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2021 Ford F-450 Super Duty Service and Repair Manual

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Exhaust Gas Recirculation (EGR) Valve

303-08B Engine Emission Control - 3.3L Duratec-V6	2022 F-150
Removal and Installation	Procedure revision date: 11/1/2019

Exhaust Gas Recirculation (EGR) Valve

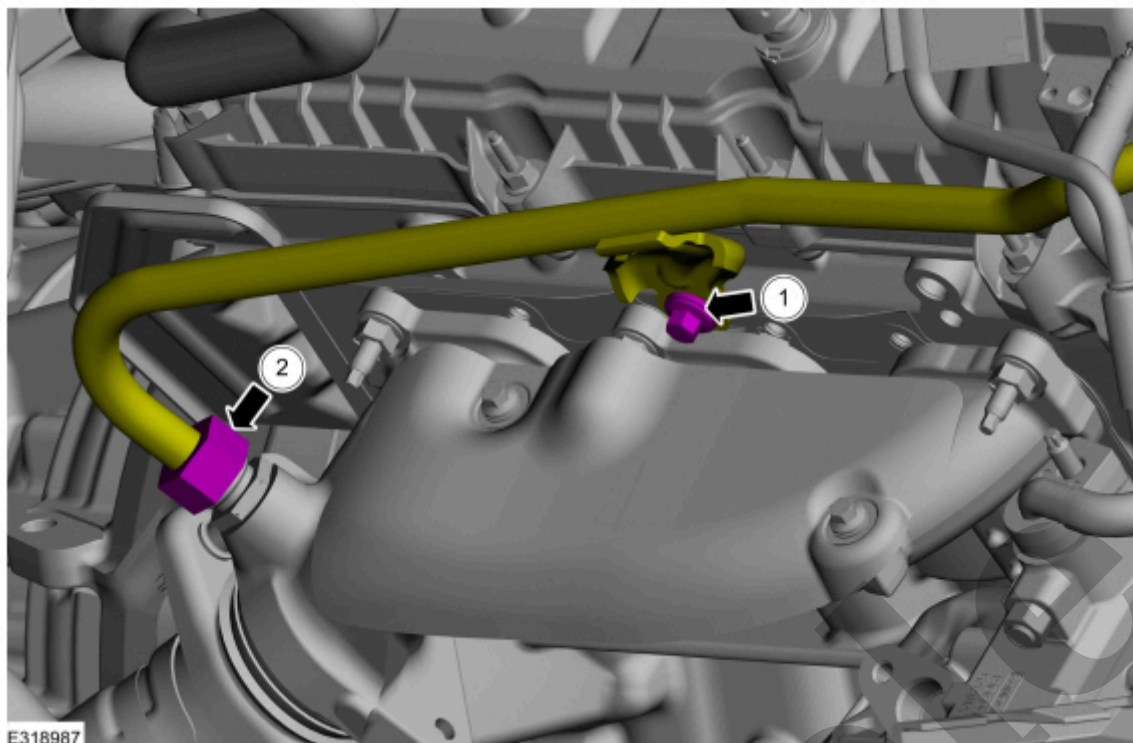
Removal

NOTE

Removal steps in this procedure may contain installation details.

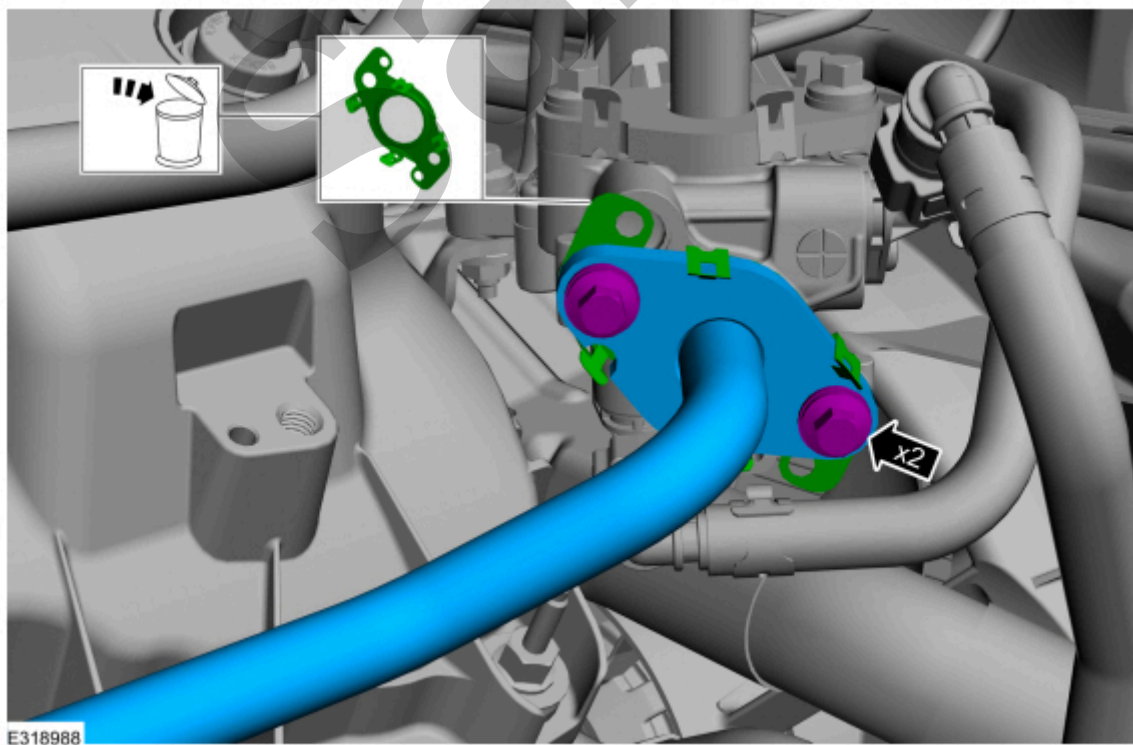
1. Drain the cooling system.

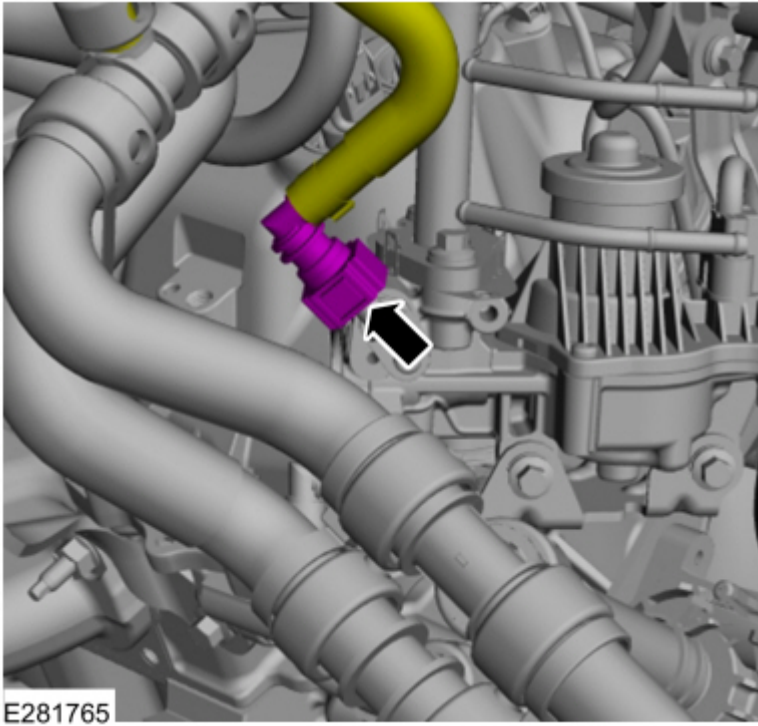
Refer to: [Engine Cooling System Draining, Vacuum Filling and Bleeding](#)(303-03B Engine Cooling - 3.3L Duratec-V6, General Procedures).
2.
 - Disconnect the EGR (exhaust gas recirculation) transducer electrical connector.
 - Remove the bolt, hoses and the EGR (exhaust gas recirculation) transducer.



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

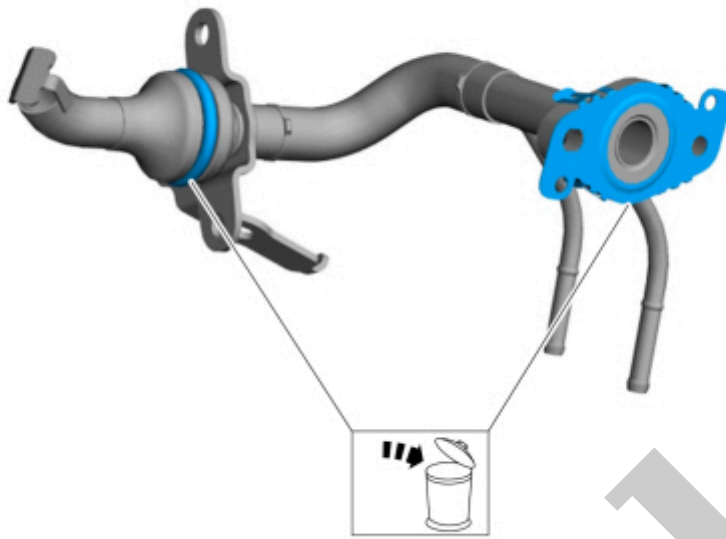
4.
 - Remove the fasteners.
 - Remove the EGR (exhaust gas recirculation) valve inlet tube.
 - Remove the gasket and discard.





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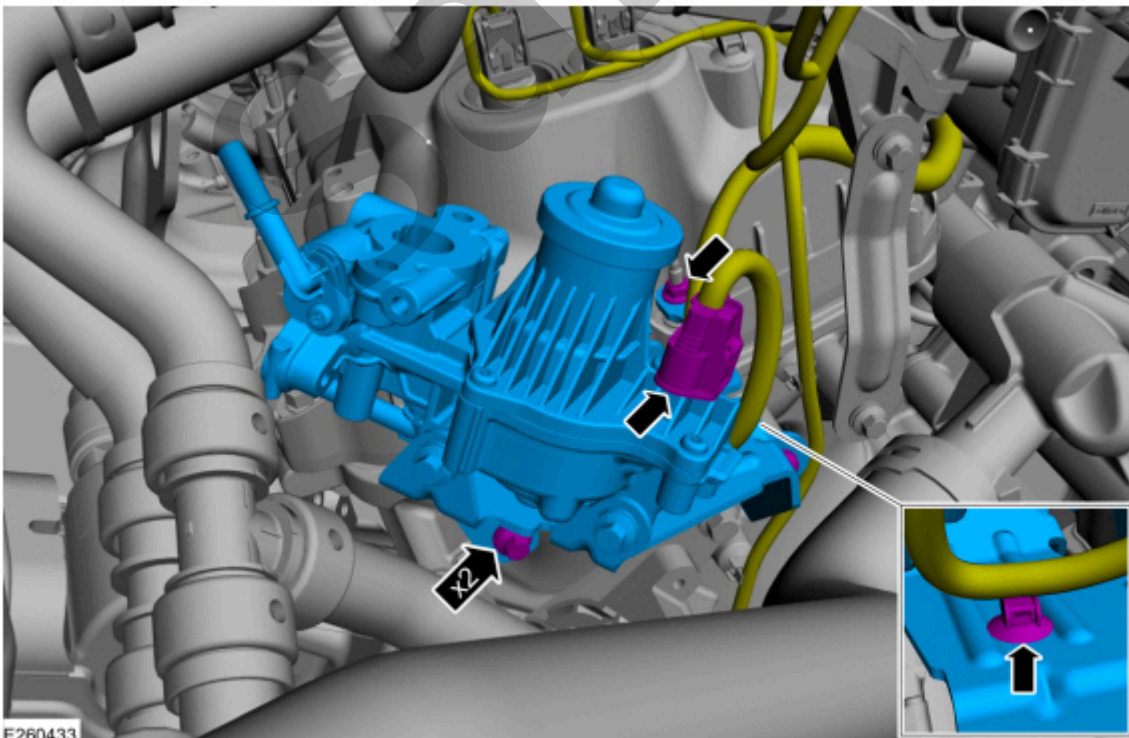
7.
 1. Remove the EGR (exhaust gas recirculation) tube to intake manifold bolts.
 2. Remove the bolts and the EGR (exhaust gas recirculation) tube.



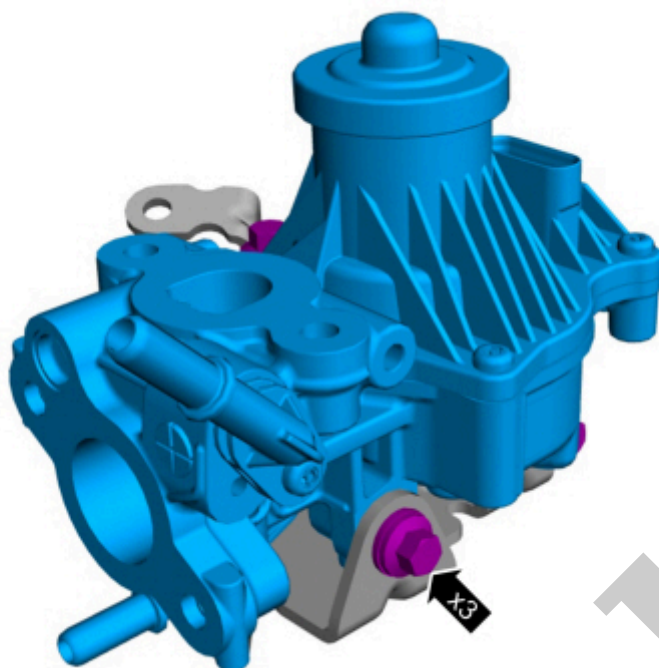
E297343

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9.
 - Disconnect the EGR (exhaust gas recirculation) valve electrical connector and detach the retainer on the EGR (exhaust gas recirculation) valve bracket.
 - Remove the EGR (exhaust gas recirculation) valve bracket mounting bolts.



E260433



E260434

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Installation

1. **WARNING**

Do not use metal scrapers, wire brushes, power abrasive discs or other abrasive means to clean the sealing surfaces. These tools cause scratches and gouges that make leak paths. Use a plastic scraping tool to remove all traces of the exhaust gas recirculation (EGR) valve gasket.

WARNING

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

Material : Motorcraft® Metal Surface Prep Wipes / ZC-31-B

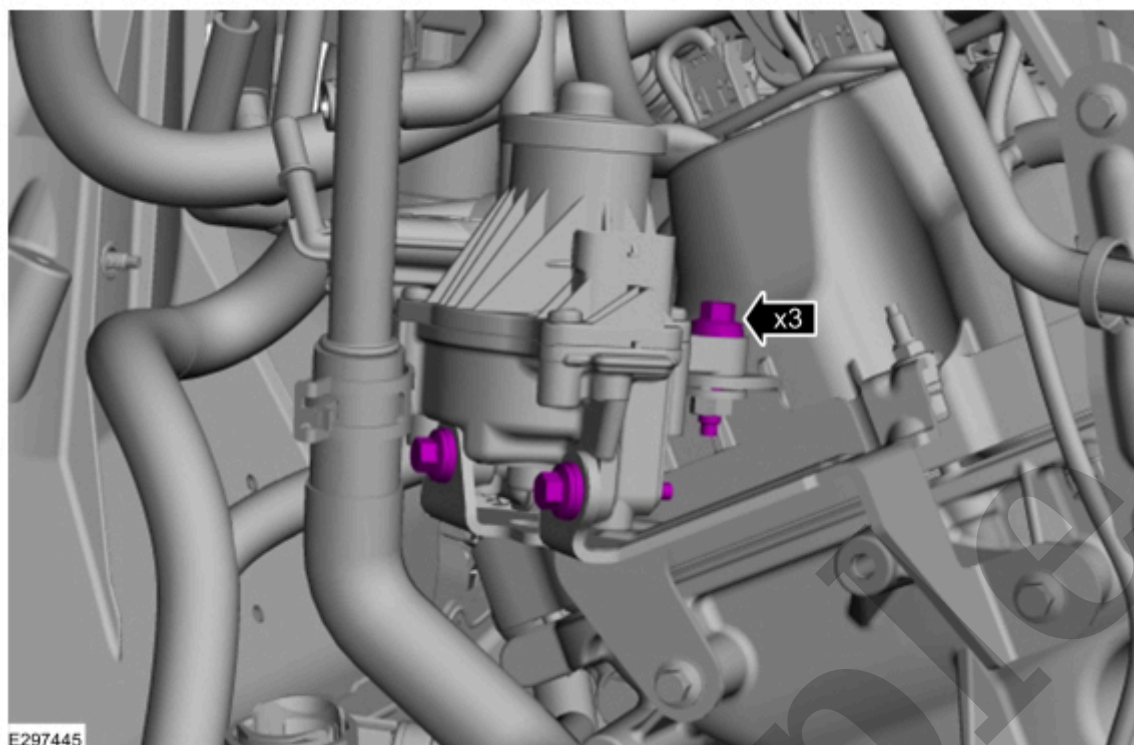
2. Install the EGR (exhaust gas recirculation) valve mounting bracket and tighten the fasteners.

Torque :

1: 71 lb.in (8 Nm)

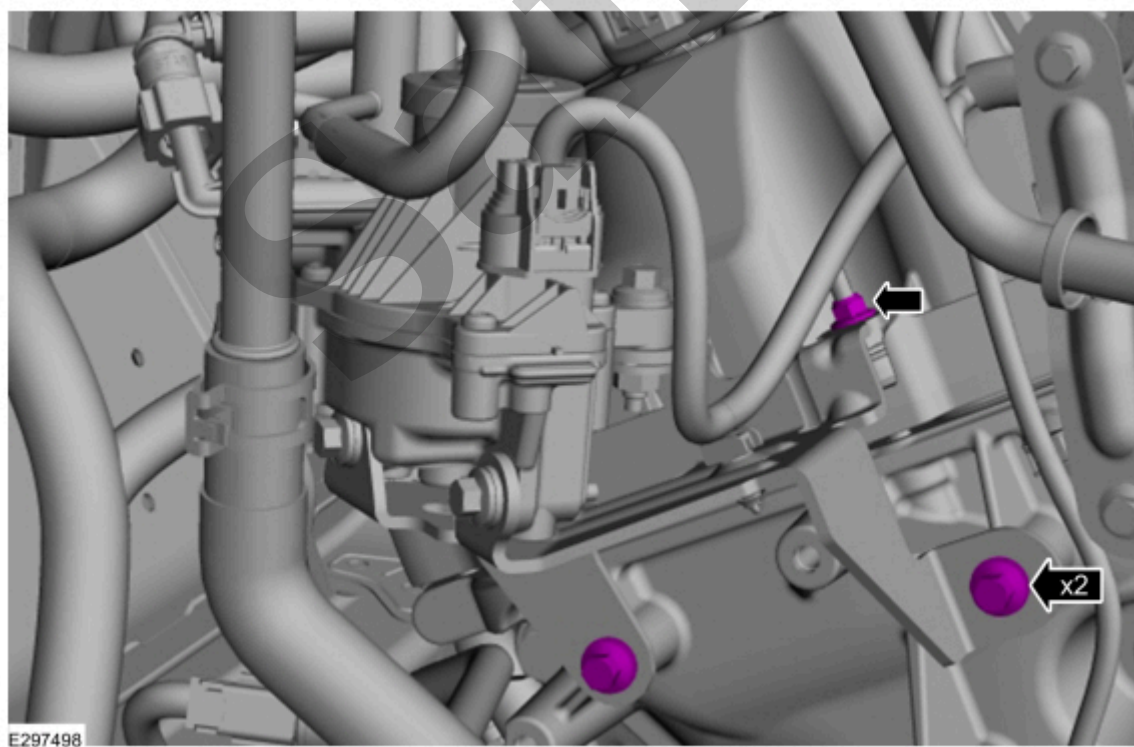
2: 89 lb.in (10 Nm)

Torque : 89 lb.in (10 Nm)

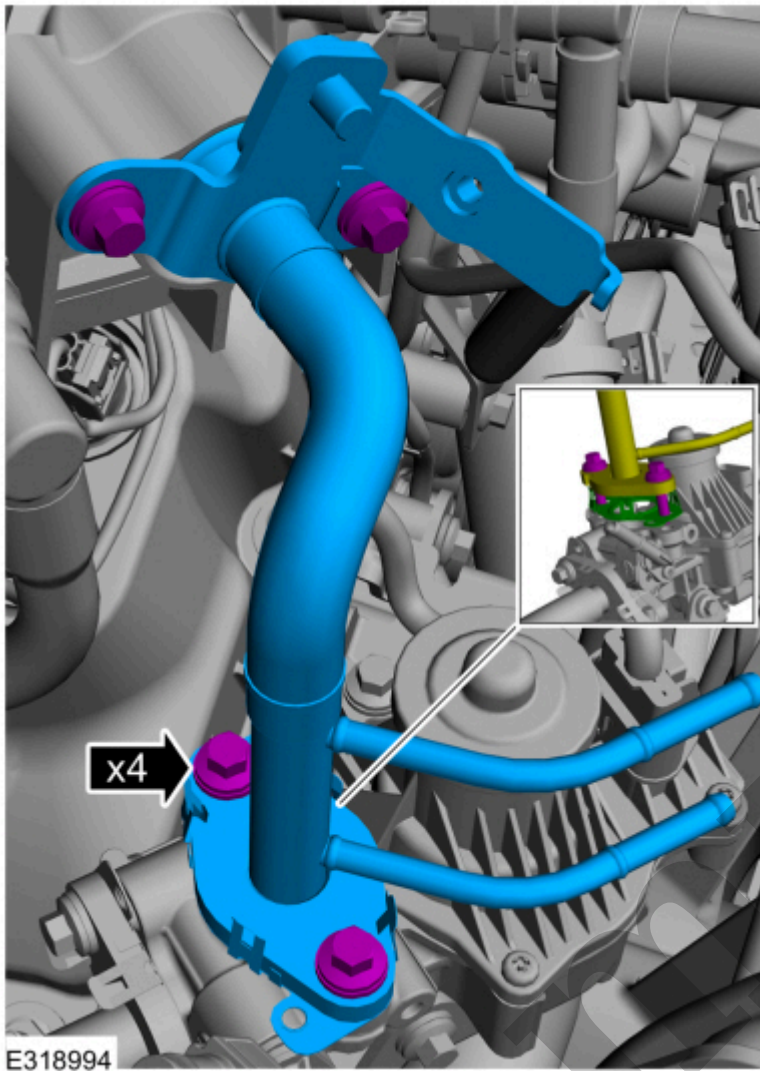


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5. Loosen the EGR (exhaust gas recirculation) valve bracket fasteners.



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8. Tighten the EGR (exhaust gas recirculation) outlet tube fasteners.

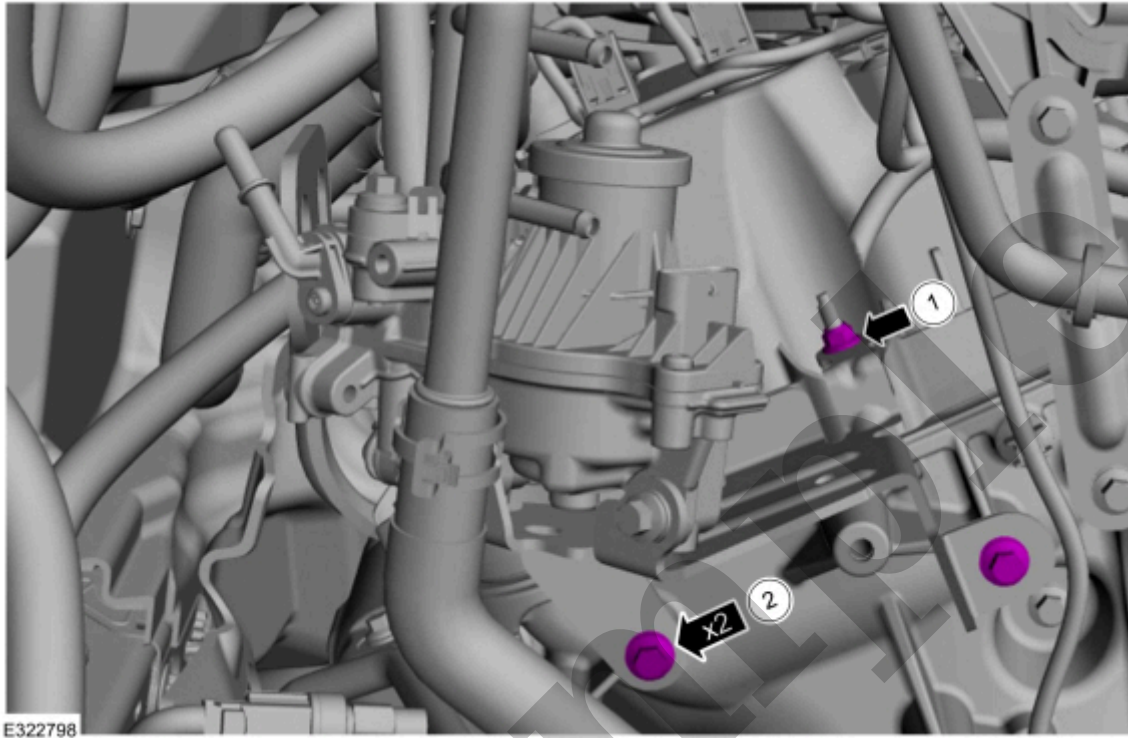
Torque : 89 lb.in (10 Nm)

10. 1. Tighten the EGR (exhaust gas recirculation) valve bracket fasteners.

Torque : 71 lb.in (8 Nm)

2. Tighten the EGR (exhaust gas recirculation) valve bracket fastener.

Torque : 89 lb.in (10 Nm)



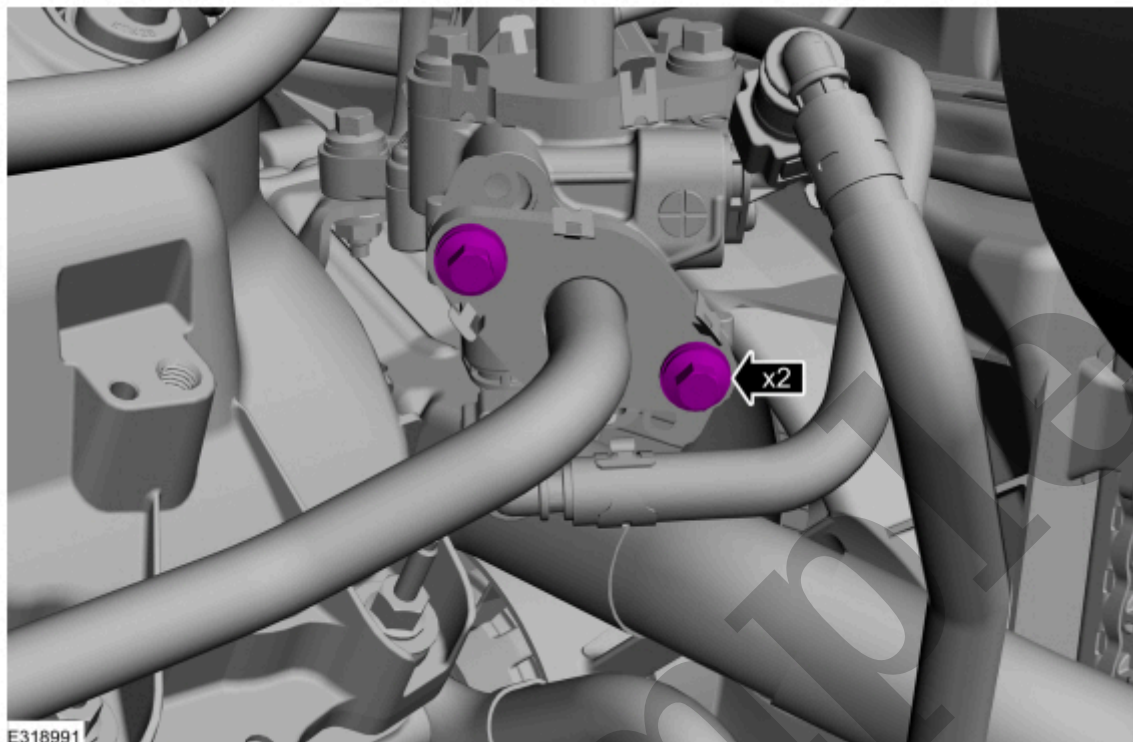
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11. • Install the new gasket.
- Install the EGR (exhaust gas recirculation) valve inlet tube.
 - Install the fasteners and hand tighten at this stage.

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13. Tighten the EGR (exhaust gas recirculation) inlet tube fasteners.

Torque : 89 lb.in (10 Nm)



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14. 1. Tighten the EGR (exhaust gas recirculation) inlet tube nut.

Torque : 30 lb.ft (40 Nm)

2. Tighten the EGR (exhaust gas recirculation) inlet tube bracket fastener.

Torque :

Stage 1: 177 lb.in (20 Nm)

Stage 2: 45°