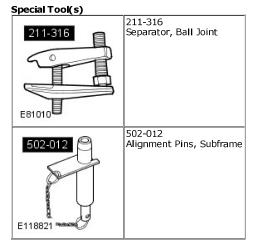
Uni-Body, Subframe and Mounting System -

Description	Nm	lb-ft
Front subframe to body bolts*	140 + 240°	103 + 240°
Front subframe cross brace bolts*	45	33
Rear subframe bolts*	175	129
Trailing arm to body bracket bolts*	110	81

^{*} New nuts/bolts must be fitted

Uni-Body, Subframe and Mounting System - Front SubframeRemoval and Installation



General Equipment

Powertrain Jack

Removal

1. 1. WARNING: Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

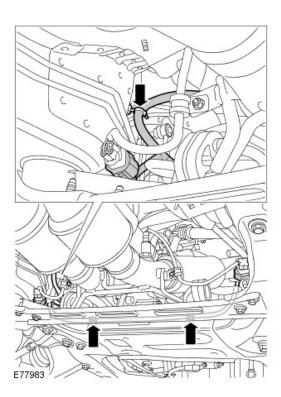
- 2. Siphon the fluid from the power steering reservoir.
- 3. Remove the front road wheels and tires.

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

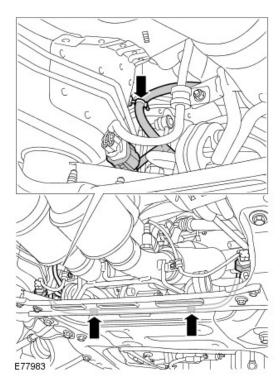
4. Remove the engine undershield.

Refer to: $\underline{\text{Engine Undershield}}$ (501-02 Front End Body Panels, Removal and Installation).

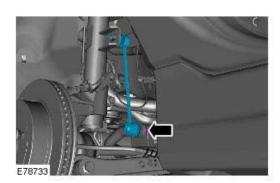
5. Disconnect the LH catalyst monitor sensor electrical connector.



6. Disconnect the RH catalyst monitor sensor electrical connector.

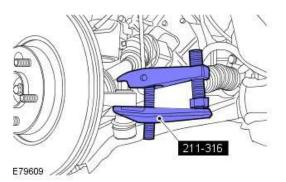


7. Release the catalyst monitor sensor wiring hamess.



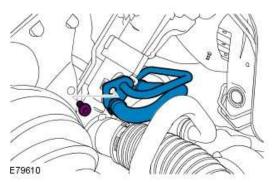
8. 8. CAUTION: Make sure that the ball joint ball does not rotate.

Disconnect both front stabilizer bar links from the lower suspension arm.



9. Using the special tool, release the LH and RH tie-rod end ball joints.

Special Tool(s): 211-316



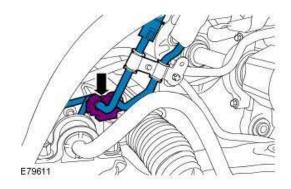
10. **10.** CAUTION: Be prepared to collect escaping fluids.

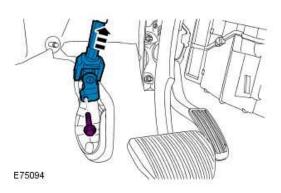
• NOTE: Make sure that all openings are sealed.

Disconnect the pressure lines from the power steering gear.



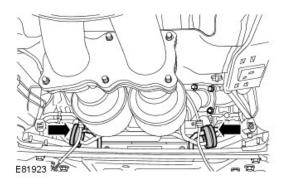
11. Release the PAS lines.



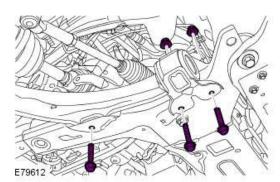


12. 12. WARNING: Make sure that a new steering column flexible coupling bolt is installed.

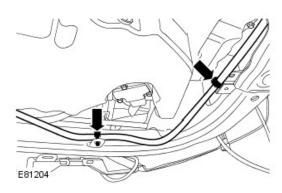
Disconnect the lower steering column from the steering gear.



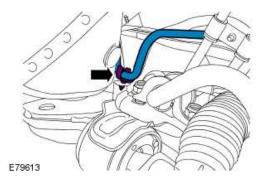
13. Release the downpipe catalytic converters.



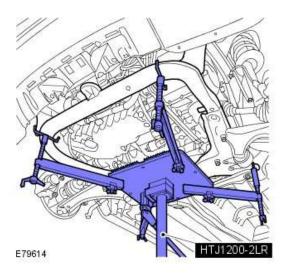
14. Release the LH and RH lower suspension arms.



15. Release the purge line from the subframe.

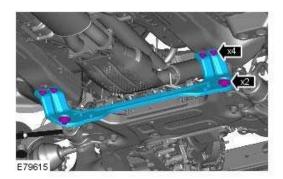


16. Release the fuel line.



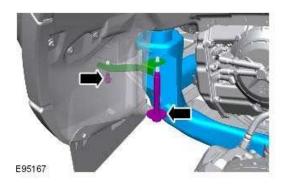
17. Support the subframe.

General Equipment: Powertrain Jack



18. **18.** CAUTION: Make sure that new subframe bolts are installed.

Remove the front subframe cross-brace.



19. **19.** CAUTIONS:



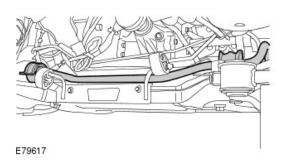
Mark the components to aid installation.

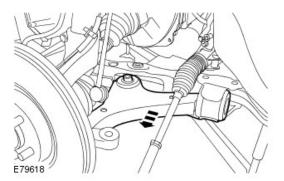


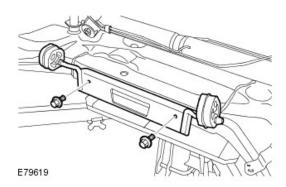
Make sure that new subframe bolts are installed.

Lower the front subframe assembly.

20. Remove the stabilizer bar.

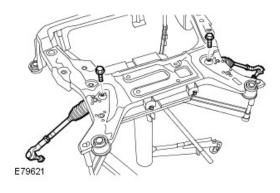






22. NOTE: Do not disassemble further if the component is removed for access only.

Remove the catalyst support bracket.



23. Remove the steering gear.

Installation

1. Install the steering gear.

Torque: 105 Nm

- 2. Using the special tool, support the subframe.
- 3. 3. CAUTION: Install all the bolts finger tight before final tightening.

 Raise the front subframe to allow installation of the suspension arms and the bolts.
- 4. Install the LH and RH suspension arms as the subframe is raised.
- The state of the service of the second of th
- 5. Install the stabilizer bar.
- 6. **6.** CAUTION: Make sure that new bolts are installed.

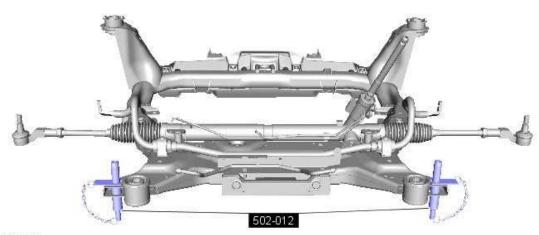
Install the subframe cross-brace.

Torque: 45 Nm

7. **7.** CAUTION: Make sure that new bolts are installed.

• Install the 2 support brackets.

Torque: 25 Nm



8. Install the front subframe.

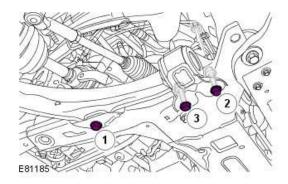
Special
Tool(s):
502-012
Torque:
Stage
1:
140 Nm
Stage
2:
240°

E133121

9. Install the catalyst support bracket.

Torque: 10 Nm

- 10. Install the fuel line.
- 11. Install the purge line.



12.

• Tighten bolt 1.

Torque:
Stage 1:140 Nm
Stage 2:45°
Tighten bolt 2 to

Torque: <u>175 Nm</u>
■ Tighten bolt 3 to

Torque: 175 Nm

13. Secure the catalytic converters.

14. 14. AWARNING: Make sure that new nuts are installed.

Connect the LH and RH tie-rod end ball joints.

Torque: 105 Nm

15. Connect the steering gear pressure lines.

Torque: 25 Nm

16. **16. MARNING:** Make sure that new nuts are installed.



Install the stabilizer link bar to the lower suspension arm, and tighten to 55 Nm (41 lb.ft) $\,$

17. Secure the electrical harness.

18. 18. WARNING: Make sure that a new steering column flexible coupling bolt is installed.

Connect the steering column to the steering gear.

Torque: 25 Nm

- 19. Connect and secure the catalyst monitor sensor electrical connectors.
- 20. Install the 2 subframe mounting bolts and remove the jack.
- 21. Install the engine undershield.

Refer to: $\underline{\text{Engine Undershield}}$ (501-02 Front End Body Panels, Removal and Installation).

22. Install the wheels and tires.

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

23. Refill and bleed the power steering.

Refer to: Power Steering System Bleeding (211-00 Steering System - General Information, General Procedures).

 $24.\,$ Using only four wheel alignment equipment approved by Land Rover, check and adjust the wheel alignment.

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

Removal and Installation

Special Tool(s)

204-598
Hydraulic Cylinder 10t

204-598-01
Remover/Installer, Subframe Bushing Guide

Removal

1. Remove the cover and disconnect the battery ground cable.

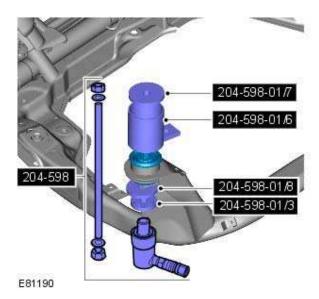
Refer to: $\underline{\text{Specifications}}$ (414-00 Battery and Charging System - General Information, Specifications).

2. 2. WARNING: Make sure to support the vehicle with axle

Raise and support the vehicle.

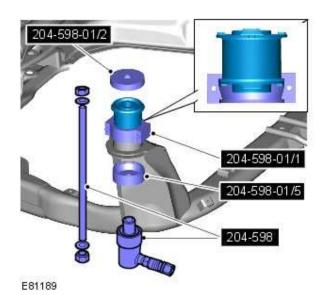
3. Remove the front subframe assembly.

Refer to: Front Subframe (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).



- 4. 4. CAUTION: Mark the components to aid installation.
 - Remove the bushing.
 - Special Tool(s): 204-598, 204-598-01
 Special tool 204-598-01/8 is used to start the bushing removal process, and must be removed after the bushing has released, as it will not pass through the sub-frame bushing aperture.

Installation



1. 1. CAUTION: Make sure that the component aligns with the installation mark.

Install the bushing.

Special Tool(s): 204-598, 204-598-01

2. Install the front subframe.

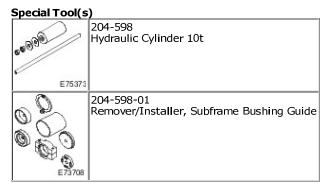
Refer to: $\underline{\text{Front Subframe}}$ (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).

3. Connect the battery ground cable and install the cover.

Refer to: $\underline{\text{Specifications}}$ (414-00 Battery and Charging System - General Information, Specifications).

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

Removal and Installation



Removal

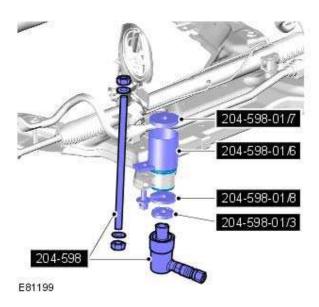
1. Remove the cover and disconnect the battery ground cable.

Refer to: $\underline{\text{Specifications}}$ (414-00 Battery and Charging System - General Information, Specifications).

Raise and support the vehicle.

3. Remove the front subframe assembly.

Refer to: Front Subframe (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).



- 4. 4. CAUTION: Mark the components to aid installation.
 - Special tool 204-598-01/8 is used to start the bushing removal process, and must be removed after the bushing has released, as it will not pass through the sub-frame bushing aperture.
 - Remove the bushing.

Special Tool(s): 204-598, 204-598-01

Installation



1. 1. CAUTION: Make sure that the component aligns with the installation mark.

Install the bushing.

Special Tool(s): 204-598, 204-598-01

2. Install the front subframe.

Refer to: $\underline{\text{Front Subframe}}$ (502-00 Uni-Body, Subframe and Mounting System, Removal and Installation).

3. Connect the battery ground cable and install the cover.

Refer to: $\underline{\text{Specifications}}$ (414-00 Battery and Charging System - General Information, Specifications).