
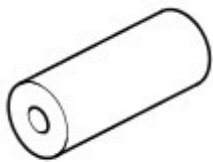


Fuel Charging and Controls - GTDi 2.0L Petrol - Fuel Rail

Removal and Installation

Special Tool(s)

| | |
|--|---|
|  <p>E107680</p> | <p>310-198 Installer, Teflon Seal</p> |
|  <p>E107681</p> | <p>310-199 Re-shape Tool, Teflon Seal</p> |

Removal



WARNING: This procedure involves fuel handling. Be prepared for fuel spillage at all times and always observe fuel handling precautions. Failure to follow these instructions may result in personal injury.



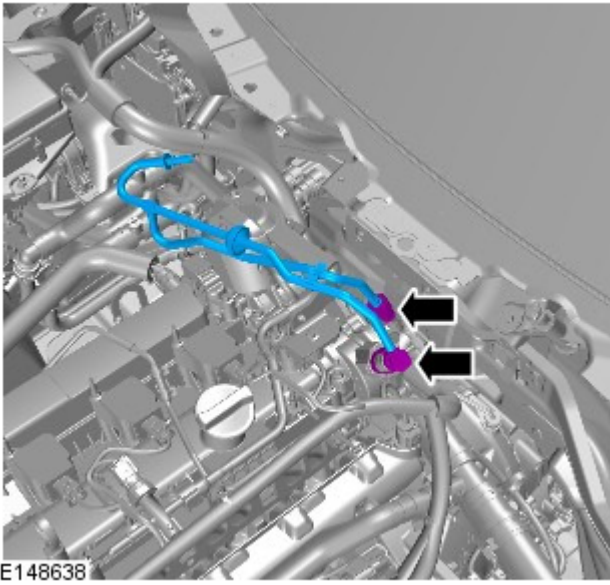
CAUTION: Make sure that all openings are sealed. Use new blanking caps.



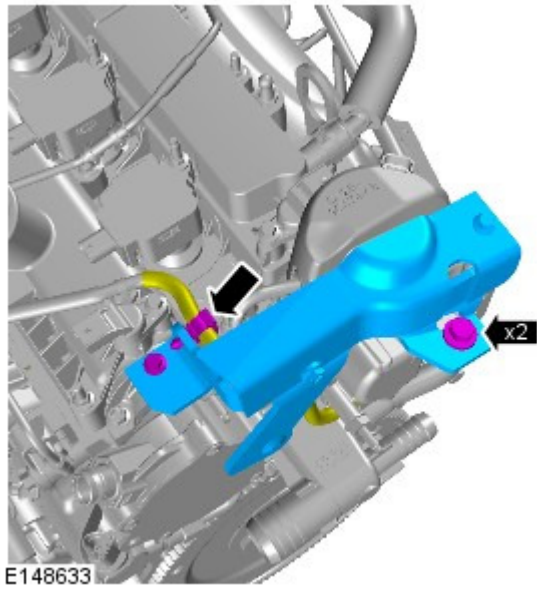
NOTE: Some variation in the illustrations may occur, but the essential information is always correct.

1. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).
2. Refer to: [Petrol and Petrol-Ethanol Fuel Systems Health and Safety Precautions](#) (100-00 General Information, Description and Operation).
3. Refer to: Fuel System Pressure Release - V8 5.0L Petrol/V8 S/C 5.0L Petrol (310-00, General Procedures).
4. Refer to: [Intake Manifold](#) (303-01E Engine - GTDi 2.0L Petrol, Removal and Installation).
5. Refer to: [Secondary Bulkhead Center Panel - GTDi 2.0L Petrol](#) (501-02 Front End Body Panels, Removal and Installation).

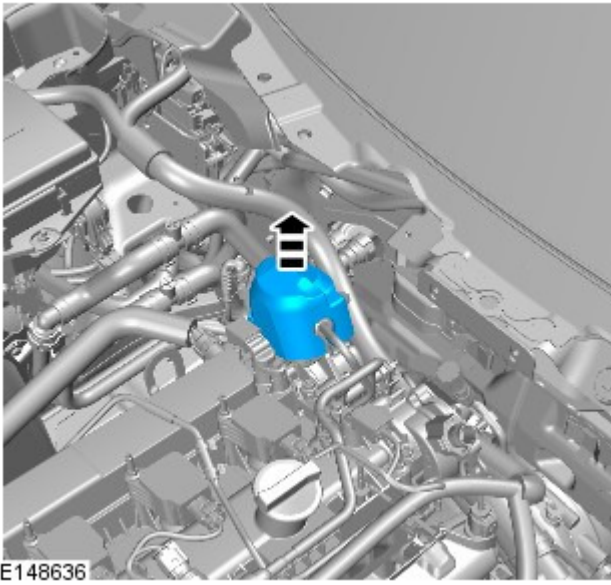
6.



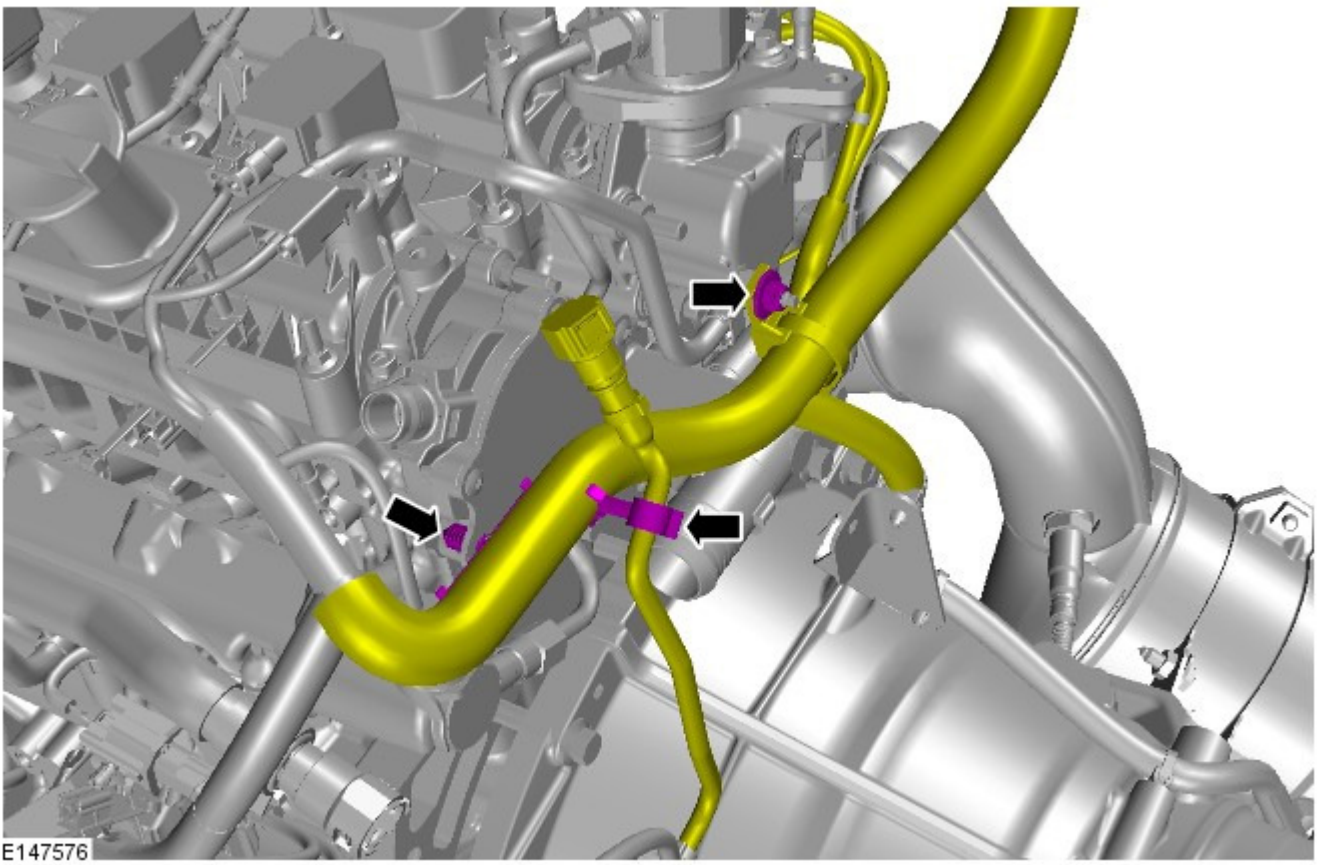
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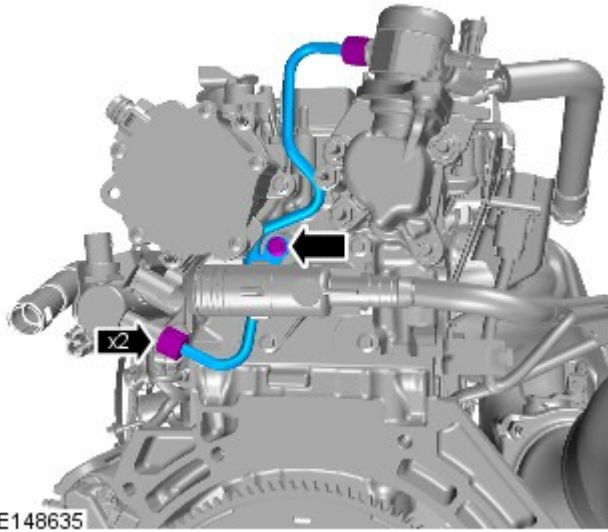
8.



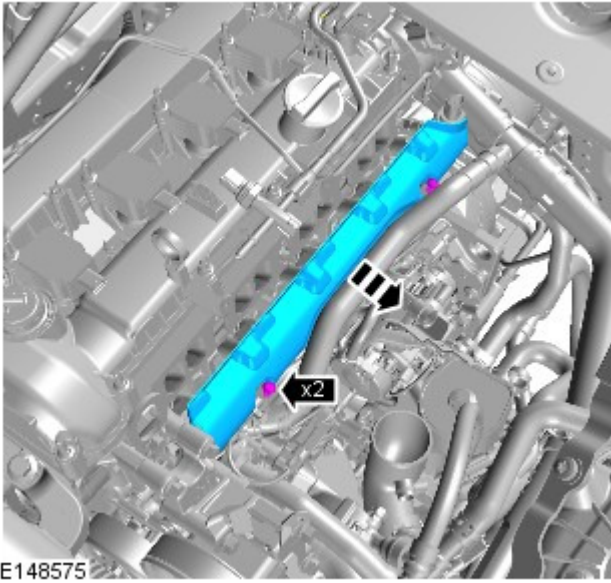
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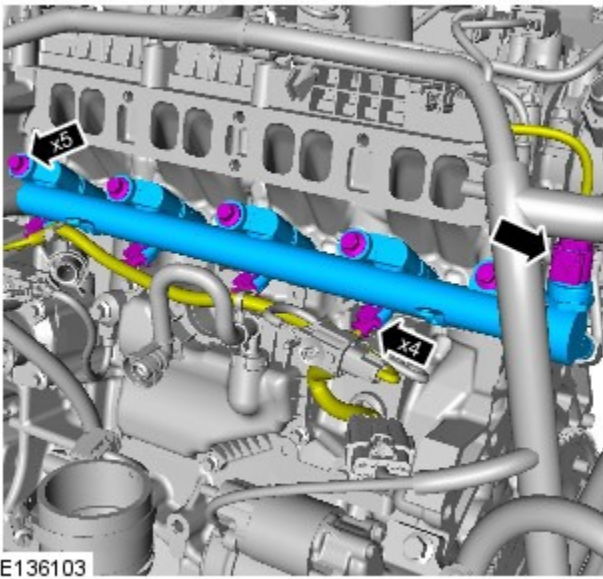


10.  CAUTION: Discard the fuel pipe.



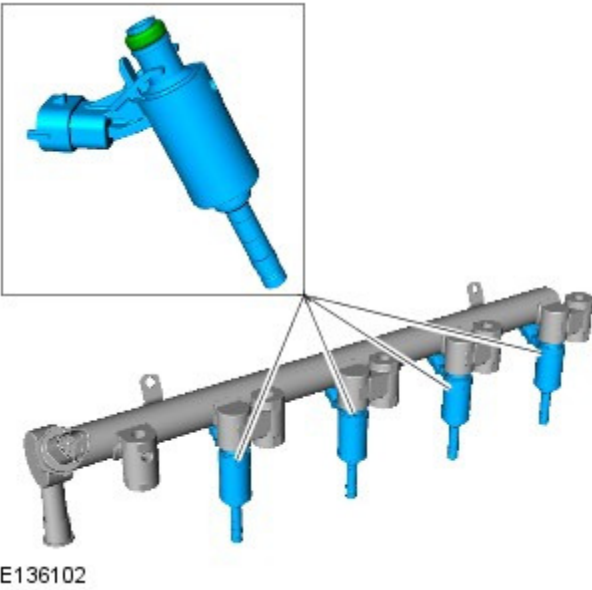
- 11.




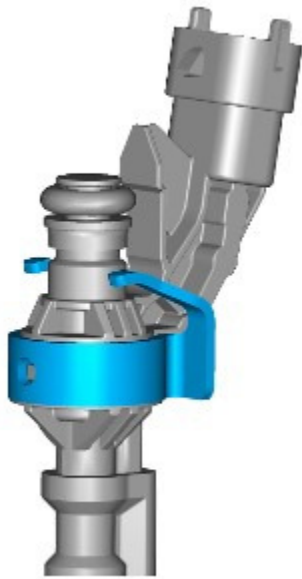


12.  CAUTION: Take extra care not to damage the edges of the component.

 NOTE: Note the position of the components prior to removal.




13.  CAUTION: Make sure that the mating faces are clean and free of foreign material.

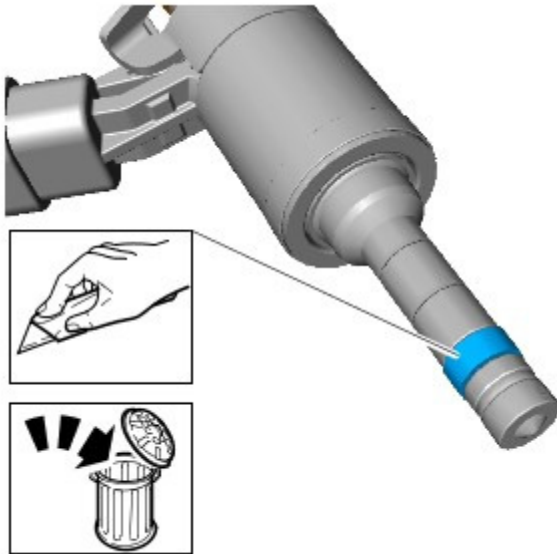


E115057

14. CAUTIONS:

 If new fuel injectors are installed, a new injector clamp must be installed.


 If the fuel injector is being removed without a new component being installed, the fuel injector clamp must remain with the fuel injector it is removed with.




E136105

15. CAUTIONS:


 Do not use excessive force to cut the fuel injector seal.

 Pinch the Teflon seal to allow the tool to cut the Teflon seal without damaging the fuel injector.

 Do not cut the Teflon seal too deep as damage could occur to the fuel injector.

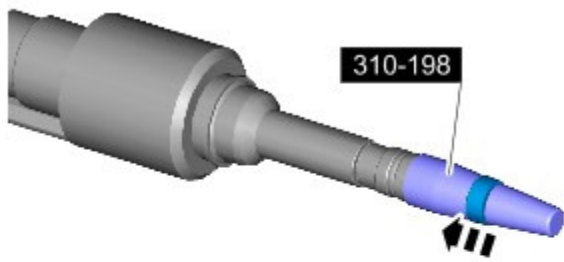
 Do not use any sharp tools to remove the O-ring seal as damage could occur to the fuel injector.

NOTES:

 Repeat this step for each of the fuel injectors.

 When cutting the fuel injector seal from the fuel injector, cut towards the electrical connector end of the fuel injector.

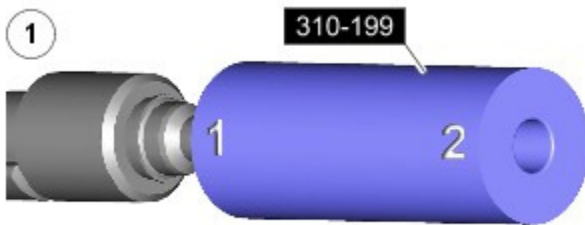
Installation



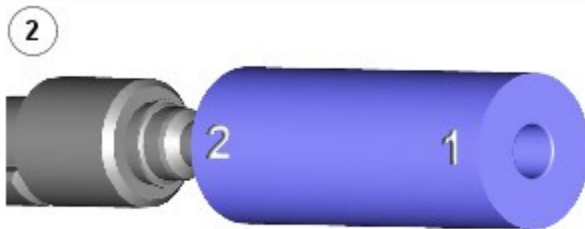
1. *Special Tool(s):* [310-198](#)




E115060

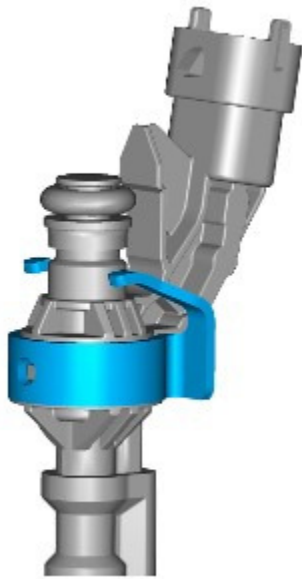


2. *Special Tool(s):* [310-199](#)



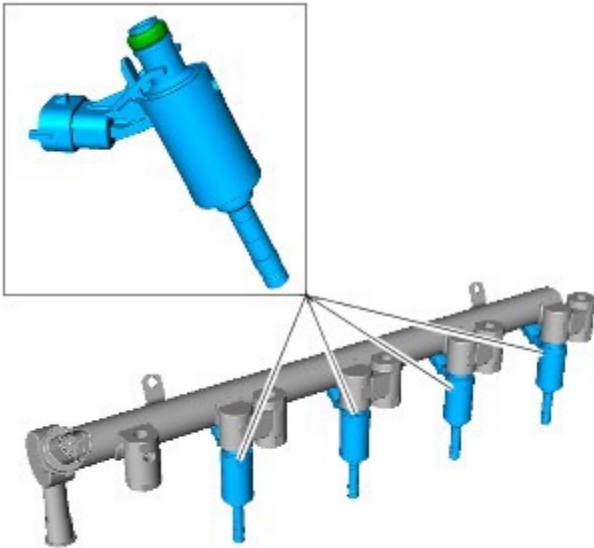
E115062

3.  CAUTION: If the original fuel injector is being installed, the original fuel injector clamp must be installed with the fuel injector it was removed with.

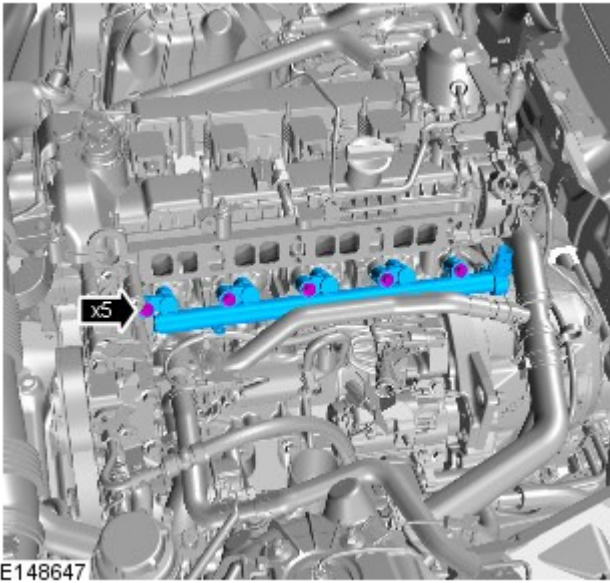


E115057

- 4.




E136102

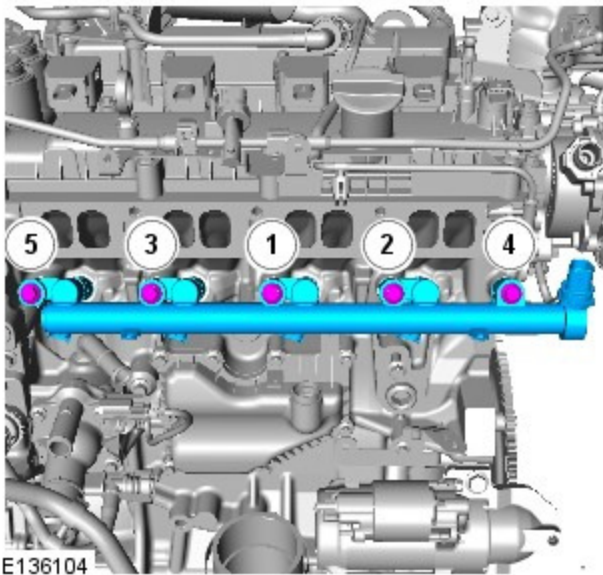


E148647

5. CAUTIONS:

 Carefully install the fuel injector and fuel rail assembly.

 Only tighten the bolts finger-tight at this stage.

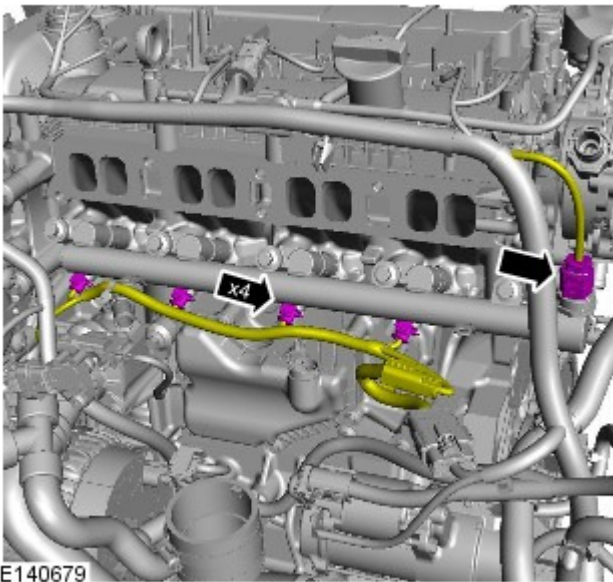


E136104


6.

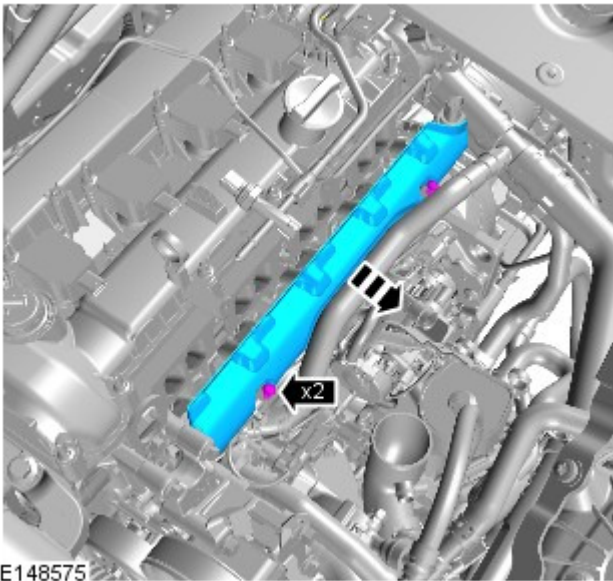
- Tighten the bolt in the sequence shown.
- *Torque: 10 Nm*
- Loosen, but do not remove the bolts.
- Tighten the bolt in the sequence shown.

Torque:
Stage 1: 8 Nm
Stage 2: 26°




E140679

7.  CAUTION: Make sure that the components are installed to the noted position in the removal steps.

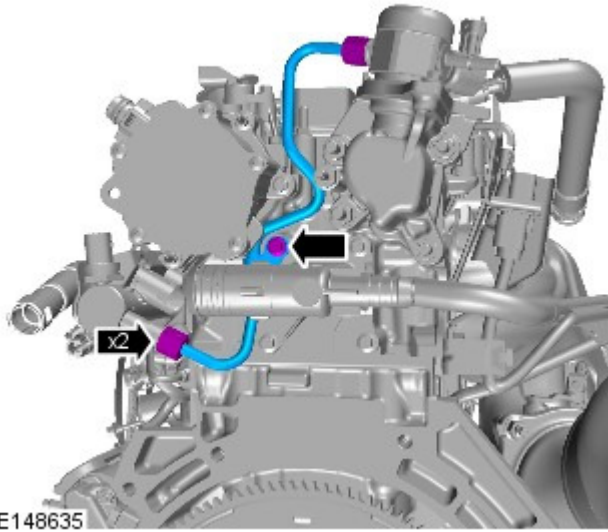


E148575

- 8.

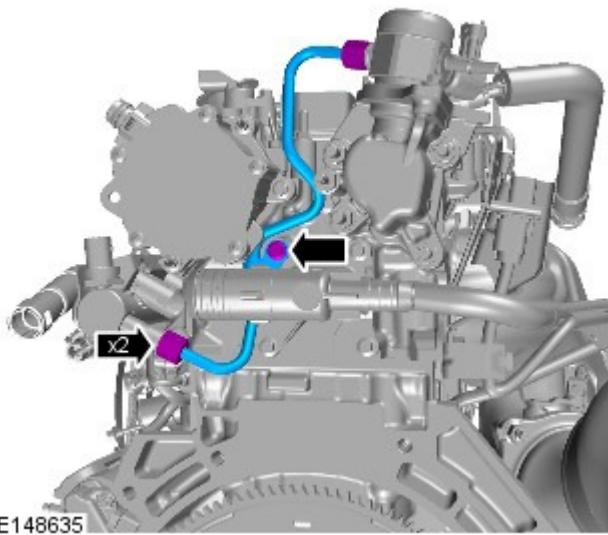
9.  CAUTION: Tighten the component finger tight first.

 NOTE: Remove and discard all blanking caps.

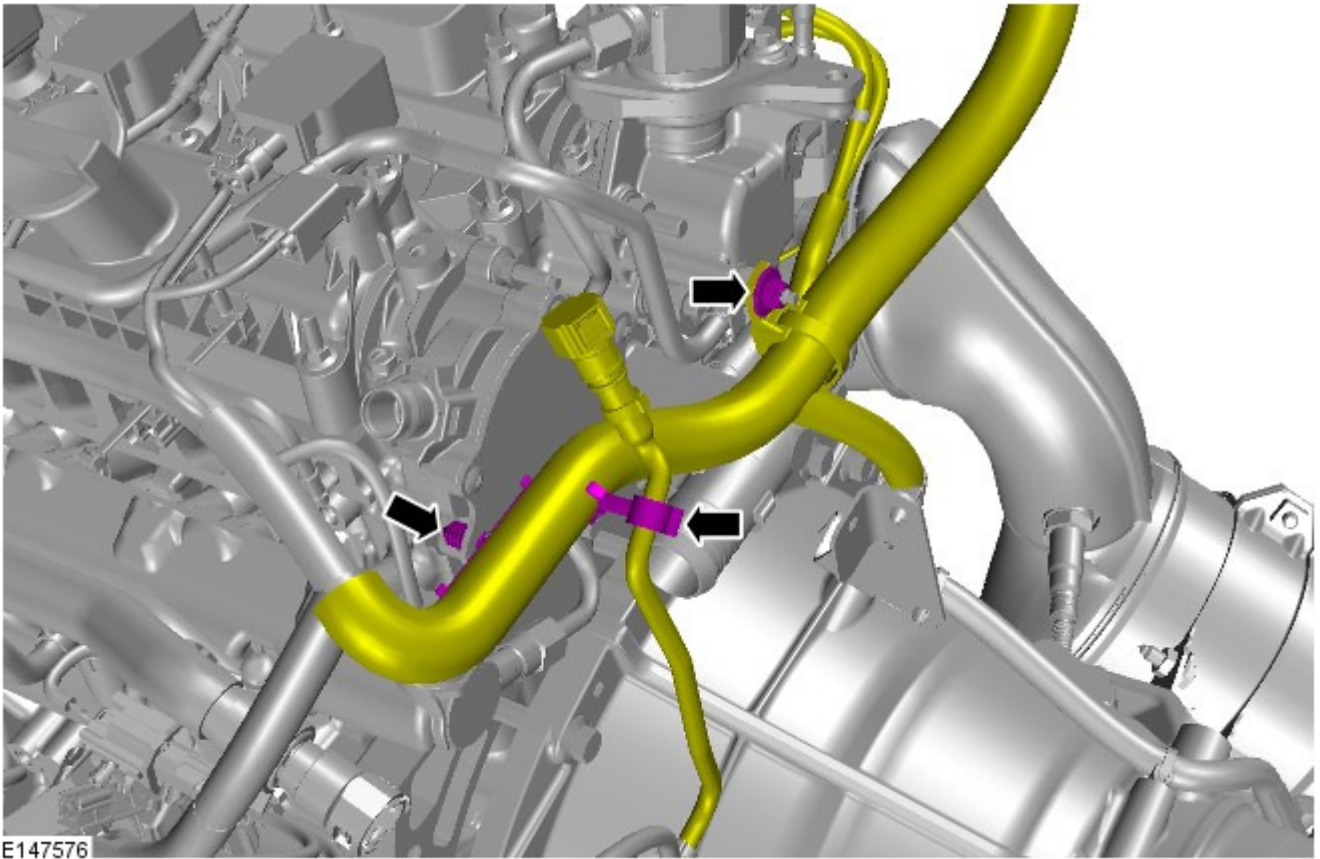


- 10.

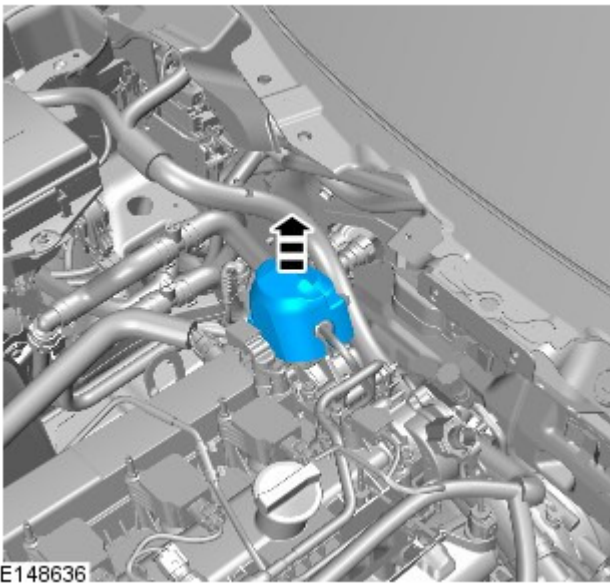
- *Torque:*
Unions 7 Nm
Bolt 10 Nm
- *Torque:*
Unions
Stage 1: 10 Nm
Stage 2: 45°

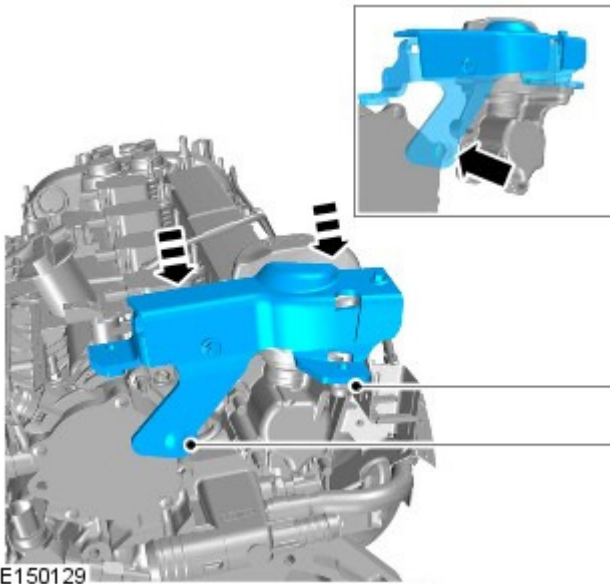


11. Torque: 8 Nm




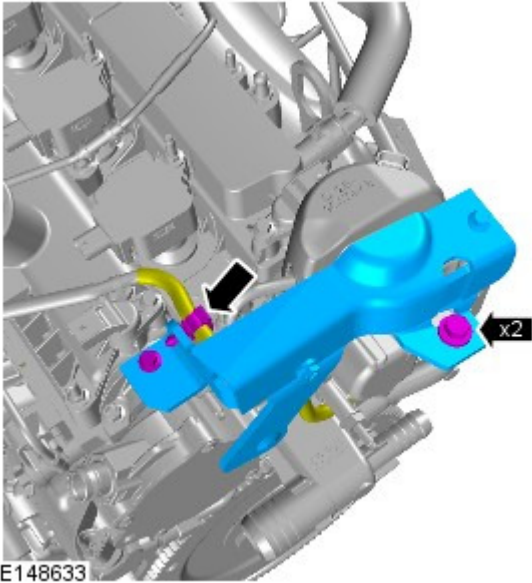
12.






E150129

13.  NOTE: Make sure that the component is correctly located.

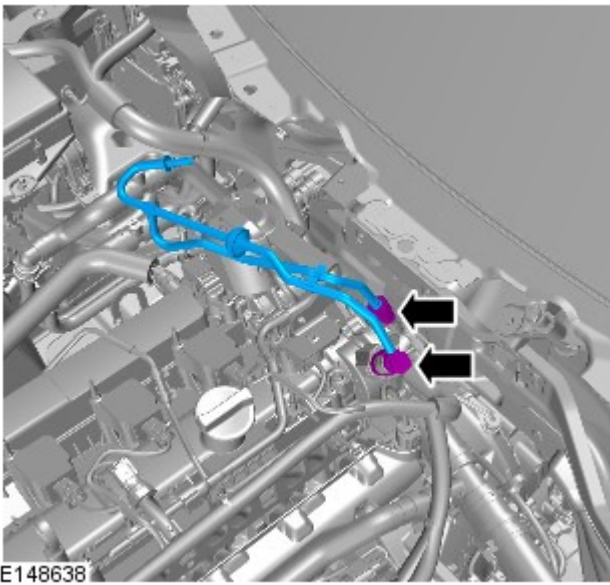


E148633

14.  NOTE: Install the the bolts finger tight first.

Torque:
M8 25 Nm
M6 11 Nm

15.



16. Refer to: [Intake Manifold](#) (303-01E Engine - GTDi 2.0L Petrol, Removal and Installation).
17. Refer to: [Secondary Bulkhead Center Panel - GTDi 2.0L Petrol](#) (501-02 Front End Body Panels, Removal and Installation).
18. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).