

Uni-Body, Subframe and Mounting System -

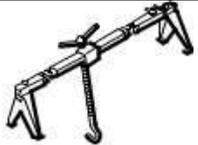
Torque Specifications

Description	Nm	lb-ft	lb-in
Front lower arm to front subframe retaining nut and bolt	175	129	-
Rear lower arm to front subframe retaining nut and bolt	175	129	-
Engine mount lower retaining nut	63	46	-
Steering gear retaining bolts	100	74	-
Front Shock absorber and spring assembly retaining bolt	175	129	-
Front subframe to body front retaining bolt			
Stage 1	100	73	-
Stage 2	270°	270°	-
Front subframe to body rear retaining bolt			
Stage 1	80	59	-
Stage 2	240°	240°	-
Front Stabilizer bar link retaining nuts	43	31	-
Front Stabilizer bar link retaining bolts	55	41	-
Rear Shock absorber and spring assembly retaining bolt	133	98	-
Rear subframe reinforcement plate retaining bolts	47	35	-
Rear subframe to body retaining bolts			
Stage 1	80	59	-
Stage 2	240°	240°	-

Uni-Body, Subframe and Mounting System - Front Subframe V8 5.0L Petrol/V8 S/C 5.0L Petrol

Removal and Installation

Special Tool(s)

 <p>303-021</p>	<p>303-021 Engine support bracket</p>
 <p>E115254</p>	<p>303-1436 Engine Lifting Bracket Front</p>
 <p>E138547</p>	<p>502-005 Alignment Bolts, Subframe</p>

General Equipment

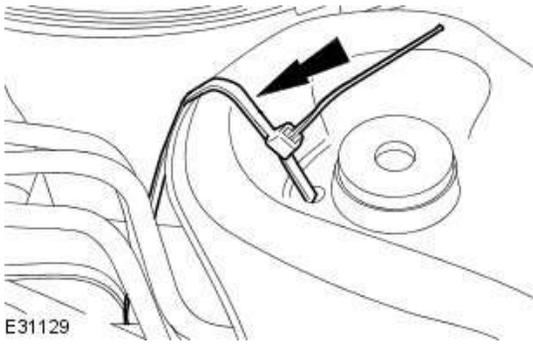
Powertrain Jack

Removal

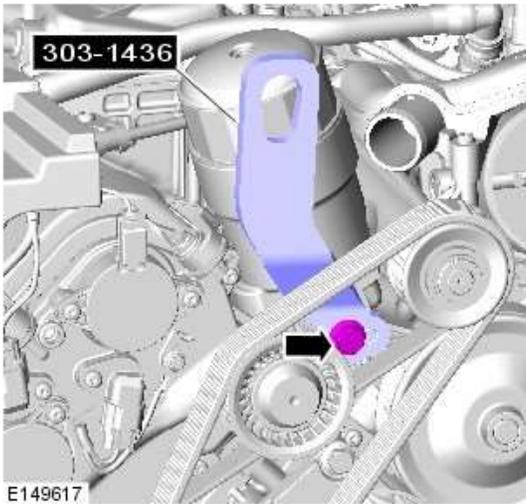


NOTE: Some variation in the illustrations may occur, but the essential information is always correct.

1. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).
2.  **WARNING:** Make sure to support the vehicle with axle stands.
Raise and support the vehicle.
3. Refer to: [Radiator Splash Shield](#) (501-02 Front End Body Panels, Removal and Installation).
4. Refer to: [Air Deflector](#) (501-02 Front End Body Panels, Removal and Installation).
5. Refer to: [Engine Cover - V8 5.0L Petrol/V8 S/C 5.0L Petrol](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).

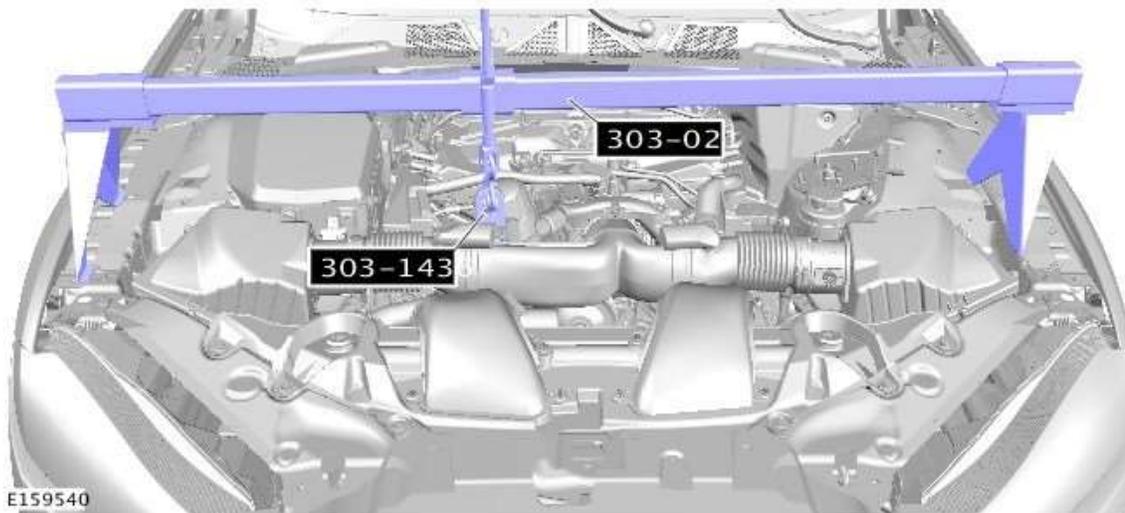


6. Secure the radiator assembly.



7.

- *Special Tool(s)*: [303-1436](#)
- *Torque*: [40 Nm](#)



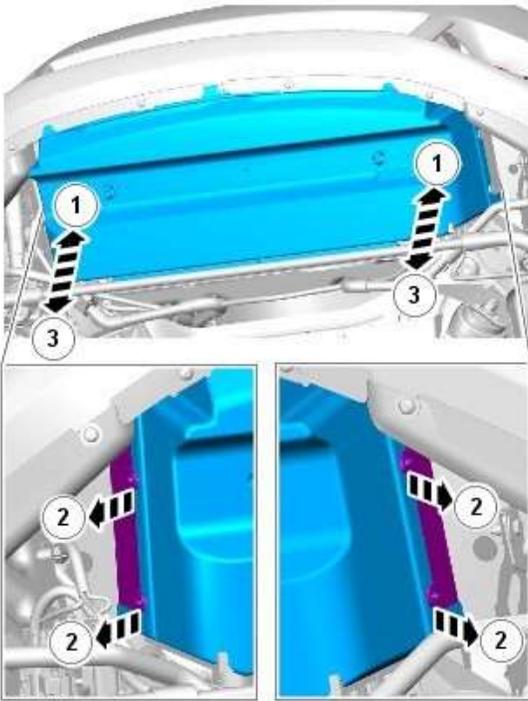
8. CAUTIONS:

 Support the engine on a jack. The angle may need to be adjusted during this procedure.

 Make sure to protect the paintwork.

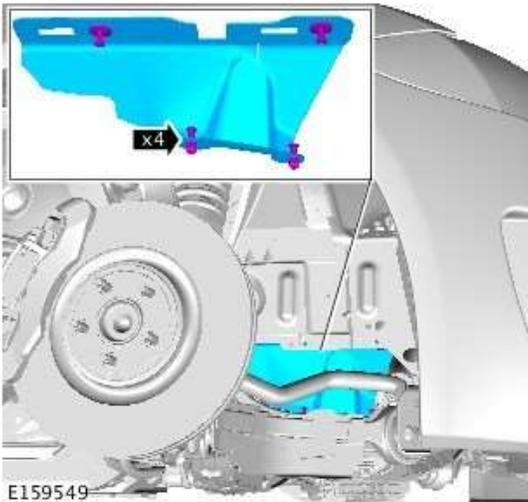
- *Special Tool(s)*: [303-021](#)
- *Special Tool(s)*: [303-1436](#)

9.



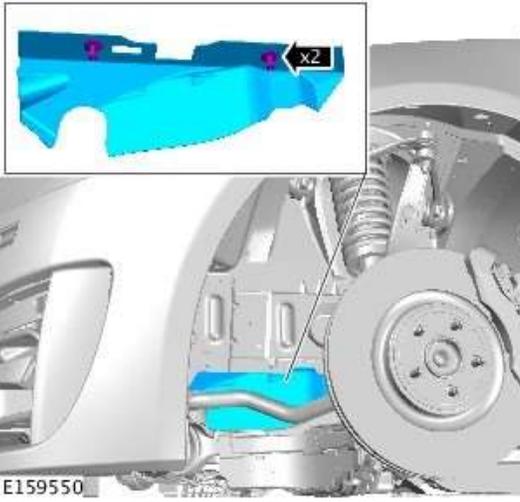
E97870

10.

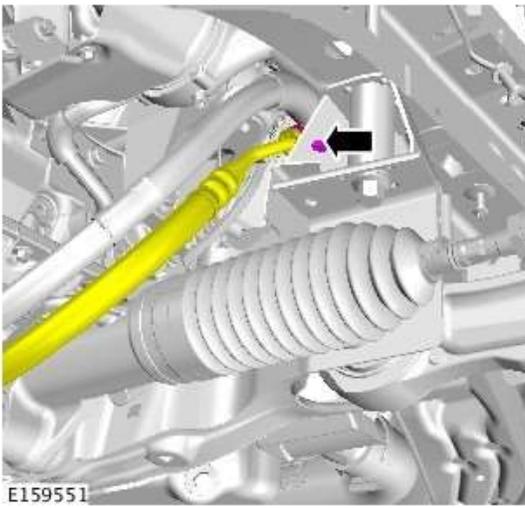


E159549

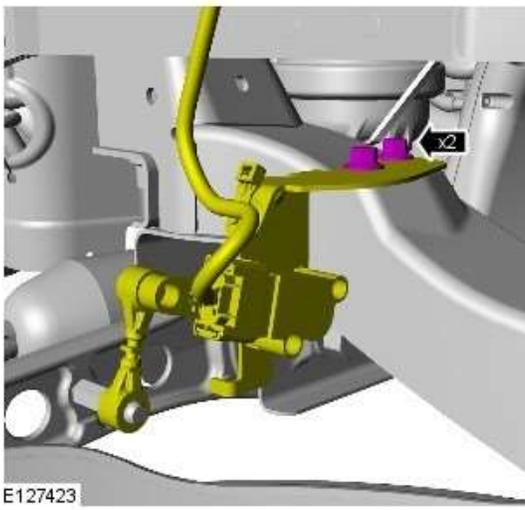
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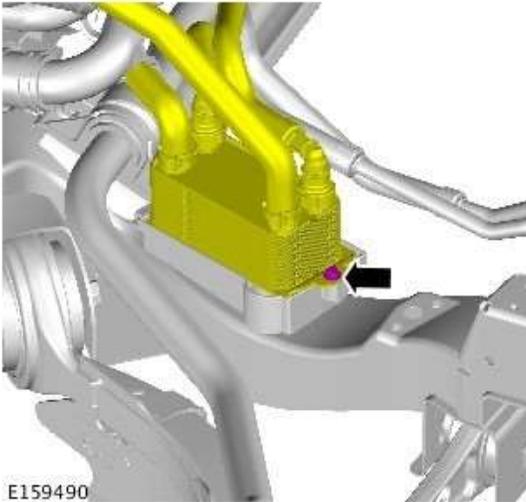
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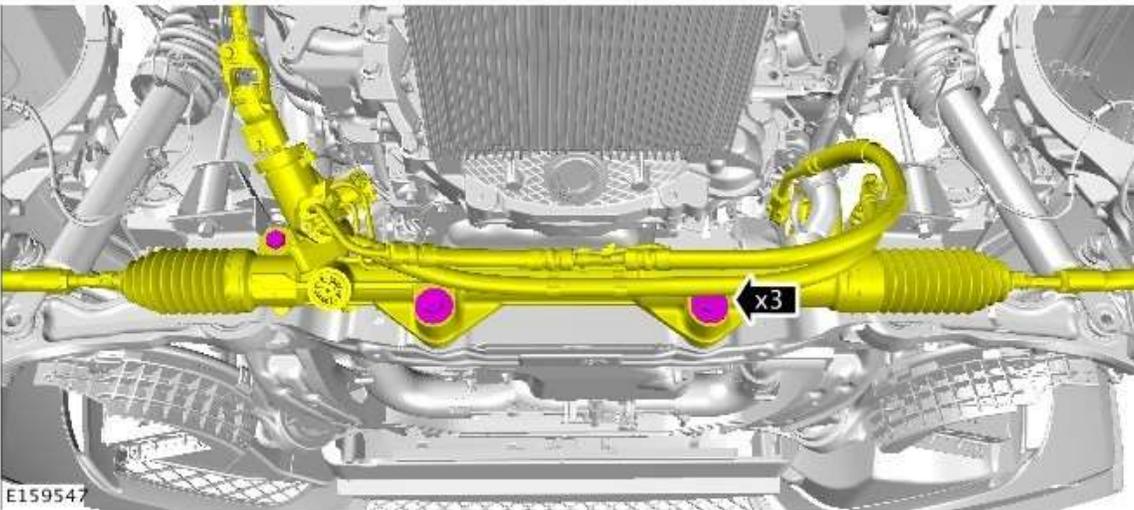
13.



14.

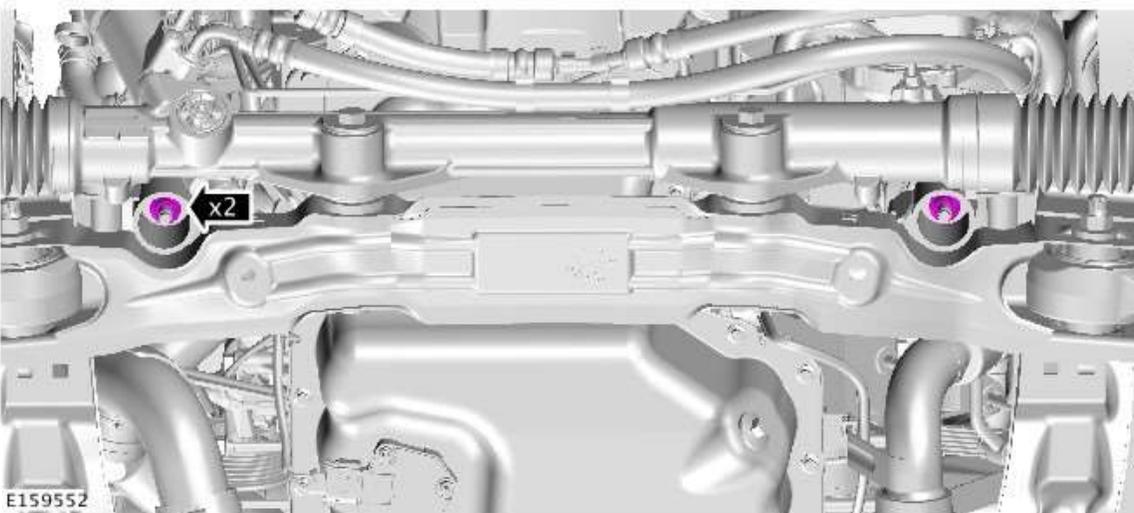


E159490



E159547

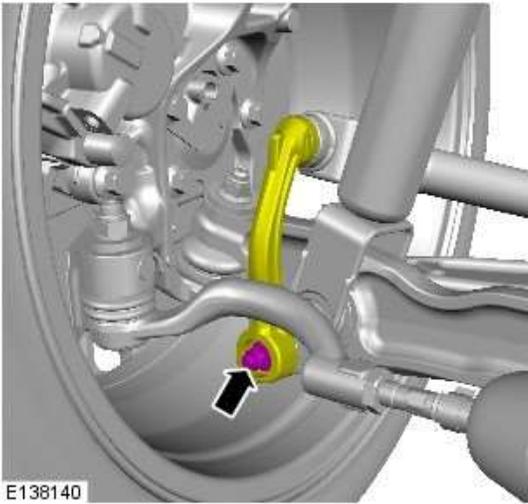
15.  **CAUTION:** Make sure to support the steering gear.
-  **NOTE:** LHD illustration shown, RHD is similar.



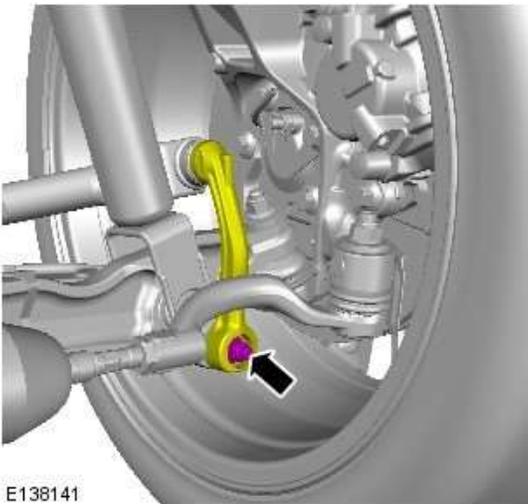
E159552

16.

17.



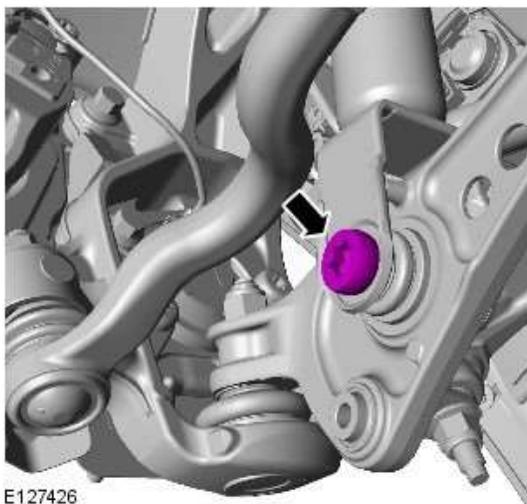
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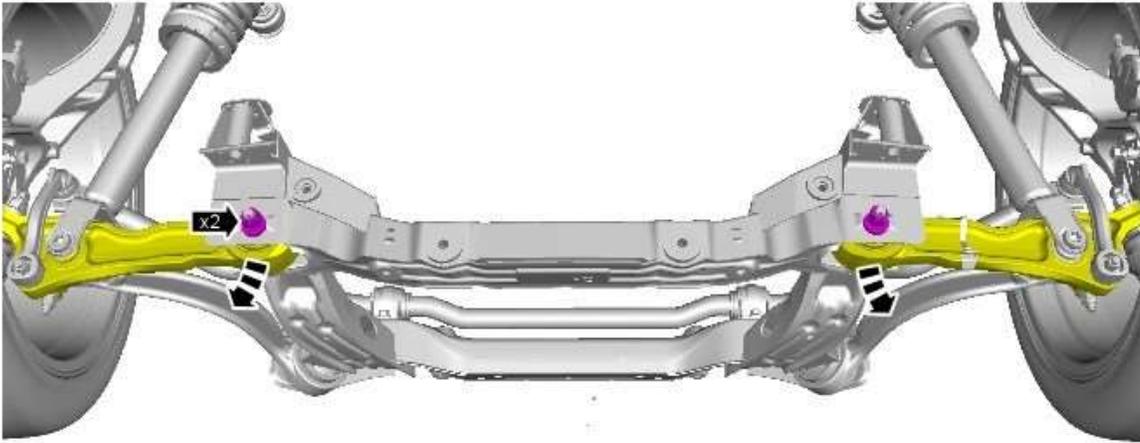


19. NOTES:

△ LH illustration shown, RH is similar.

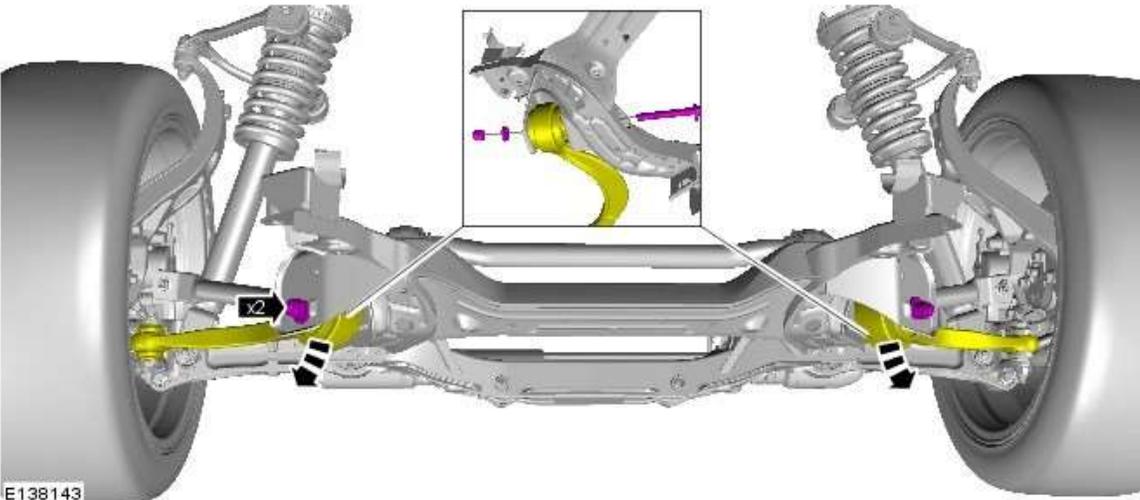
△ Repeat the step for the other side.





20.  NOTE:
Note the fitted position of each bolt, mark the washers and sub-frame before removal to aid assembly.

E138142

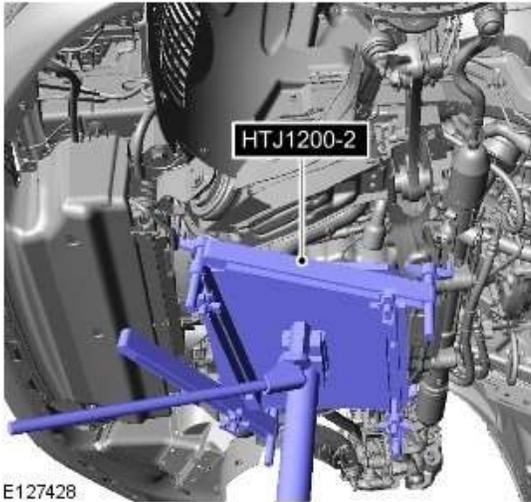


21.  CAUTION:
Make sure the wheel knuckle is supported. Failure to follow these instructions may result in damage to the vehicle.

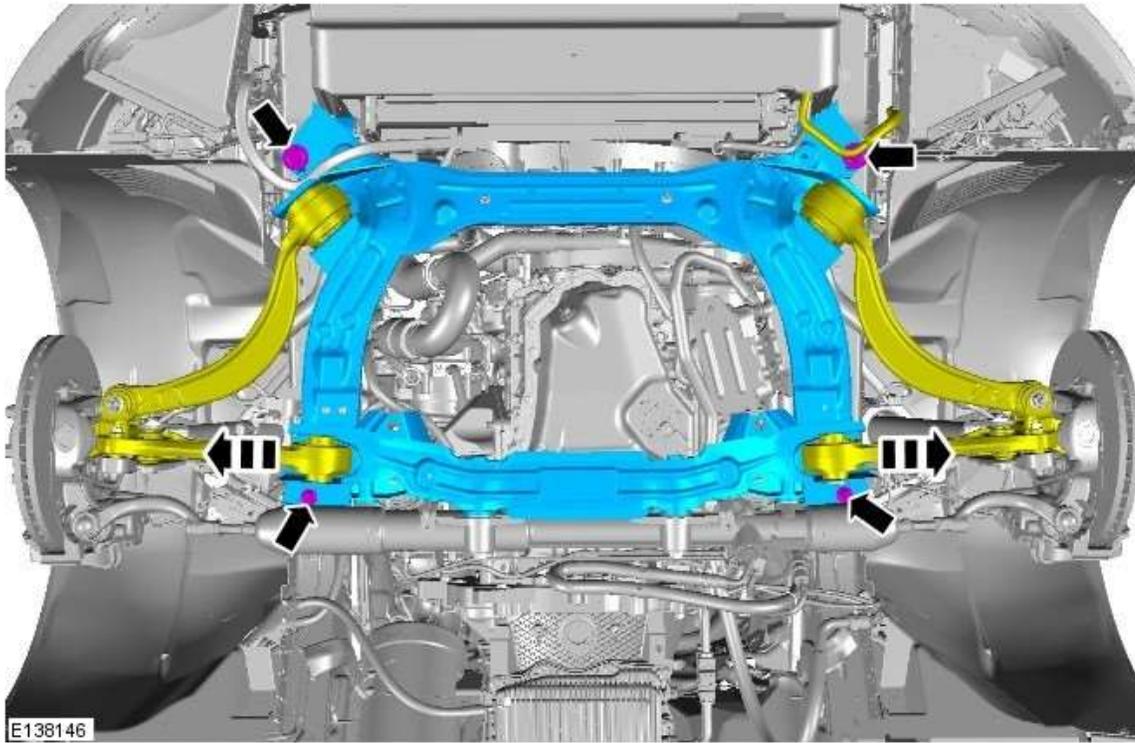
 NOTE:
Note the fitted position of each bolt, mark the washers and sub-frame before removal to aid assembly.

E138143

22. General Equipment: [Powertrain Jack](#)



E127428



23.  CAUTION:
Take extra care not to damage the air conditioning (A/C) pipes when lowering the component.

NOTES:

 This step requires the aid of another technician.

 Do not disassemble further if the component is removed for access only.



24.

E127430



25.

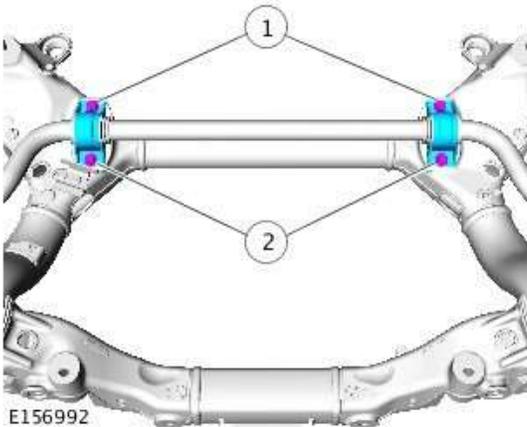
E127431

Installation



E127431

1.  CAUTION: Only tighten the bolts finger-tight at this stage.



E156992

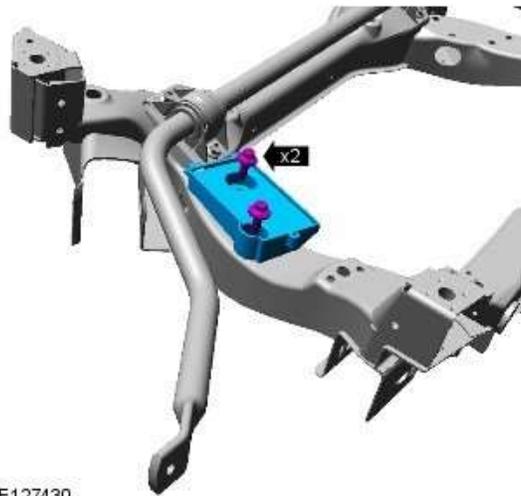
2.  CAUTION: Tighten the bolts in the sequence shown.

Torque:

Bolt 1 63 Nm

Bolt 2 63 Nm

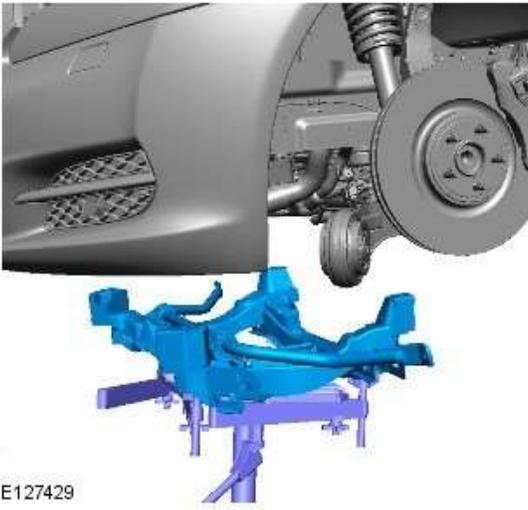
Bolt 1 63 Nm



E127430

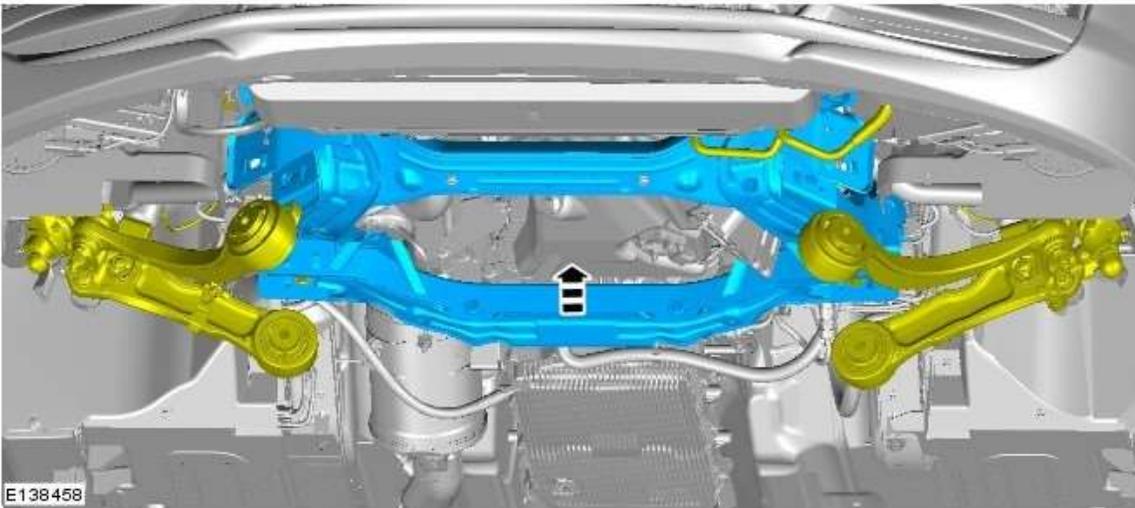
3. *Torque:* 12 Nm

4. General Equipment: [Powertrain Jack](#)



E127429

5.



E138458

6. Install the special tool to the front subframe.

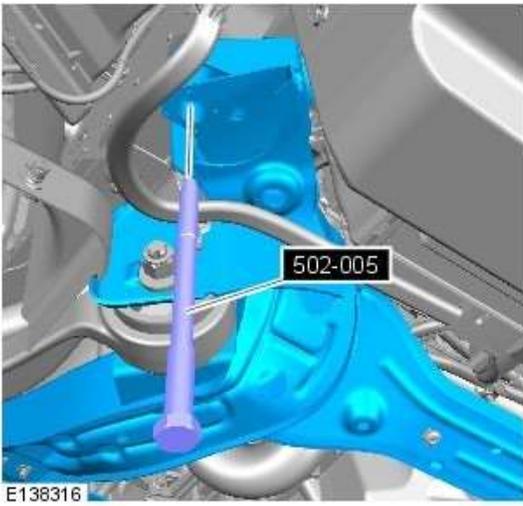
Special Tool(s): [502-005](#)



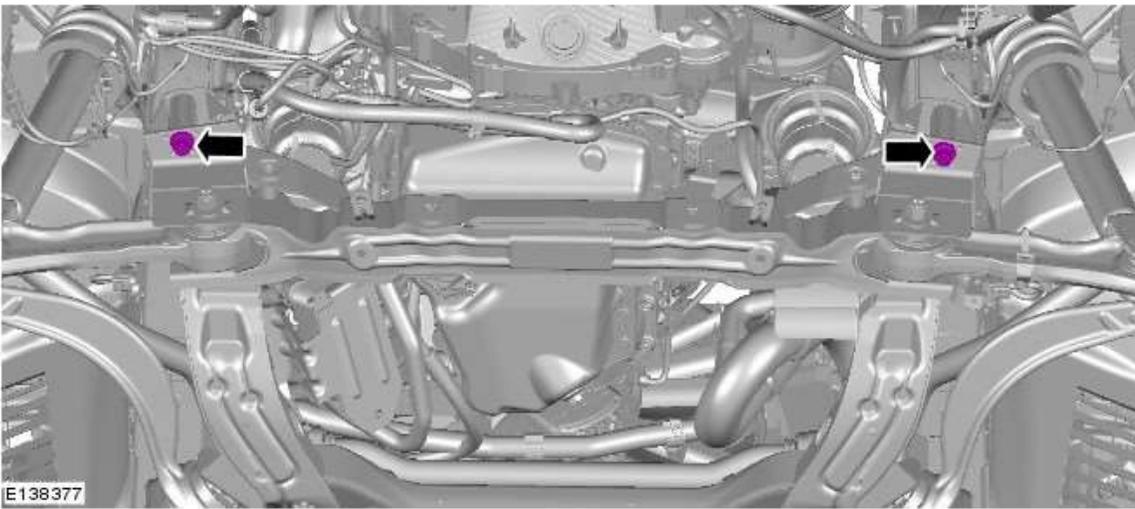
E138315

7. Install the special tool to the front subframe.

Special Tool(s): [502-005](#)



8. *Torque:*
Stage 1: 80
Nm
Stage 2:
240°



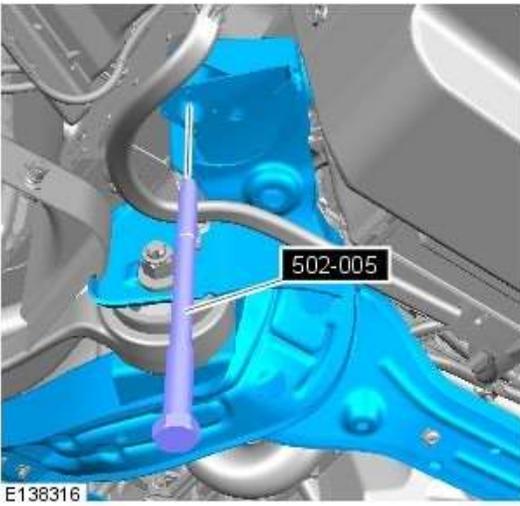
9. Remove the special tool.

Special Tool(s): [502-005](#)

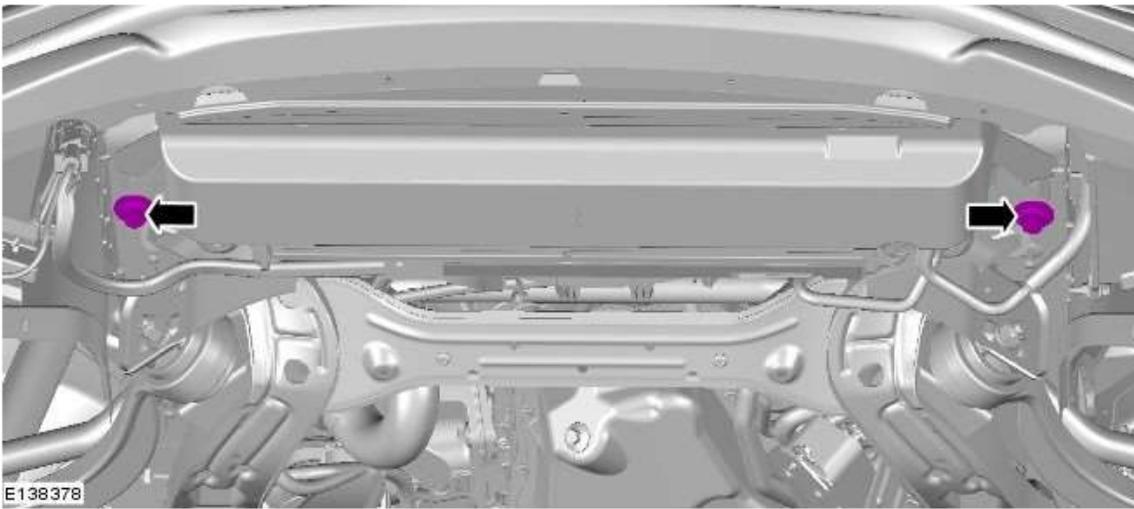


10. Remove the special tool.

Special Tool(s): [502-005](#)

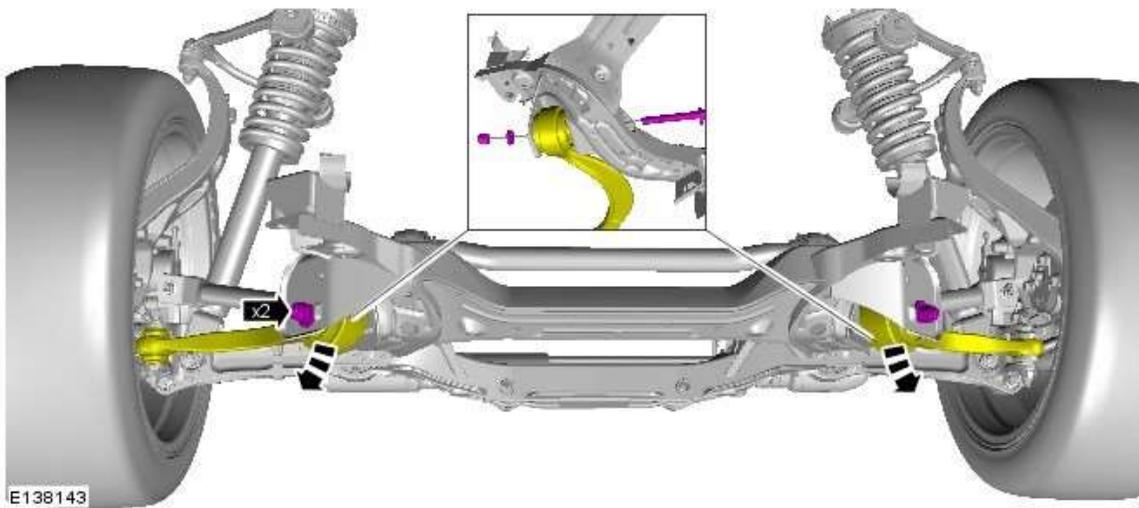


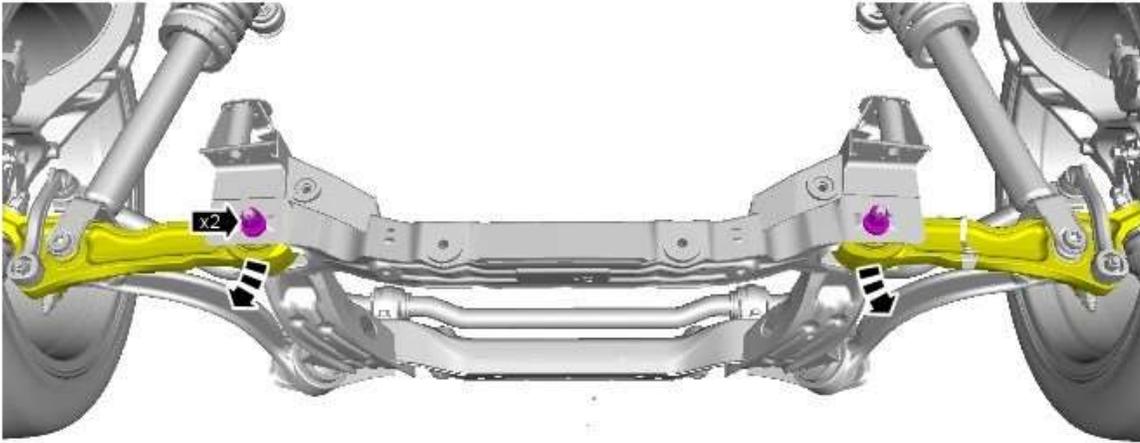
11. **Torque:**
Stage 1:
100 Nm
Stage 2:
270°



12.  **CAUTION:**
Make sure each
bolt aligns with
the removal
markings.

Torque: 175
Nm

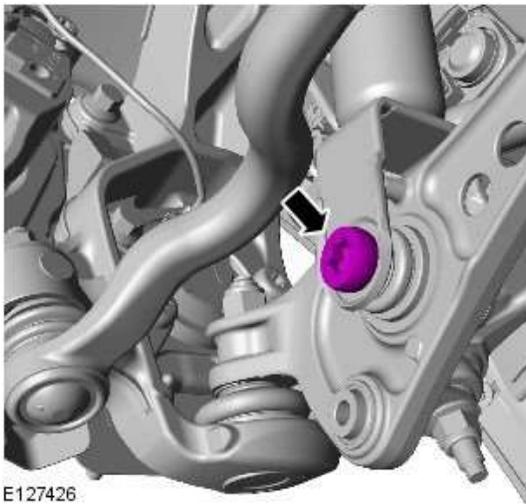




E138142

13.  CAUTION: Make sure each bolt aligns with the removal markings.

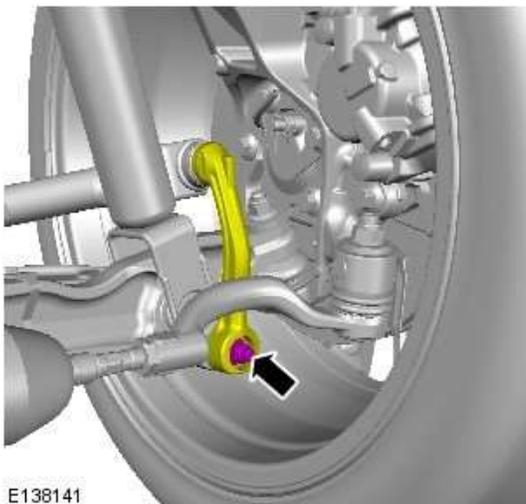
Torque: 175 Nm



E127426

14.  NOTE: Repeat the step for the other side.

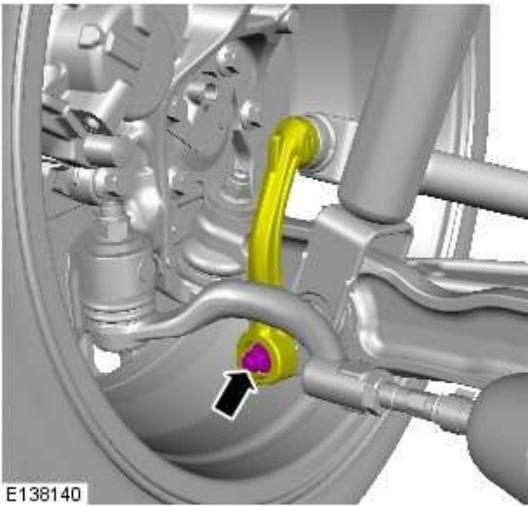
Torque: 175 Nm



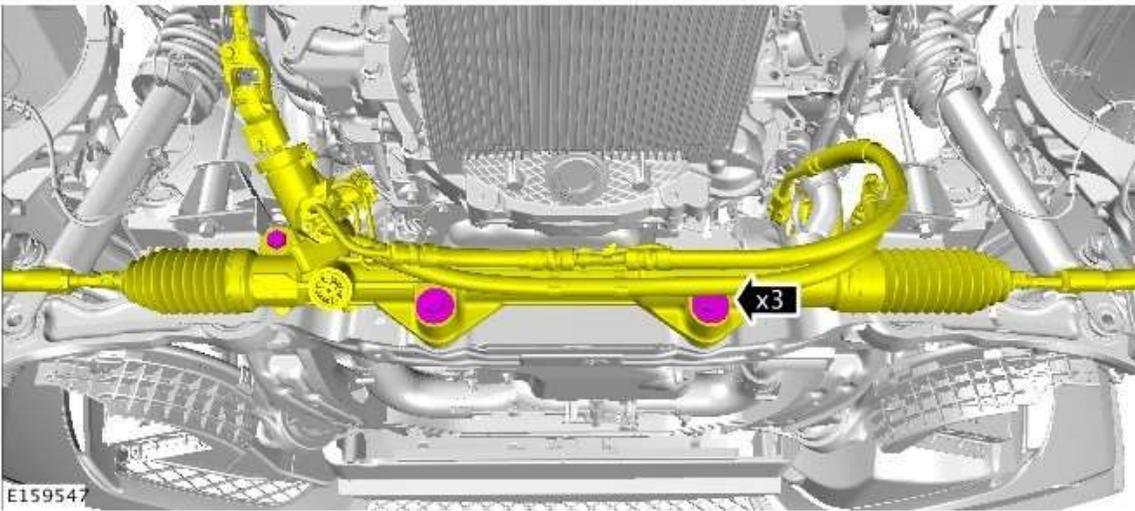
E138141

15. *Torque:* 43 Nm

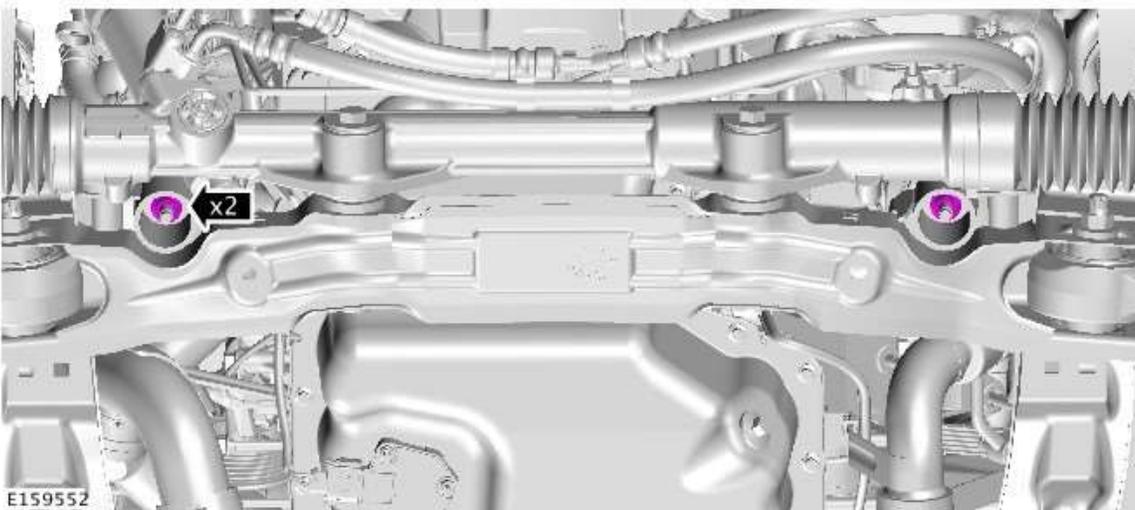
16. Torque: 43 Nm



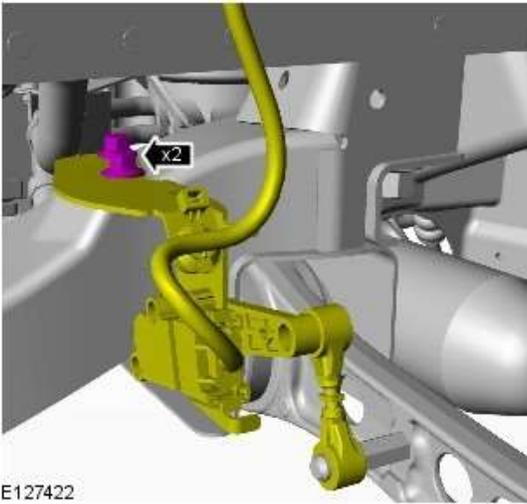
17. Torque: 100 Nm



18. Torque: 45 Nm

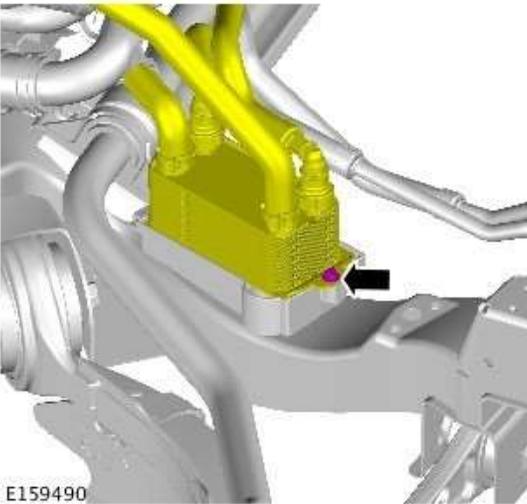


19. Torque: 22 Nm



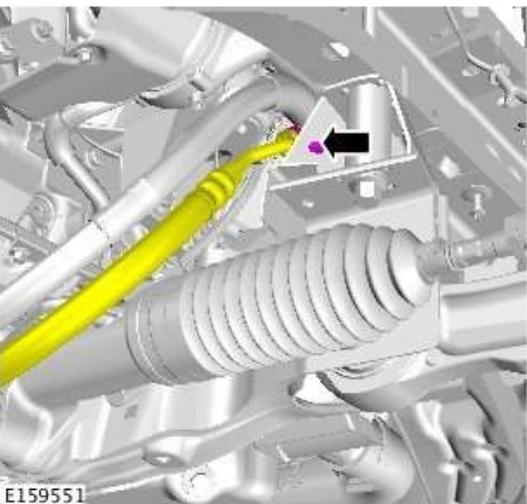
E127422

20. Torque: 5 Nm



E159490

21.

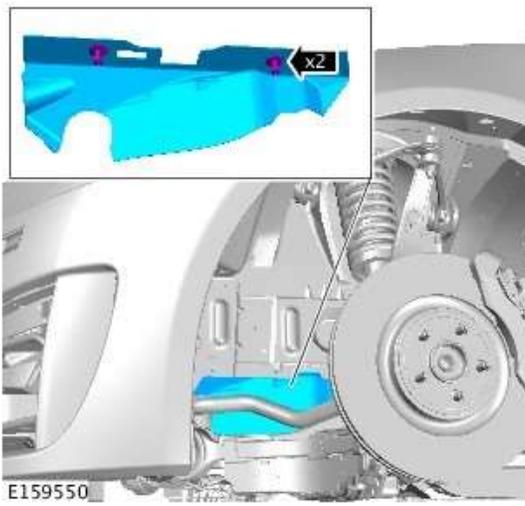


E159551

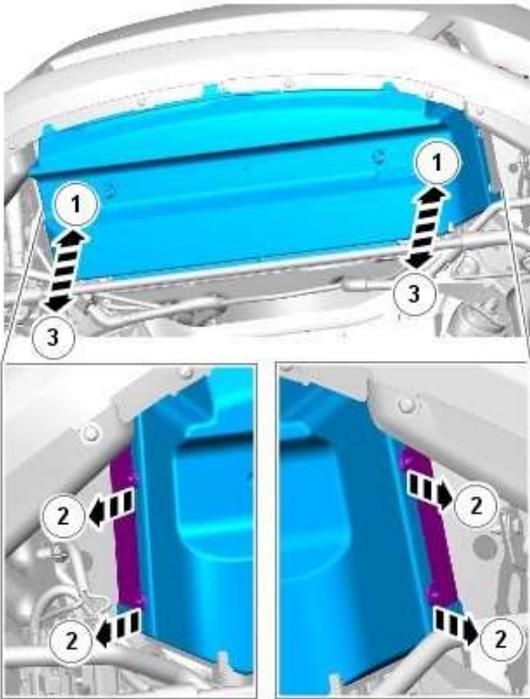
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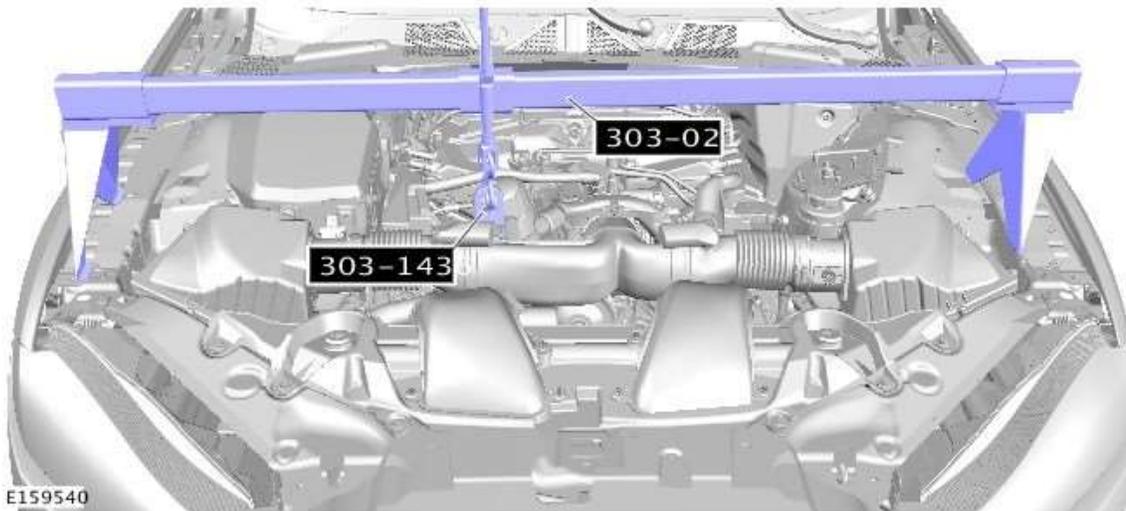
23.



24.

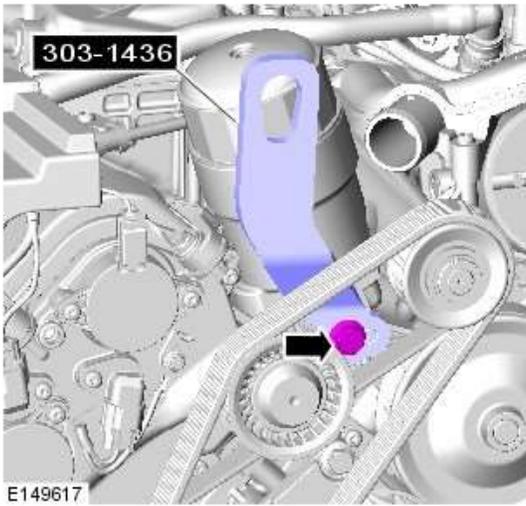


E97870

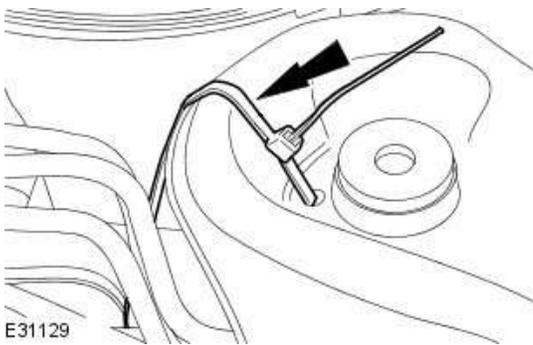


E159540

25.  **CAUTION:**
Make sure to protect the paintwork.
- *Special Tool(s):*
[303-1436](#)
 - *Special Tool(s):*
[303-021](#)



26. Special Tool(s): [303-1436](#)



27. Release the radiator assembly.

28. Refer to: [Engine Cover - V8 5.0L Petrol/V8 S/C 5.0L Petrol](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).
29. Refer to: [Air Deflector](#) (501-02 Front End Body Panels, Removal and Installation).
30. Refer to: [Radiator Splash Shield](#) (501-02 Front End Body Panels, Removal and Installation).
31. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).
32. Refer to: [Camber and Caster Adjustment](#) (204-00 Suspension System - General Information, General Procedures).

Uni-Body, Subframe and Mounting System - Rear Subframe V8 5.0L Petrol/V8 S/C 5.0L Petrol

Removal and Installation

General Equipment

Powertrain Jack

Removal



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

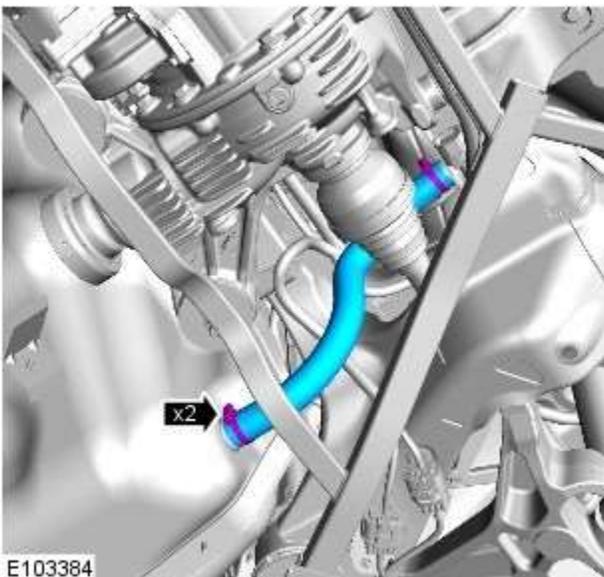
1. Refer to: [Petrol and Petrol-Ethanol Fuel Systems Health and Safety Precautions](#) (100-00 General Information, Description and Operation).



2. **WARNING:** Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.

Raise and support the vehicle.

3. Refer to: [Fuel Tank Draining](#) (310-00 Fuel System - General Information, General Procedures).
4. Refer to: [Wheel and Tire](#) (204-04 Wheels and Tires, Removal and Installation).
5. Refer to: [Driveshaft - V8 5.0L Petrol/V8 S/C 5.0L Petrol](#) (205-01 Driveshaft, Removal and Installation).



6. **CAUTION:** Be prepared to collect escaping fluids.

NOTES:

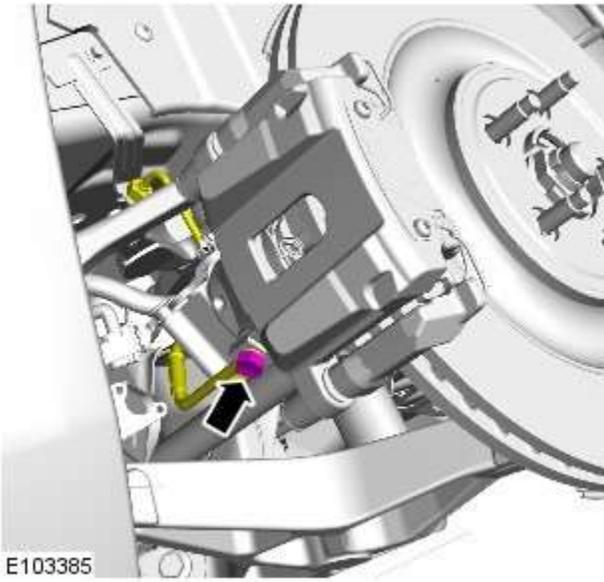


The fuel tank has a non-return valve in the filler stub pipe, only the fuel present in the filler hose will be spilt.



Some variation in the illustrations may occur, but the essential information is always correct.

7. Using the special tool, press and hold the brake pedal.



8. **WARNING:** If the fluid is spilled on the paintwork, the affected area must be immediately washed down with cold water.

CAUTIONS:



Make sure that a new sealing washer is installed.

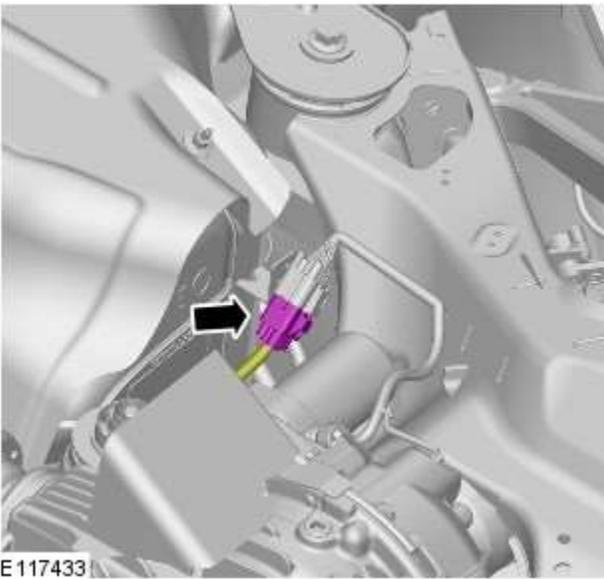


Be prepared to collect escaping fluids.



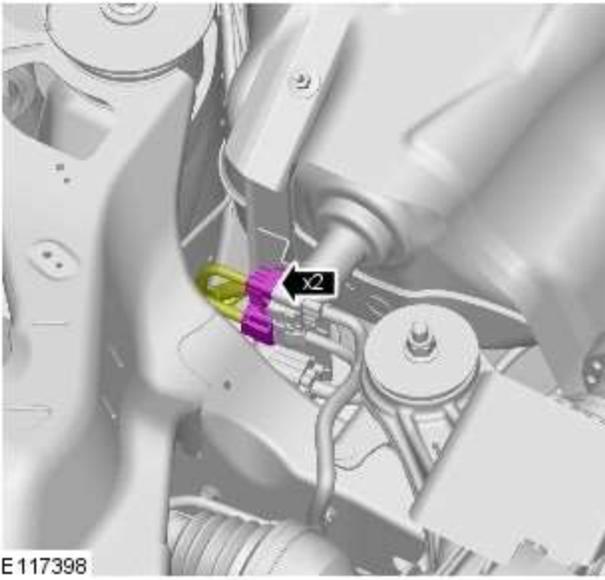
NOTE: LH illustration shown, RH is similar.

Torque: 35 Nm

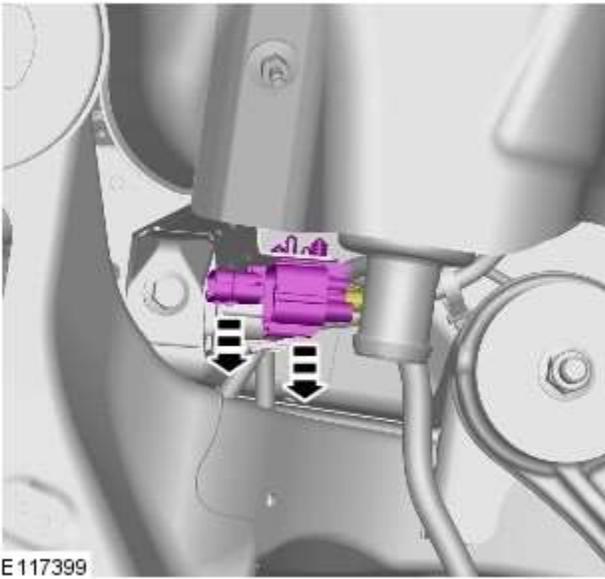


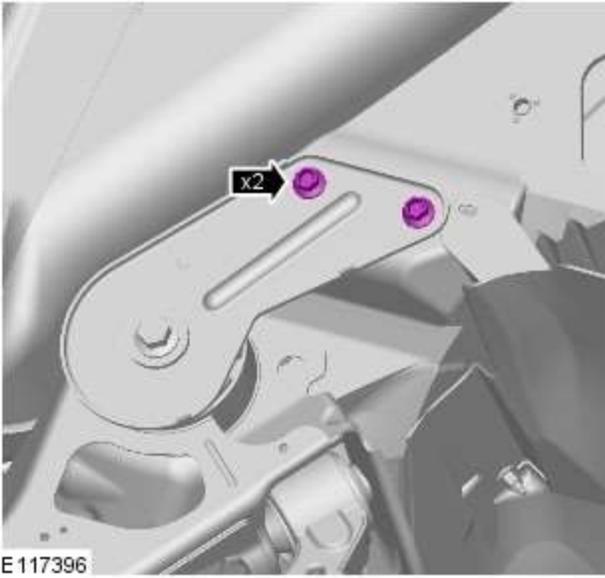
9.

10.



11.

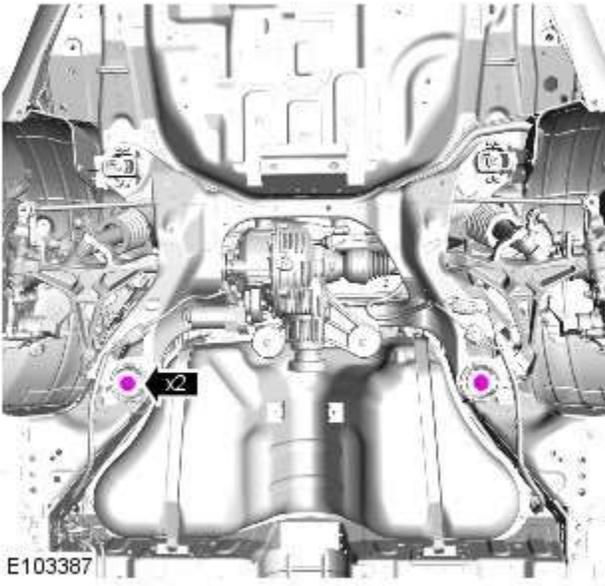




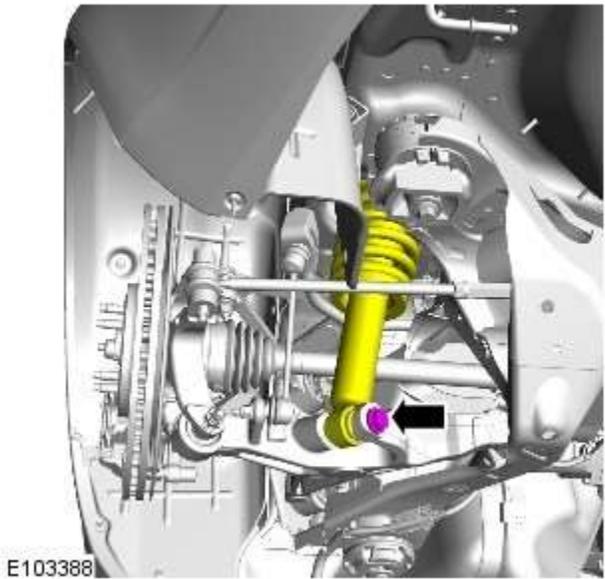
12.  NOTE: Left-hand shown, right-hand similar.
Torque: 47 Nm



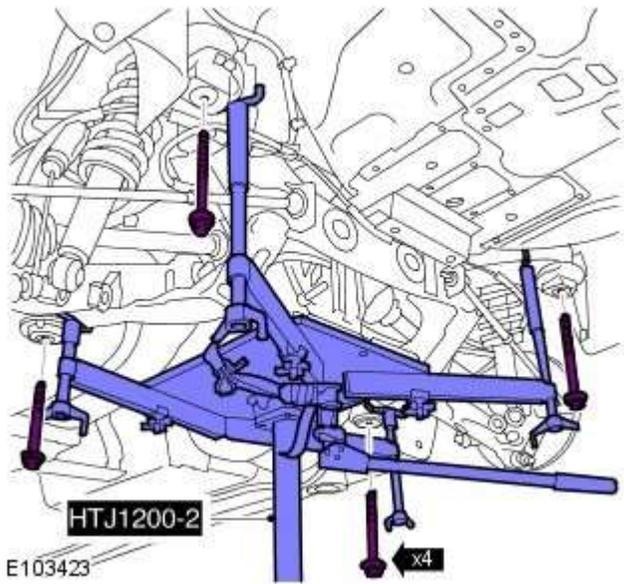
13.  NOTE: Left-hand shown, right-hand similar.



14.  **WARNING:** Install the M12 subframe bolts prior to removing axle support.



15.  **NOTE:** LH illustration shown, RH is similar.
Torque: 133 Nm



16.  CAUTION: Make sure that new bolts are installed.

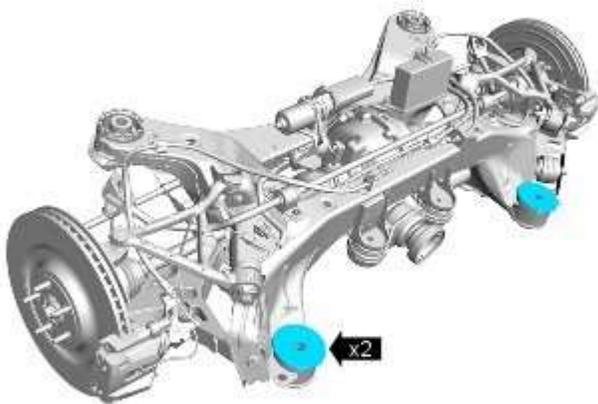
General Equipment: [Powertrain Jack](#)

Torque:

Stage 1: 80 Nm

Stage 2: 240°

- 17.



E103390

Installation

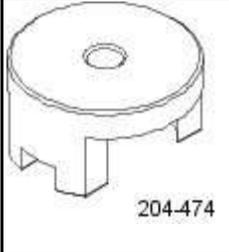
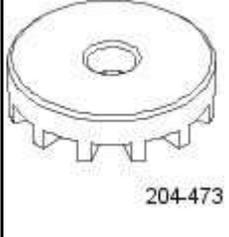
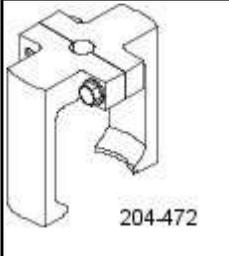
1. To install, reverse the removal procedure.
2. Refer to: [Brake System Bleeding](#) (206-00 Brake System - General Information, General Procedures).
3. Refer to: [Camber and Caster Adjustment](#) (204-00 Suspension System - General Information, General Procedures).

Uni-Body, Subframe and Mounting System - Rear Subframe Rear Bushing

TDV6 3.0L Diesel /V8 5.0L Petrol/V8 S/C 5.0L Petrol

Removal and Installation

Special Tool(s)

 <p>204-469</p>	<p>Forcing bolt 204-469</p>
 <p>204-475</p>	<p>Receiver-bush 204-475</p>
 <p>204-474</p>	<p>Replacer-bush 204-474</p>
 <p>204-473</p>	<p>Remover bush 204-473</p>
 <p>204-472</p>	<p>Remover support-bush 204-472</p>

Removal

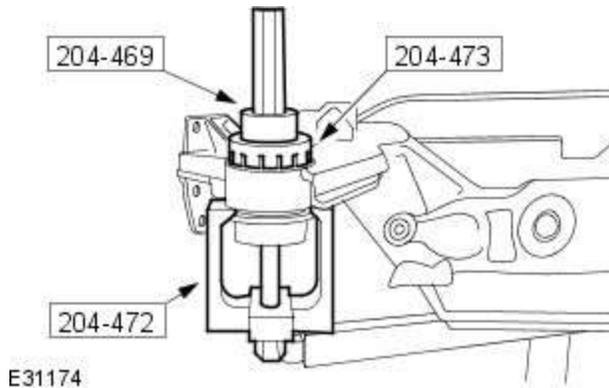
Vehicles with 3.0L diesel engine

1. For additional information, refer to: [Rear Subframe - TDV6 3.0L Diesel](#) (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).

Vehicles with 5.0L

2. For additional information, refer to: [Rear Subframe - V8 5.0L Petrol/V8 S/C 5.0L Petrol](#) (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).

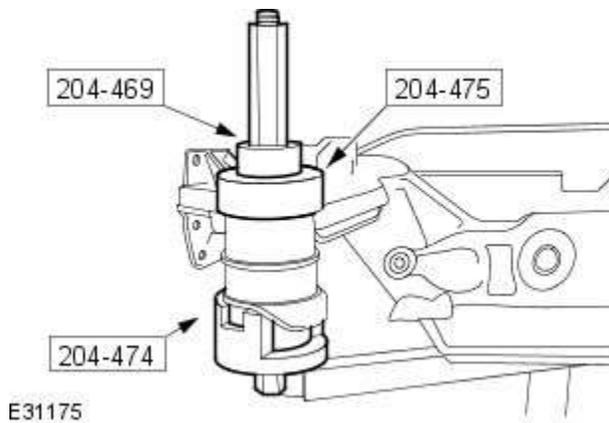
All vehicles



3. NOTE: Note the orientation of the bushing before removal.

Installation

All vehicles



1. NOTE: Make sure the bushing is correctly orientated.

Vehicles with 5.0L

2. For additional information, refer to: [Rear Subframe - V8 5.0L Petrol/V8 S/C 5.0L Petrol](#) (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).

Vehicles with 3.0L diesel engine

3. For additional information, refer to: [Rear Subframe - TDV6 3.0L Diesel](#) (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).