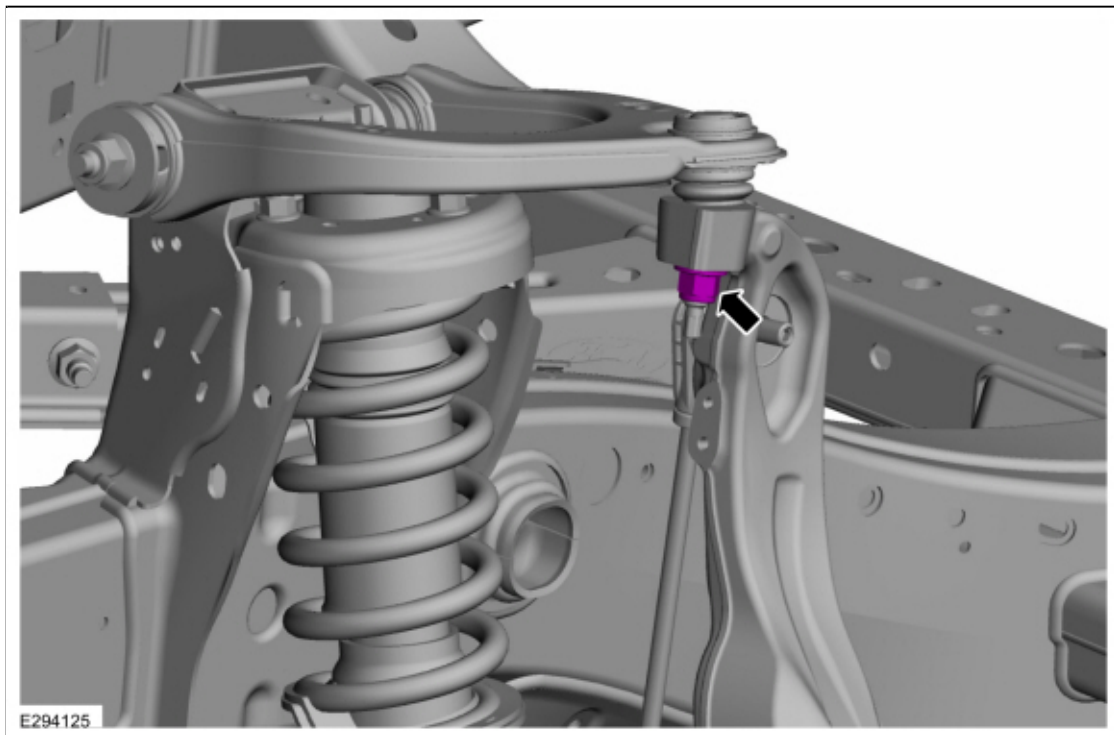
Installation

NOTICE: All suspension bushings, including stab bar bushings, must be tightened with the suspension at the normal use ride height (suspension compressed with vehicle weight).

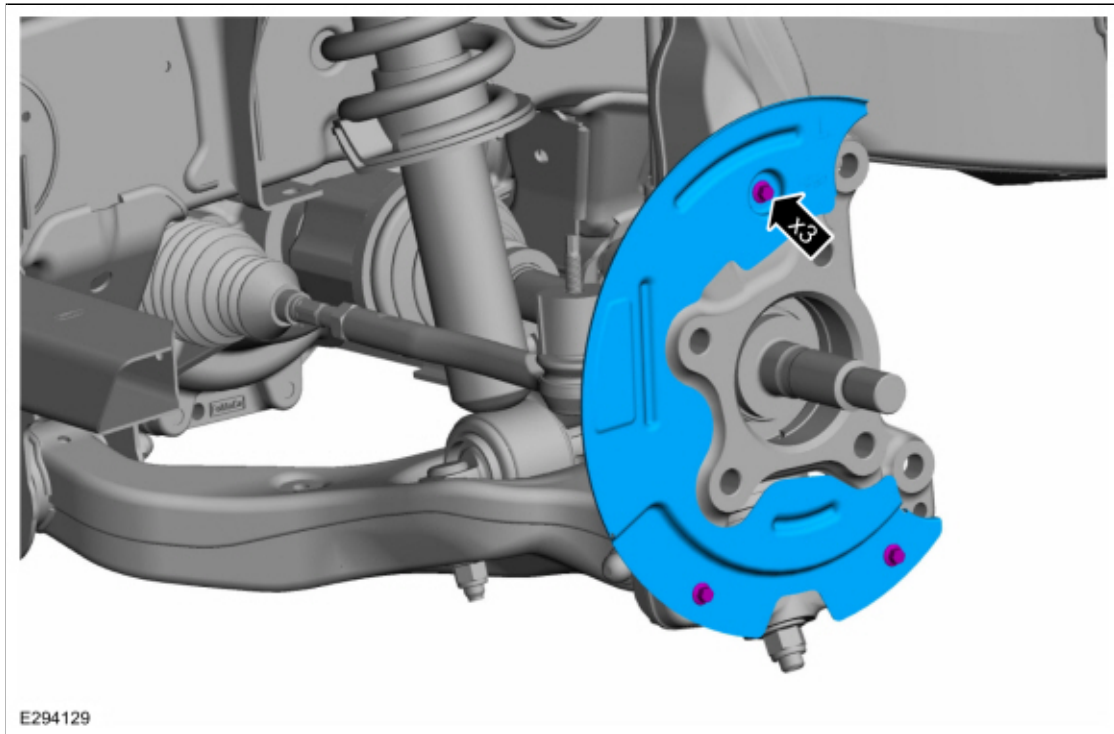
1.
 1. Install the wheel knuckle.
 2. Install the new lower ball joint nut.
Torque: 76 lb.ft (103 Nm)



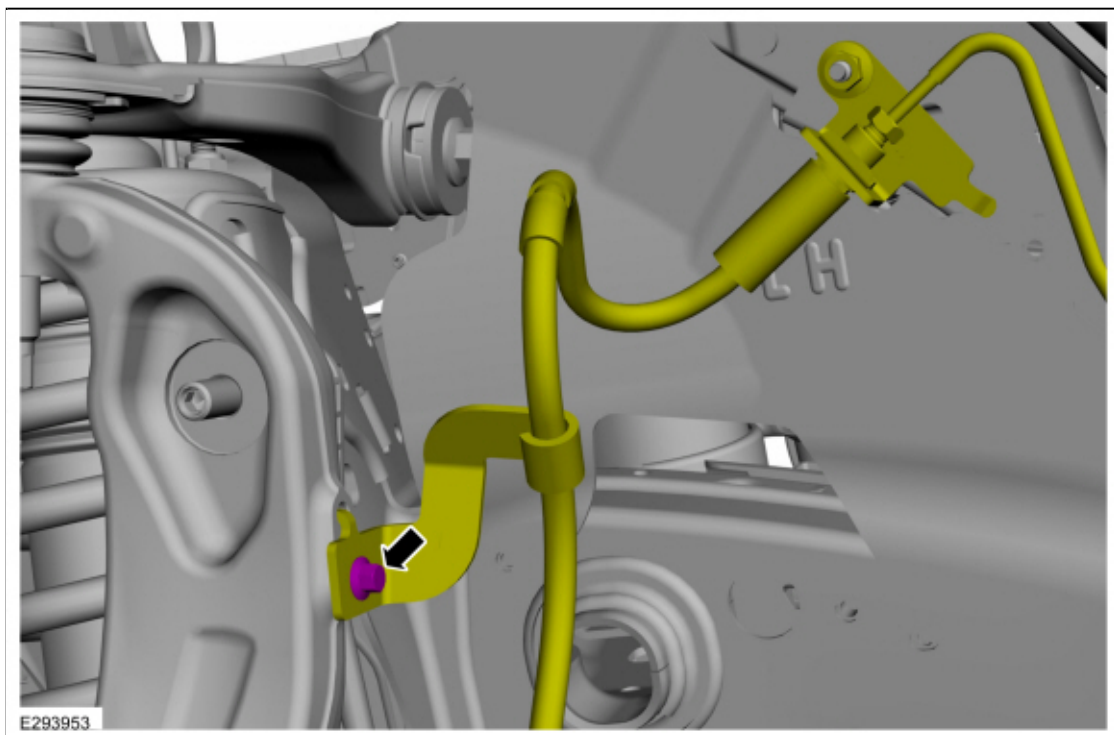
2. Install the new upper ball joint nut.
Torque: 46 lb.ft (63 Nm)



3. Install the brake disc shield and the brake disc shield bolts.
Torque: 150 lb.in (17 Nm)



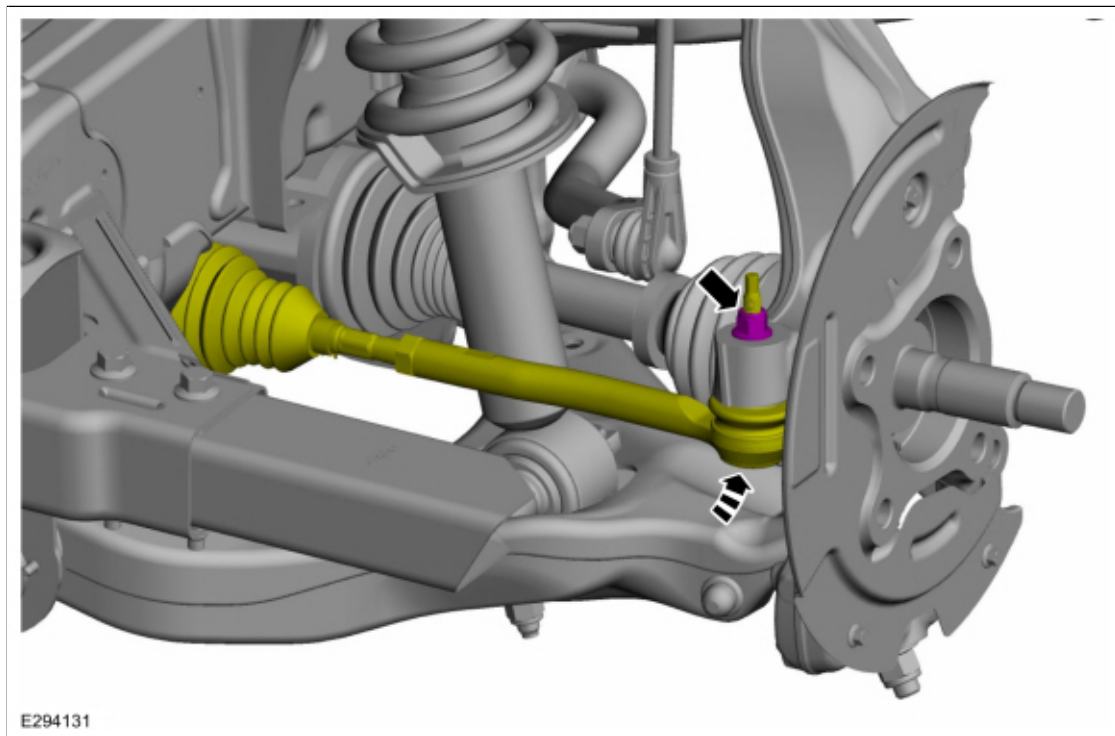
4. Position the brake hose and install the brake hose bracket bolt.
Torque: 159 lb.in (18 Nm)



5. **NOTE:** Use the hex-holding feature to prevent the stud from turning while removing the nut.

Position the tie rod end and install the new tie rod end nut.

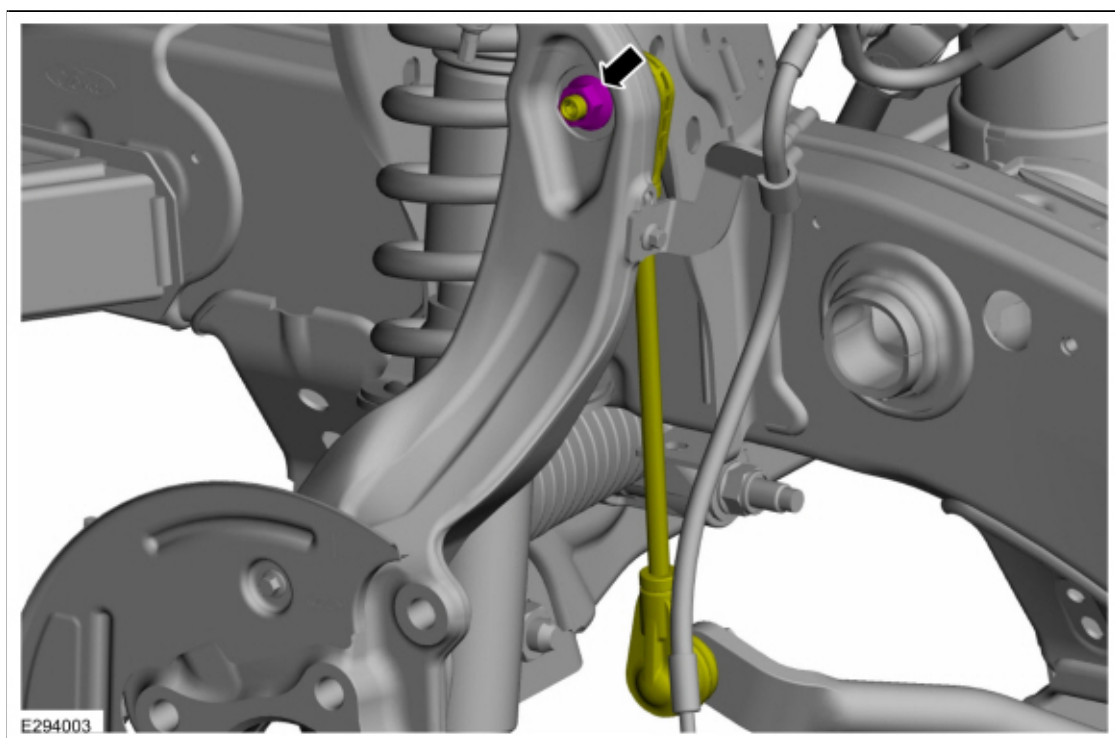
Torque: 35 lb.ft (48 Nm)



6. **NOTE:** Use the hex-holding feature to prevent the stud from turning while removing the nut.

Install the new front stabilizer link upper nut.

Torque: 85 lb.ft (115 Nm)



7. Install the front wheel bearing and wheel hub.
Refer to: [Front Wheel Bearing and Wheel Hub](#) (204-01B Front Suspension - 4WD, Removal and Installation).

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