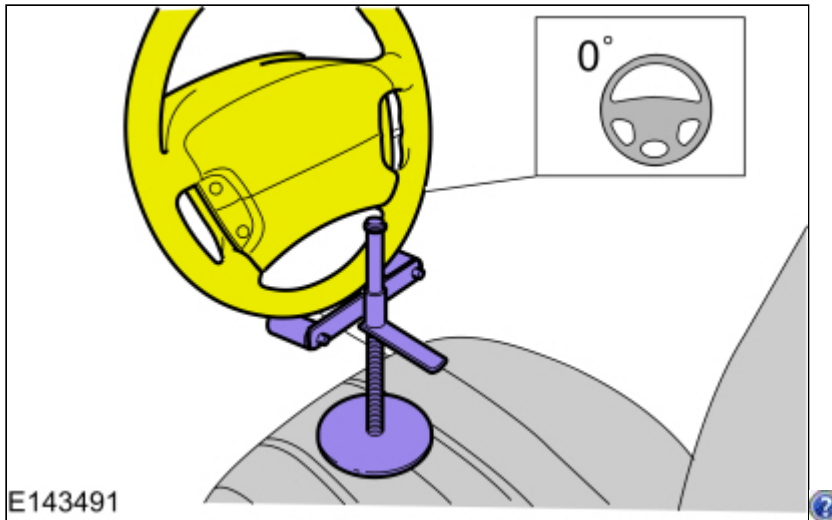


Front Subframe

Removal

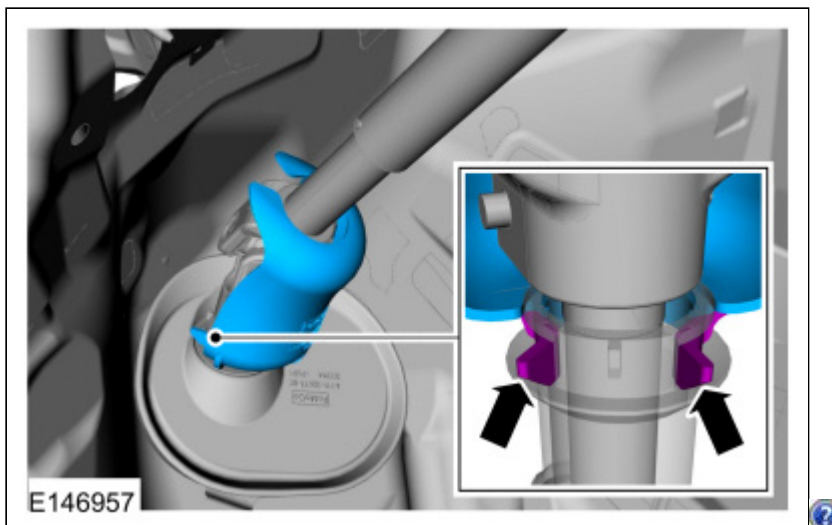
⚠ WARNING: Before beginning any service procedure in this section, refer to **Safety Warnings** in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

1. Refer to: [Health and Safety Precautions](#) (100-00 General Information, Description and Operation).
- 2.



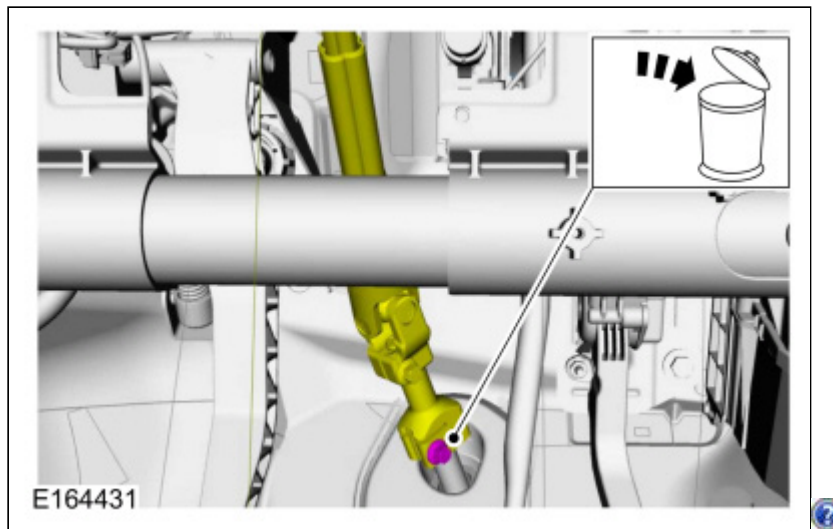
This is sort of a pain in the ass. I put tape on the top of the steering wheel and column and marked it with a sharpie to be sure the wheel did not move. I also tried using a jug of engine oil to hold the wheel secure, but it didn't work very well. I would also keep in mind that you could mar your seat. Just use a box or something that can squish against the wheel while keeping it steady.

3. If equipped.



4. **⚠ 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).

NOTICE: Do not allow the steering column to rotate while the steering column shaft is disconnected or damage to the clockspring may result. If there is evidence that the steering column shaft has rotated, remove and recenter the clockspring. For additional information, refer to Section 501-20B.



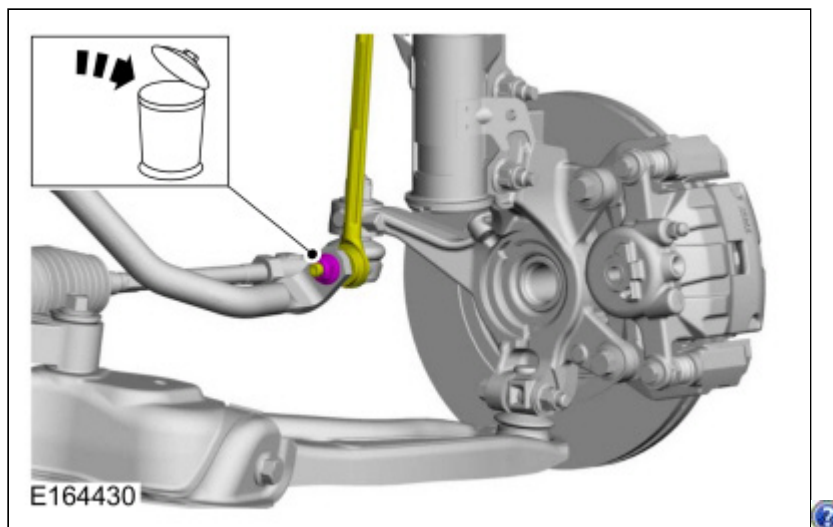
Bolt is inside the car, down in the foot well. Hard to get to.

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

6. **NOTE:** The stabilizer bar links are designed with low friction ball joints that have a low breakaway torque.

NOTE: Use the hex-holding feature to prevent the ball stud from turning while removing or installing the stabilizer bar link nut.

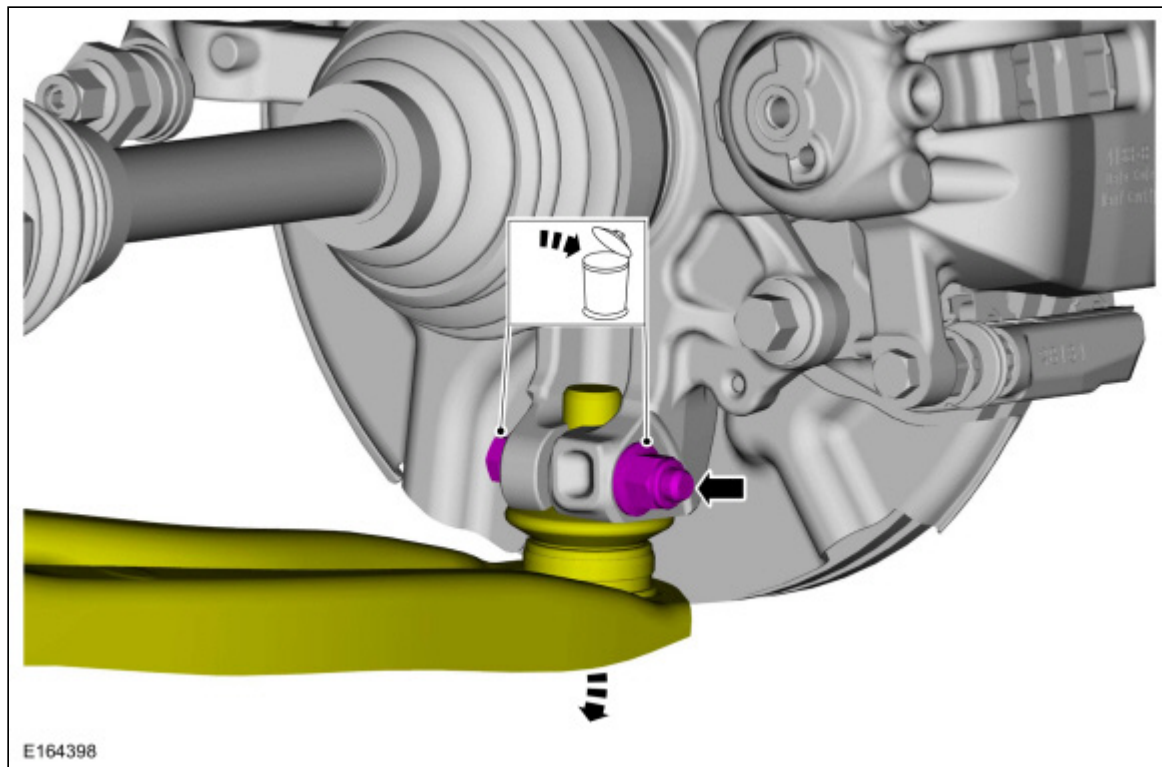
On both sides.



7. **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. Only use the pry bar by inserting it into the lower arm body opening.

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

On both sides.

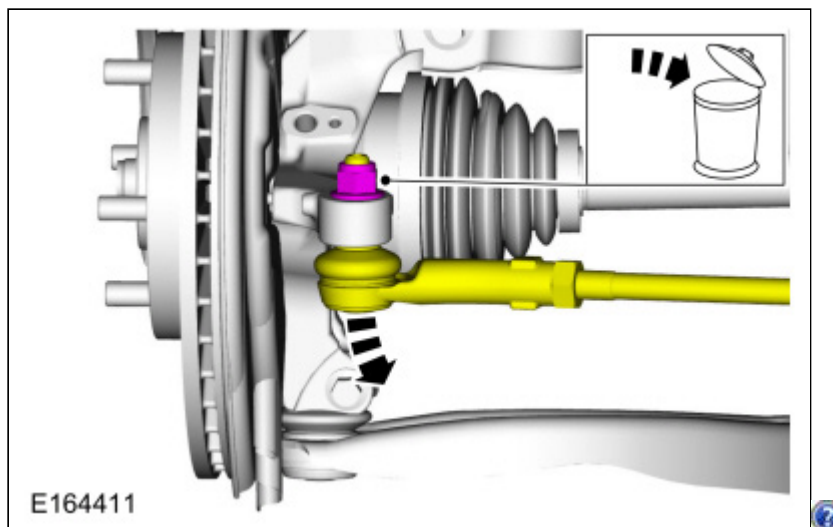


8. **NOTICE:** Do not use a hammer to separate the outer tie-rod end from the wheel knuckle or damage to the wheel knuckle may result.

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

On both sides.

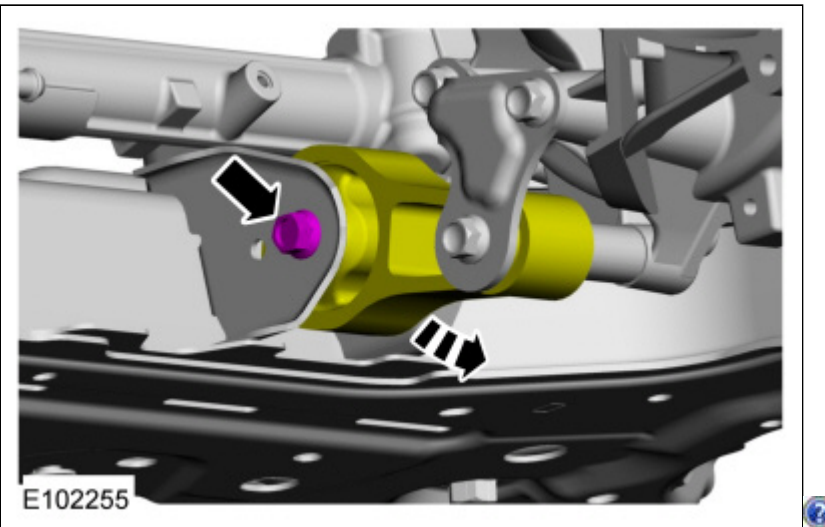
General Equipment : Tie Rod End Remover



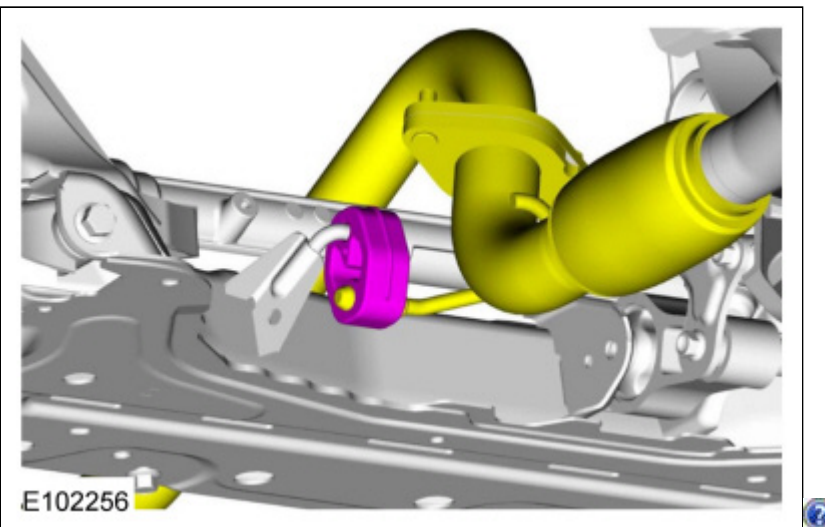
These are both tricky and will require lots of force to remove. For the lower ball joint, use penetrating oil. I ended up needing to use a pickle fork and steel bars which resulted in damaging the ball joints. Use care.

Steering link was a bit easier, but still required some soft taps. Make sure to mark the location of the tie rod end with a paint pen BEFORE you remove it.

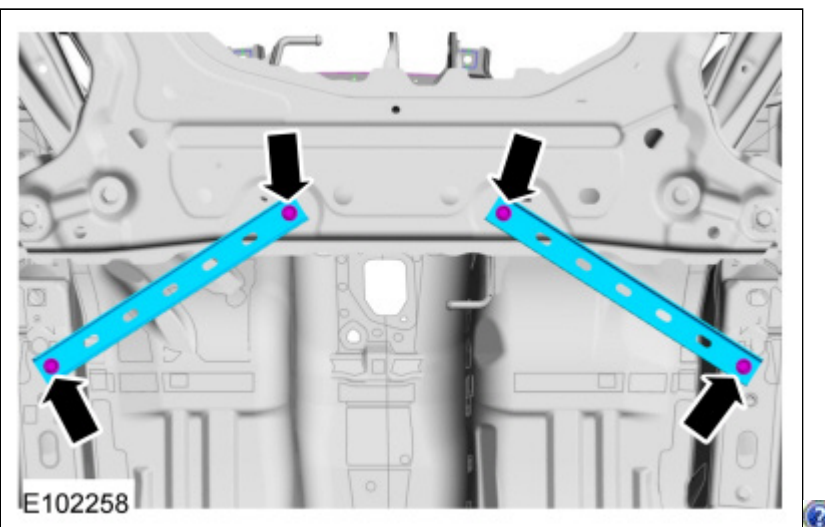
Discard and replace these nuts.



10. **NOTE:** 1.6L shown, 1.0L Fox similar.

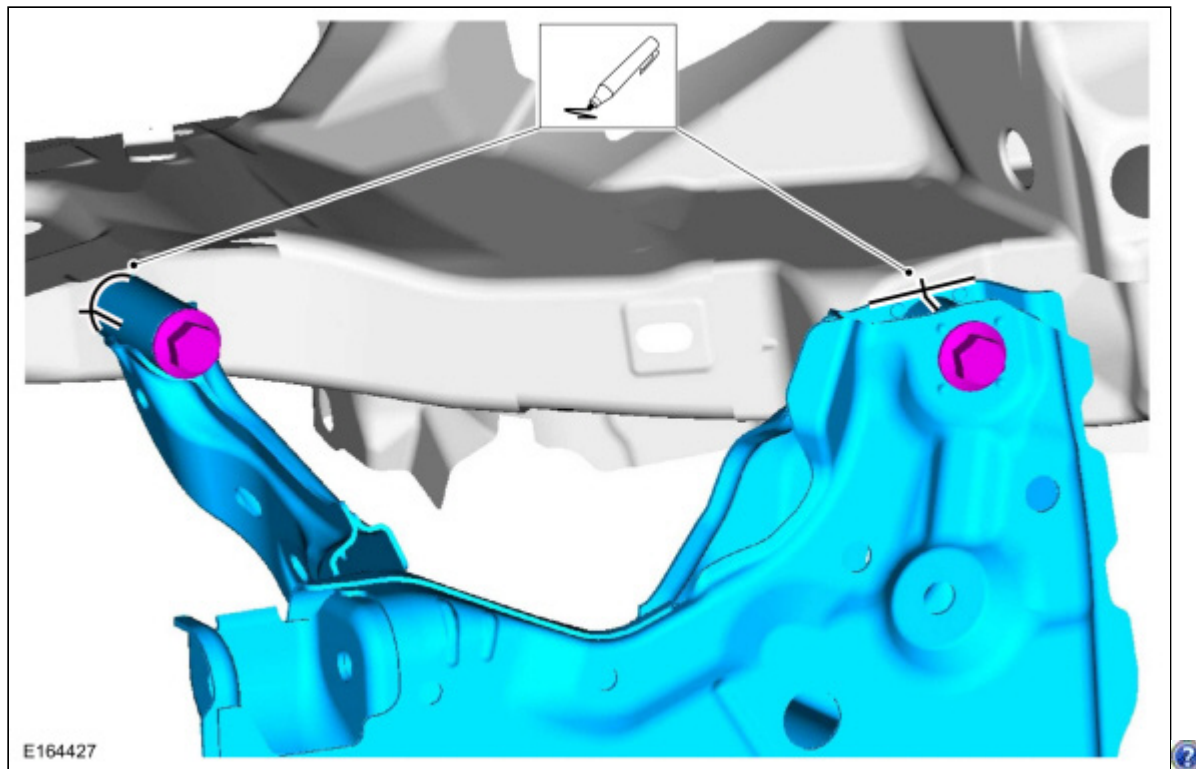


11.

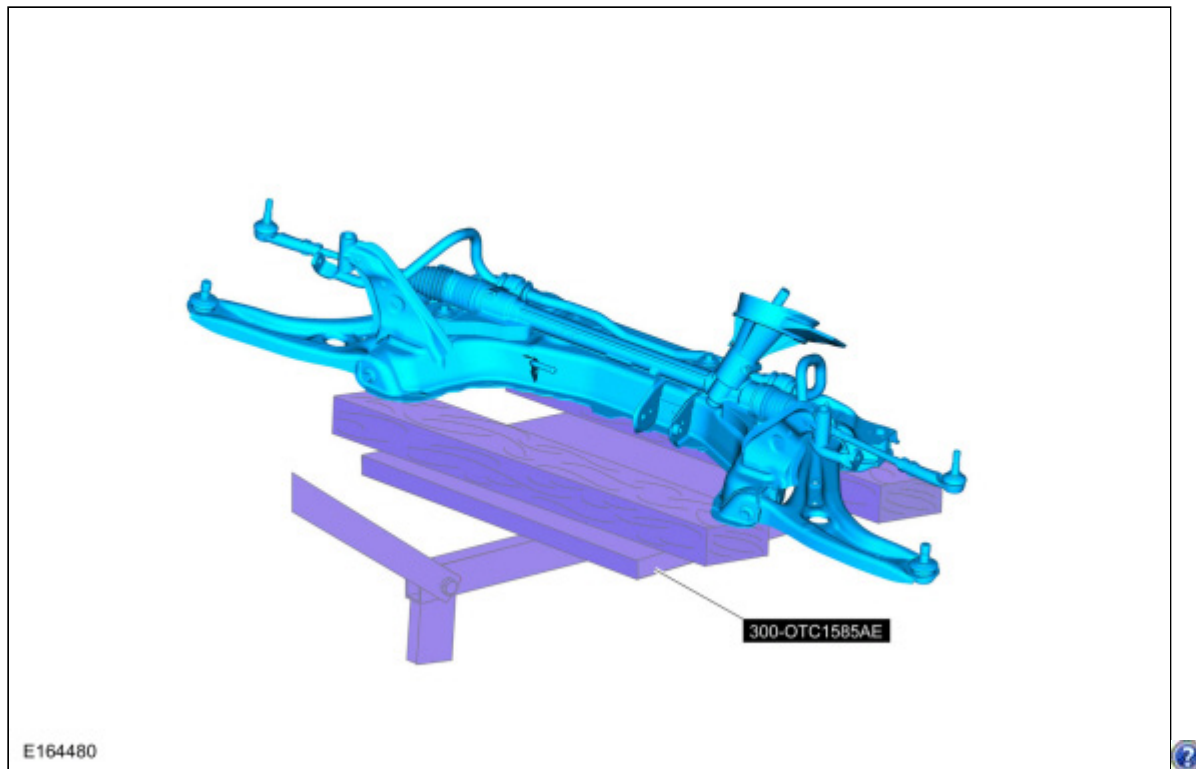


12. **NOTE:** This step is not necessary if the subframe assembly is replaced.

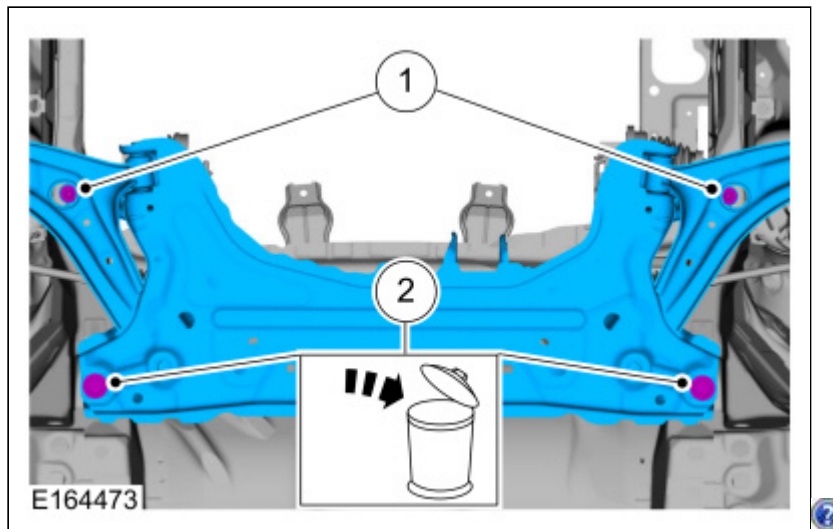
On both sides.



13. Position the Powertrain Lift.
Special Tool(s) : 300-OTC1585AE Powertrain Lift
General Equipment : Wooden Block

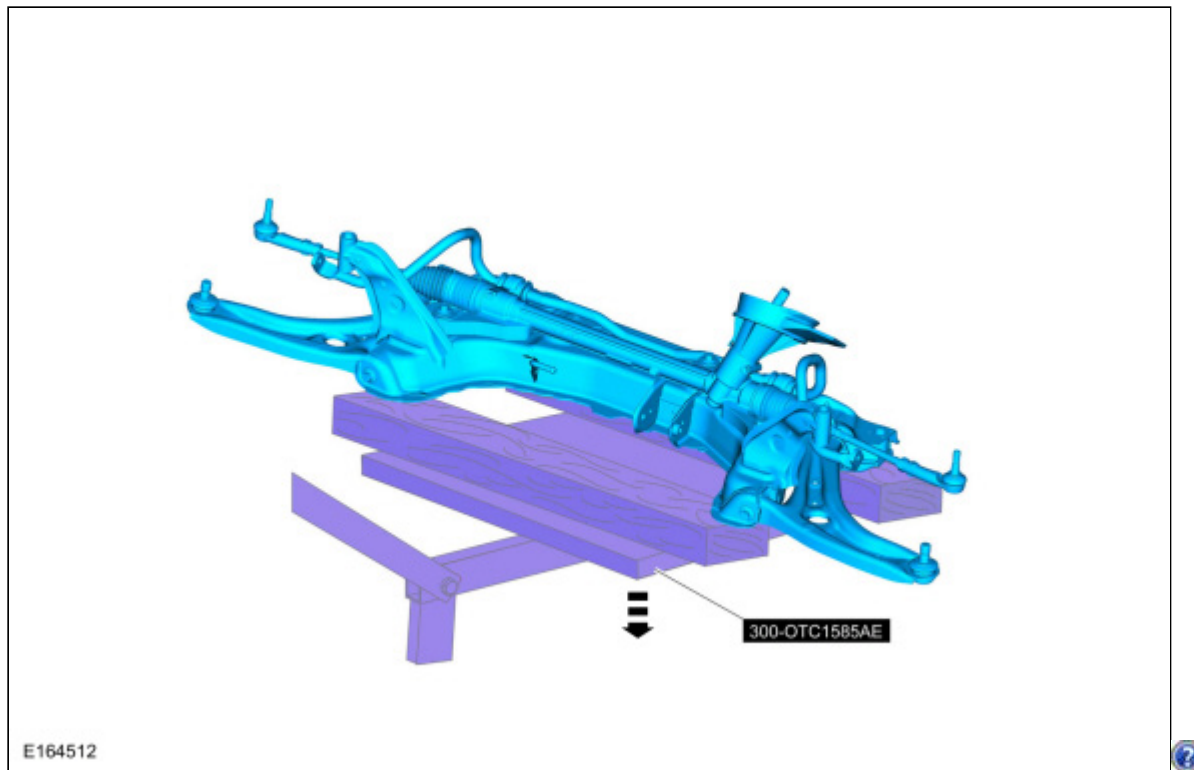


14. I used my transmission jack with some long boards on it to support the A-arms.



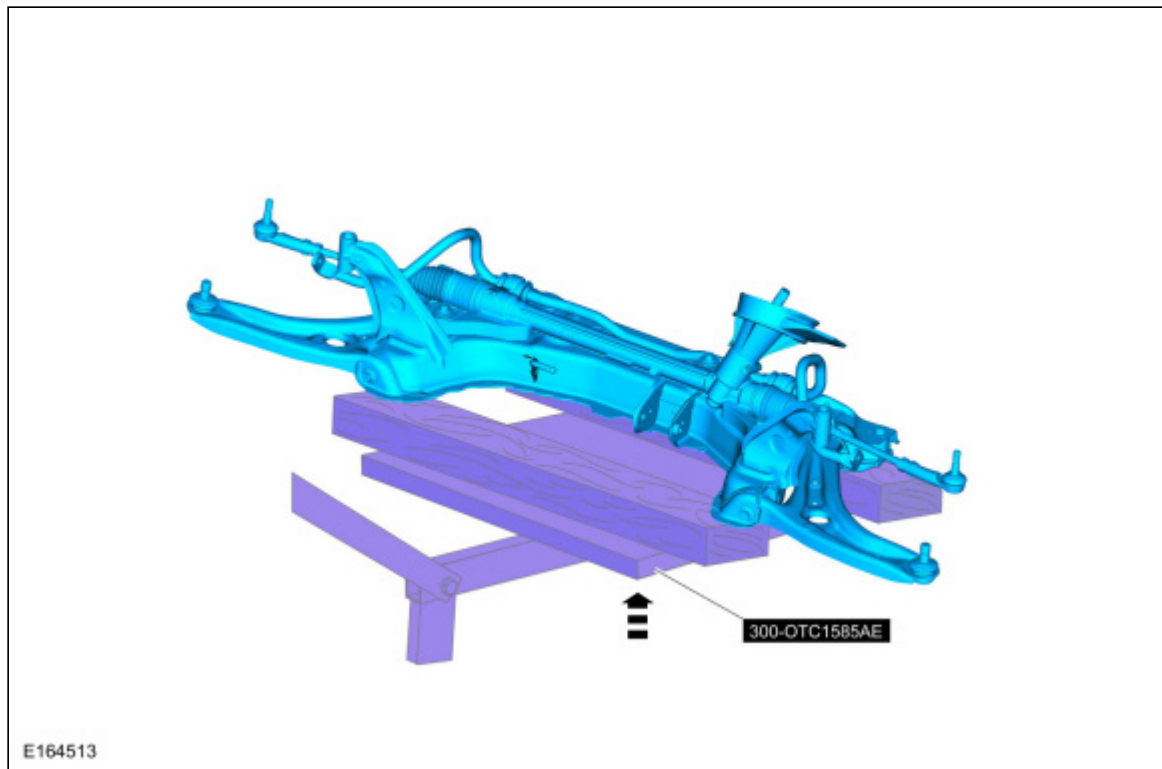
Discard and replace these bolts.

15. *Special Tool(s)* : 300-OTC1585AE Powertrain Lift
General Equipment : Wooden Block



Installation

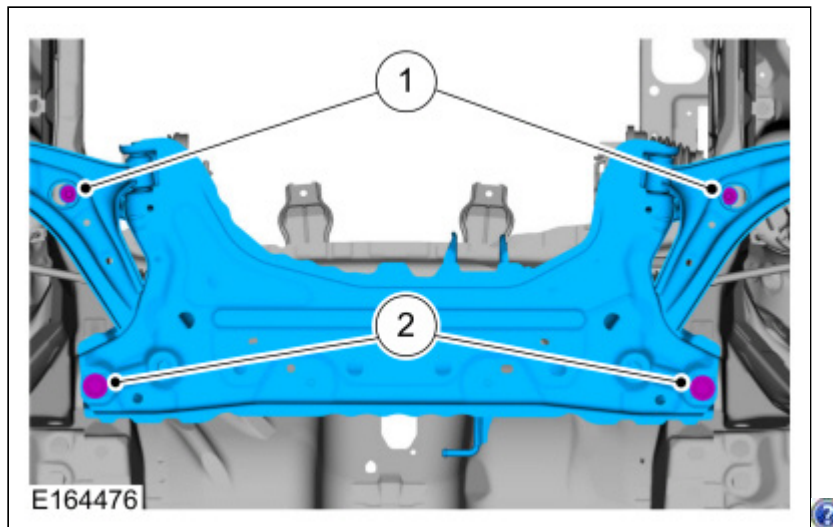
1. *Special Tool(s)* : 300-OTC1585AE Powertrain Lift
General Equipment : Wooden Block



2.

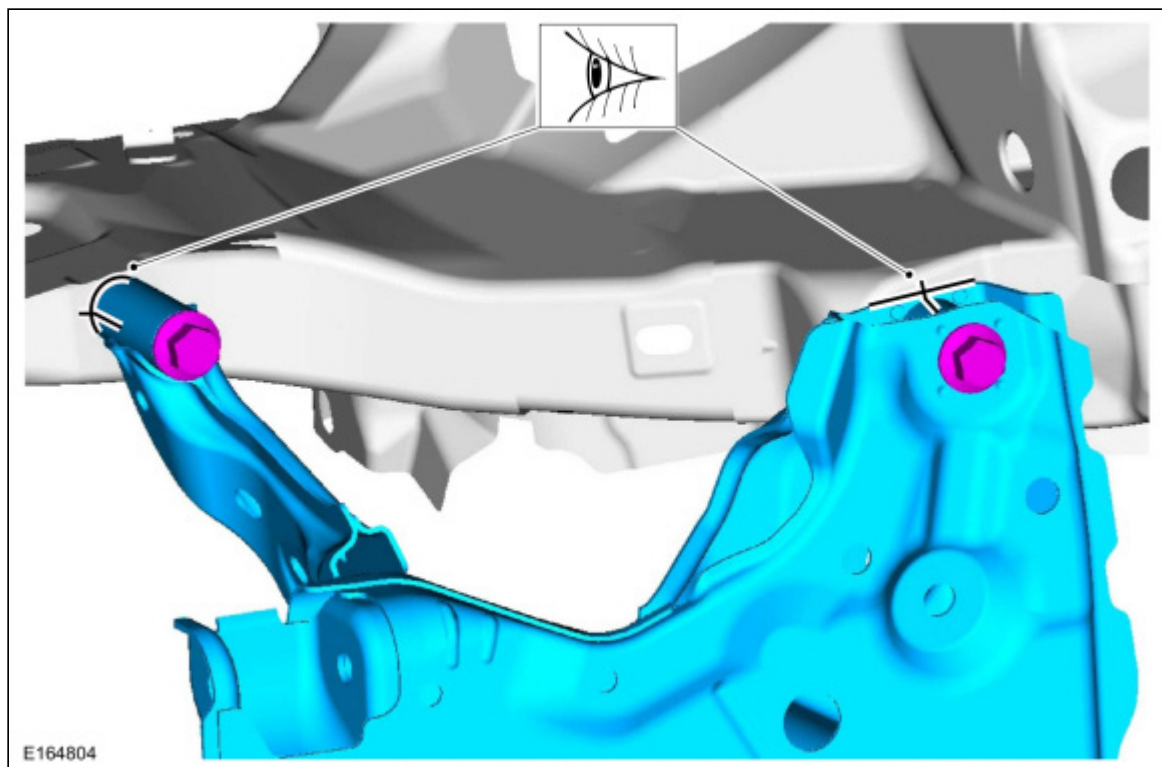
1. Only tighten the bolts finger tight at this stage.
2. Only tighten the bolts finger tight at this stage.

Take care to watch the steering shaft align with the internal linkage. Take your time here! Go slowly.



3. **NOTE:** *If installing the subframe that was previously removed.*

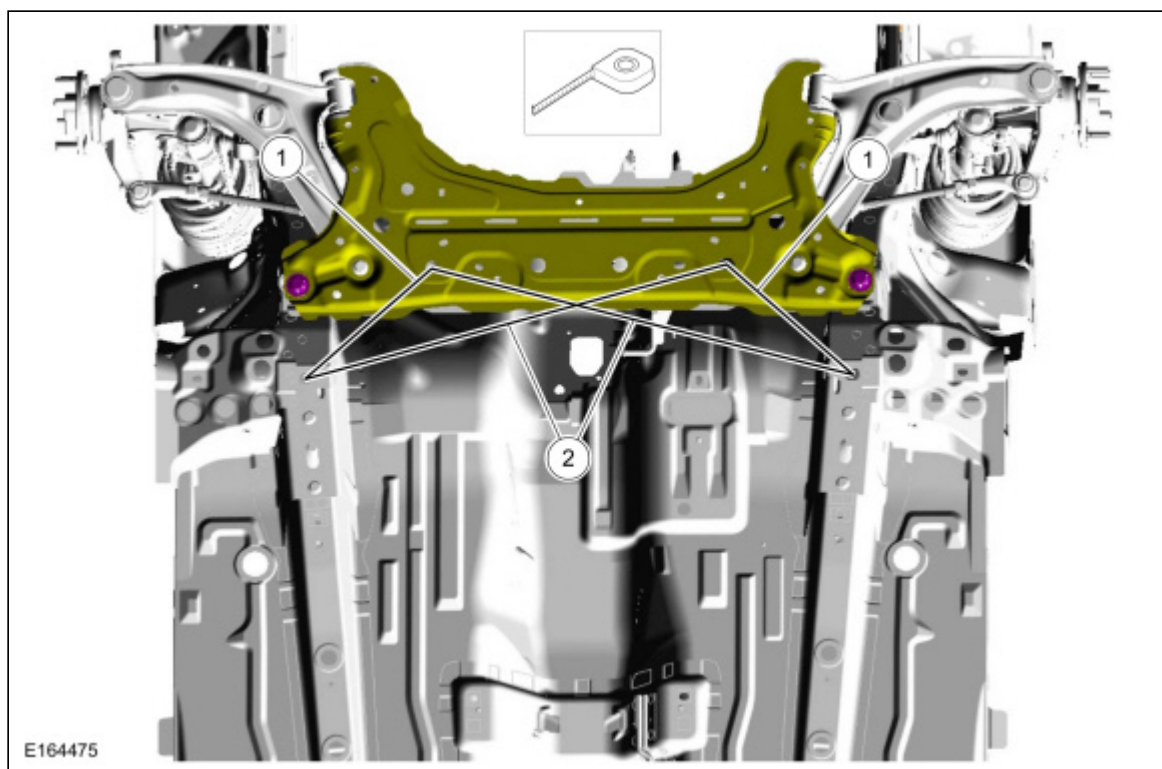
On both sides.



4. **NOTE:** If installing a new subframe, measure for correct positioning of the subframe to vehicle underbody.

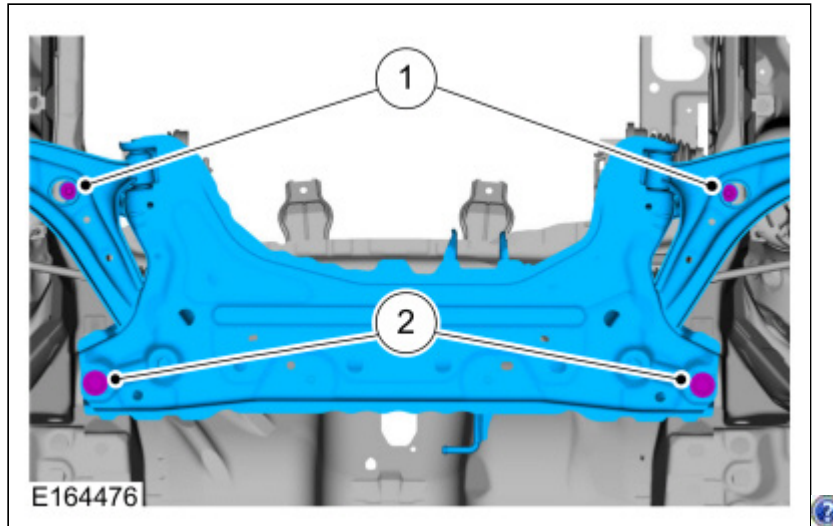
NOTE: RH and LH dimensions are identical. All measurements on center.

1. Location 1 —
Dimension : 10.236 in (260 mm)
2. Location 2 —
Dimension : 26.220 in (666 mm)



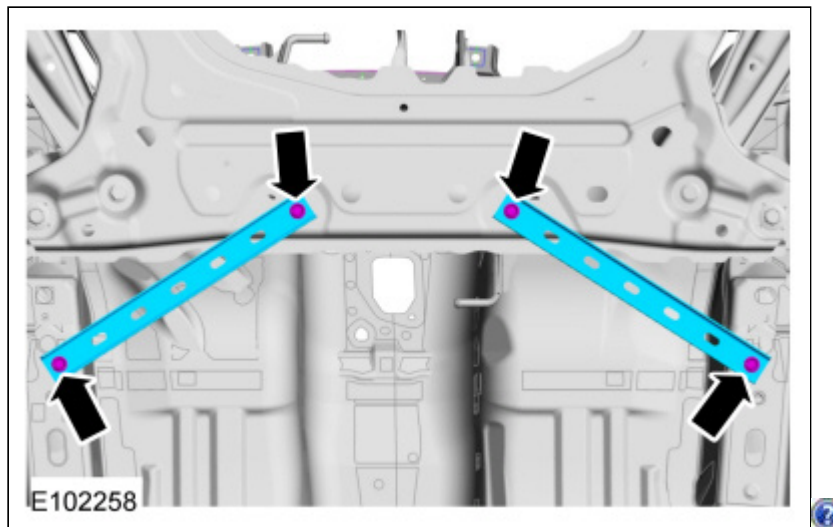
5.
 1. Torque : 60 Nm

2. Torque :
Stage 1: 100 Nm
Stage 2: 240°

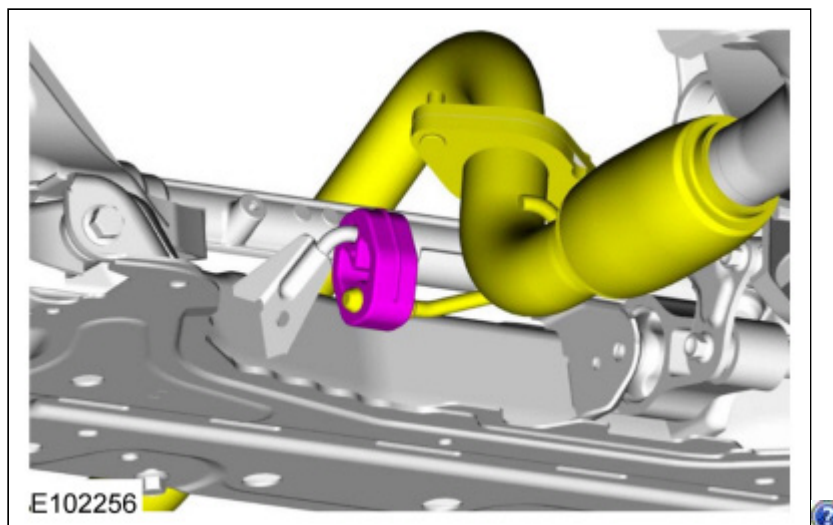


Applying a lot of torque on these bolts! I found that a breaker bar with a cheater pipe attached to it was the only way. If you have another person to help, ask them. I marked the bolts and frame with a paint pen to see how far they needed to turn.

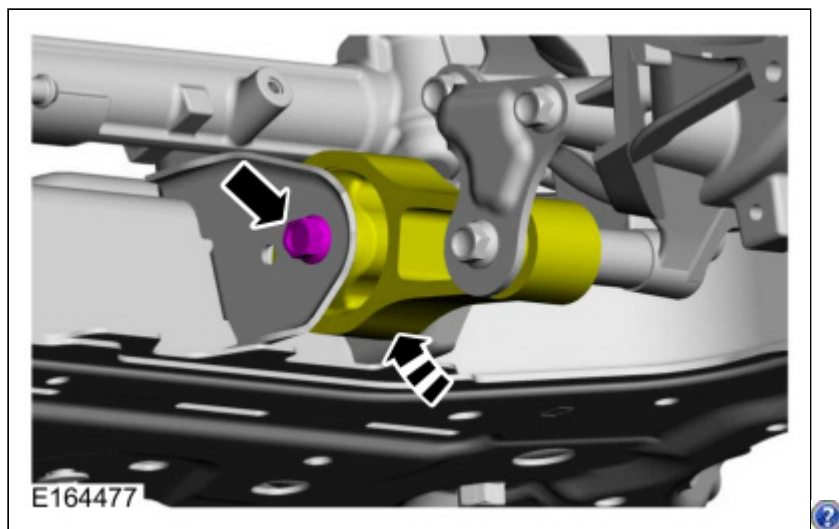
6. Torque : 48 Nm



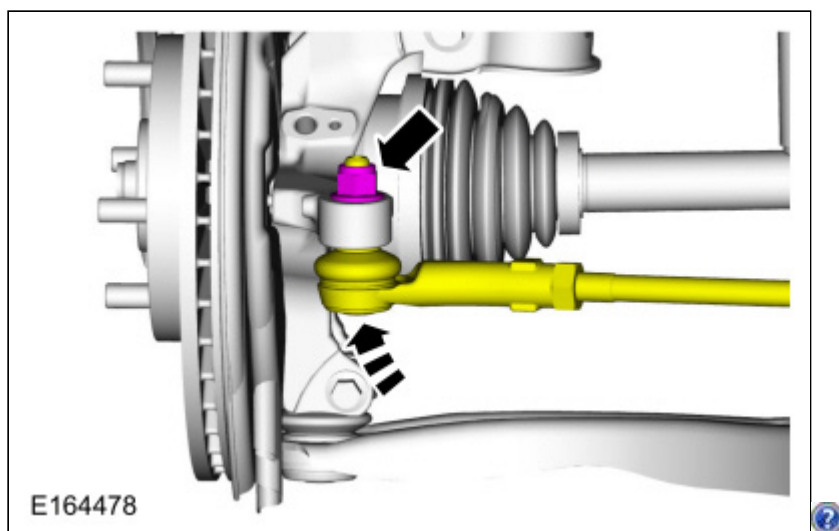
7. **NOTE:** 1.6L shown, 1.0L Fox similar.



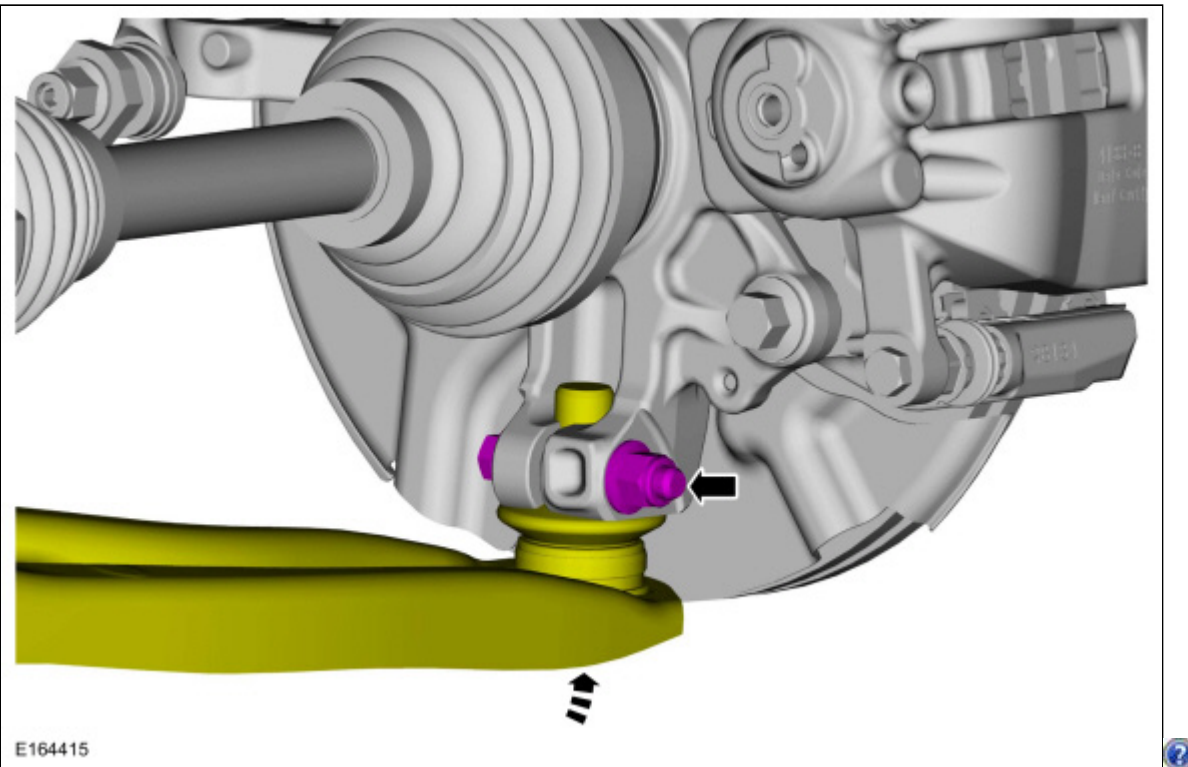
8. Torque : 50 Nm



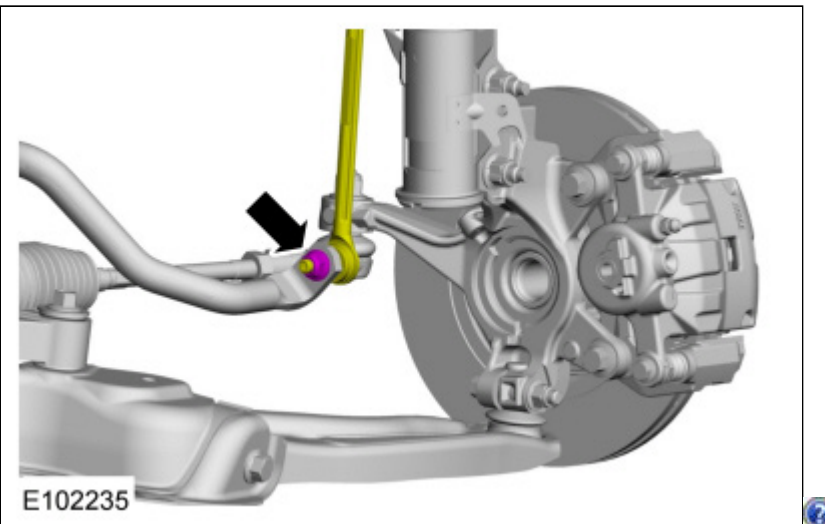
9. On both sides.
Torque : 53 Nm



10. On both sides.
Torque : 52 Nm

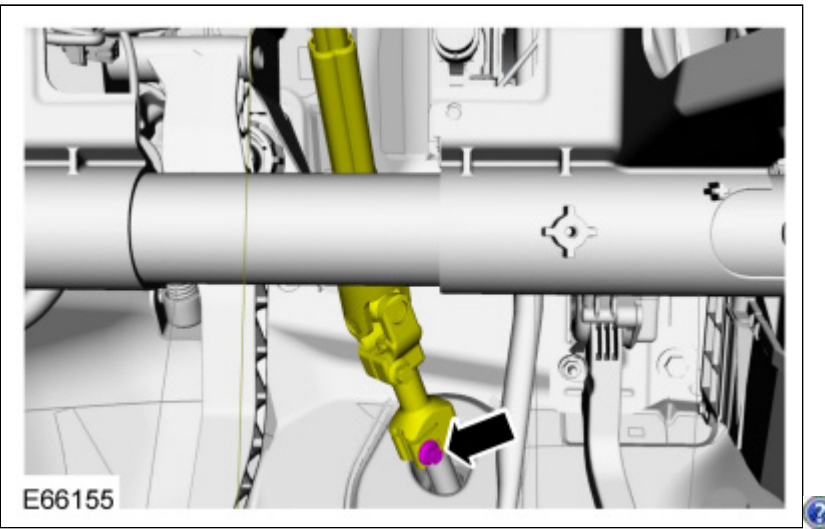


11. On both sides.
Torque : 48 Nm



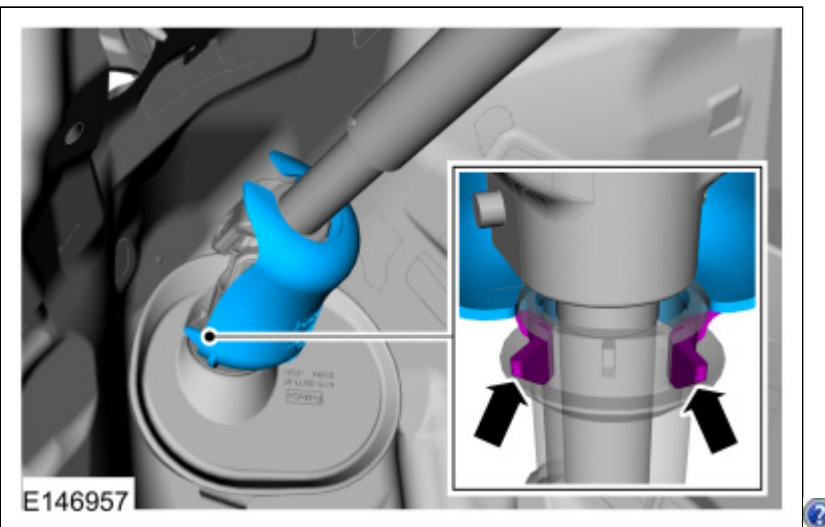
12. Refer to: [Wheel and Tire](#) (204-04A Wheels and Tires, Removal and Installation).
13. **⚠ WARNING:** Do not reuse steering column shaft bolts. This may result in fastener failure and steering column shaft detachment or loss of steering control. Failure to follow this instruction may result in serious injury to vehicle occupant(s).

Torque : 34 Nm



Take extra care with this bolt and be sure to use a NEW one. This is what links the steering shafts together!

14. If equipped.



15. Refer to: [Front Toe Adjustment](#) (204-00 Suspension System - General Information, General Procedures).

Time for an alignment!