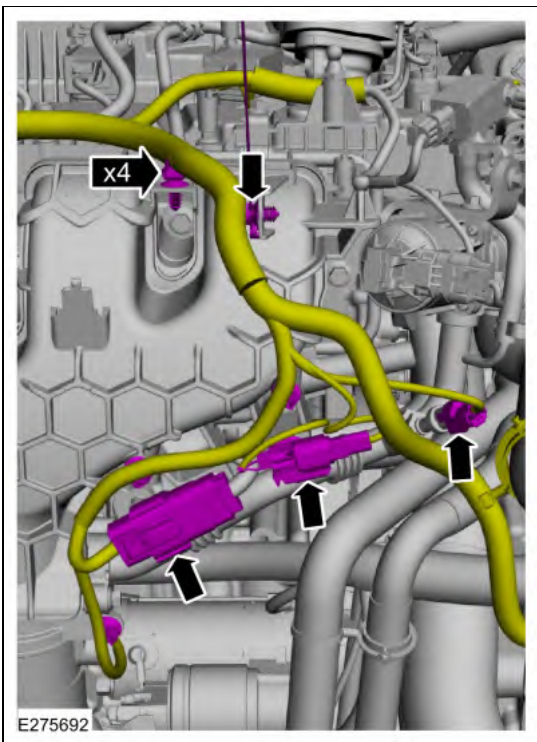
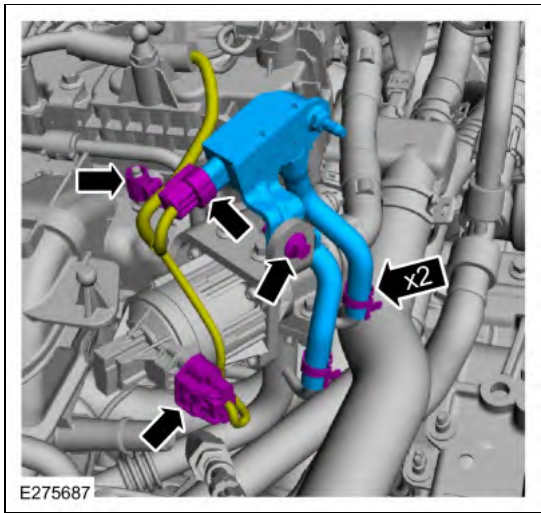
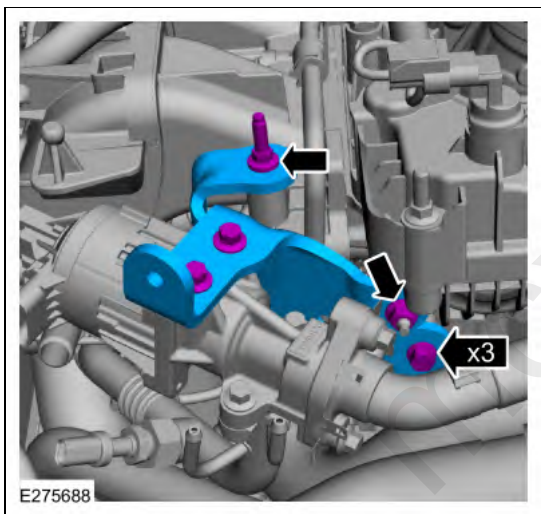




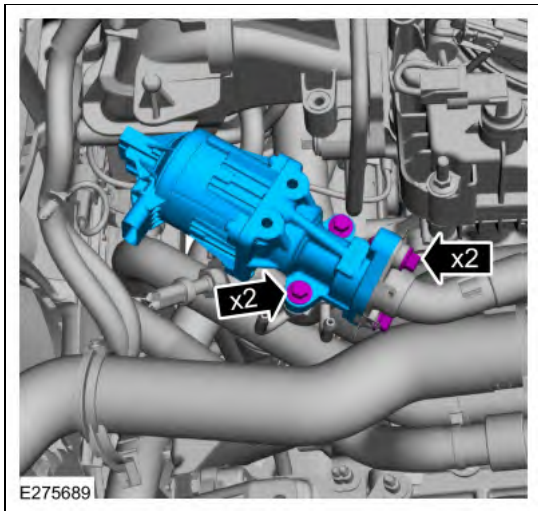
- 6.
- Disconnect the wiring harness electrical connectors and retainer.
 - Loosen the clamps and remove the EGR transducer hoses.
 - Remove the bolt and the EGR transducer assembly.



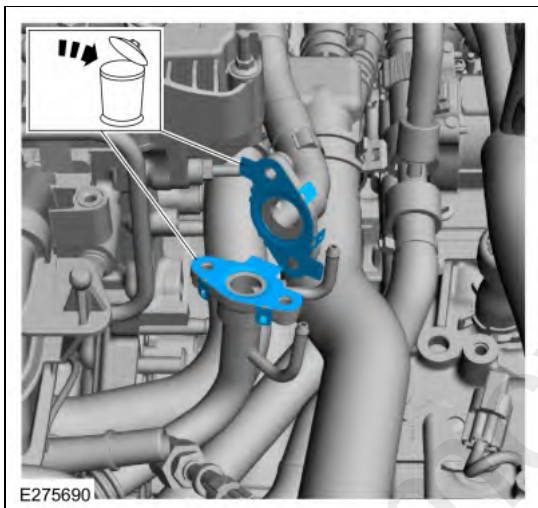
7. Remove the stud bolt, nut, bolts and the EGR bracket.



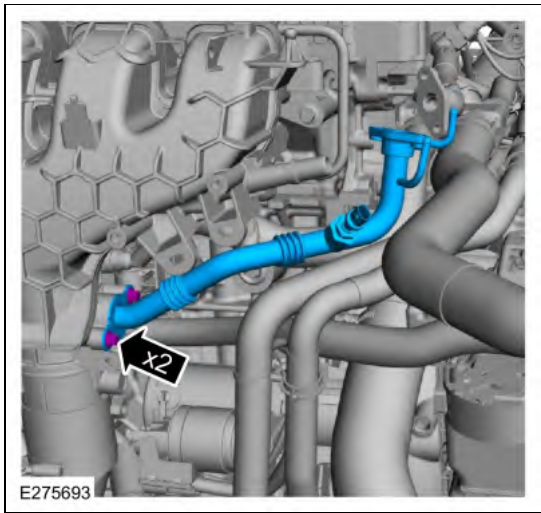
8. Remove the bolts and the EGR valve.



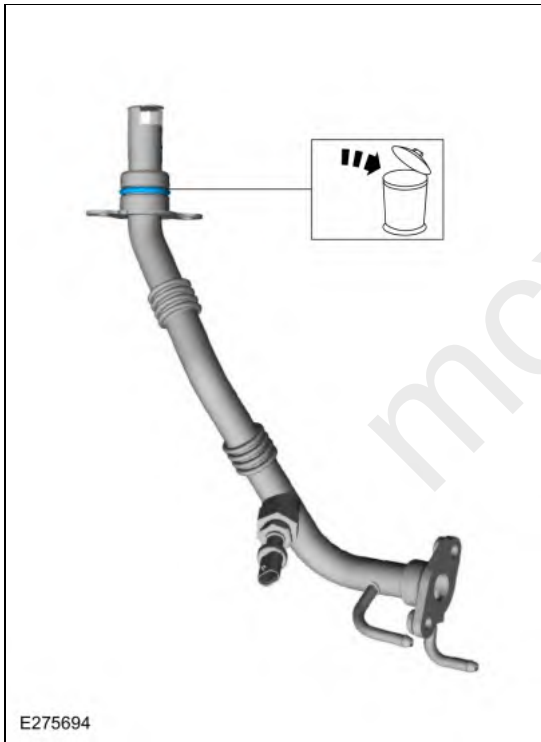
9. Remove and discard the EGR valve gaskets.



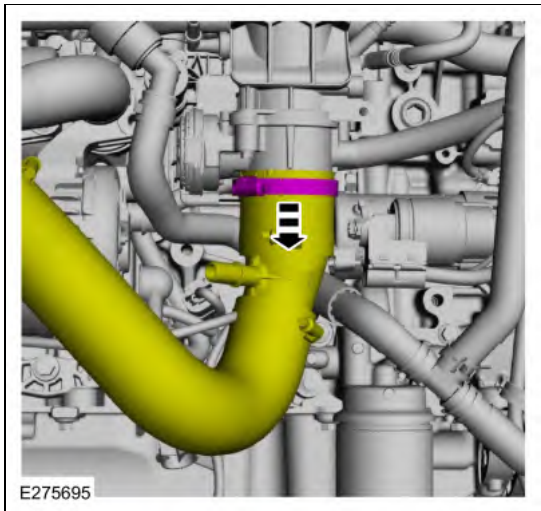
10. Remove the bolts and the EGR outlet tube assembly.



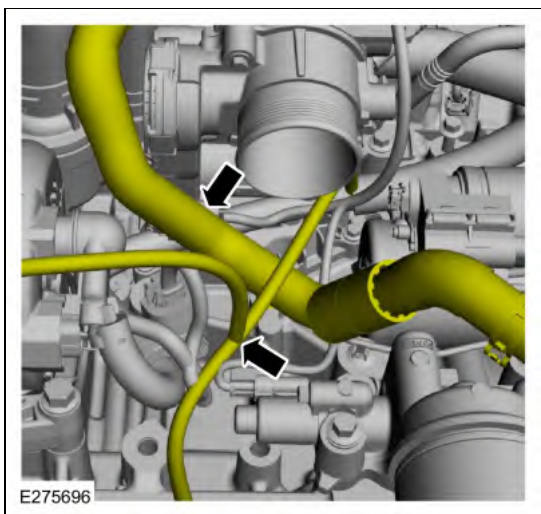
11. Remove and discard the EGR outlet tube assembly O-ring seal.



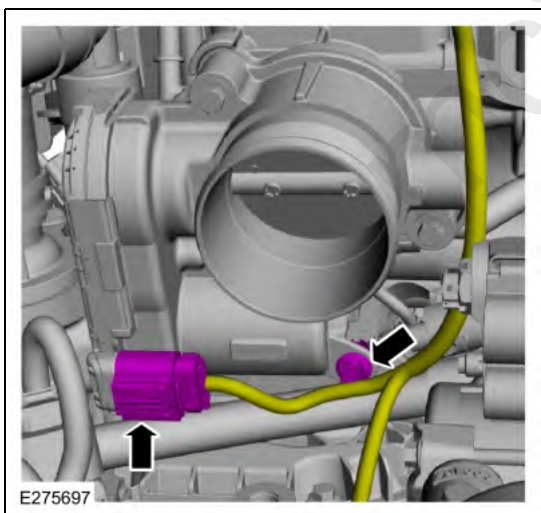
12. Loosen the clamp and position the CAC tube off the throttle body.



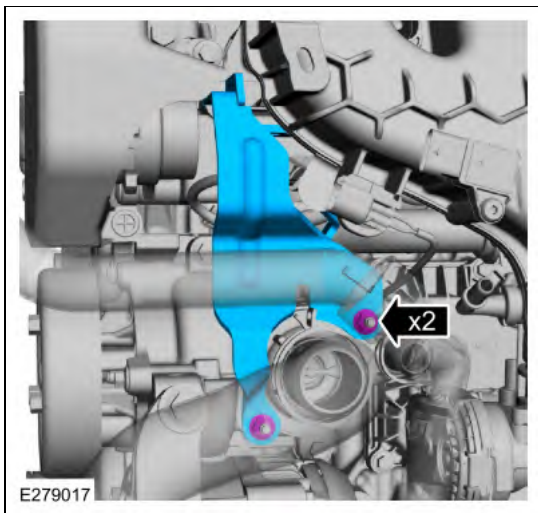
13. Position the coolant hose and wiring harness aside.



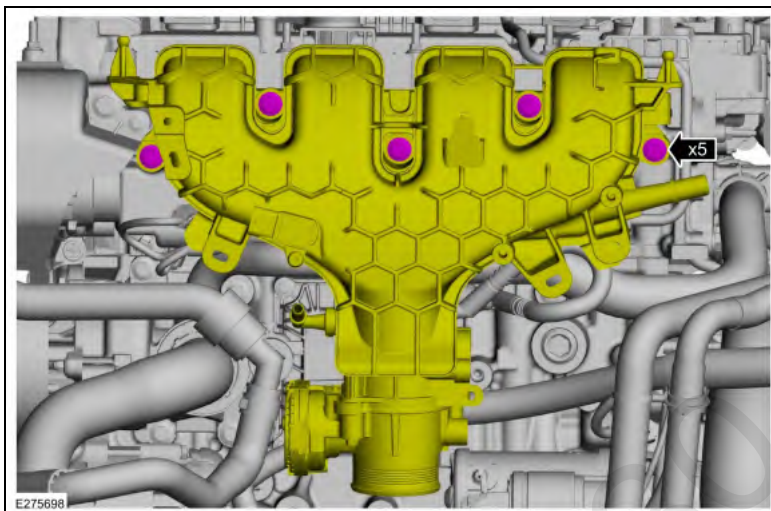
14. Disconnect the throttle body electrical connector and retainer.



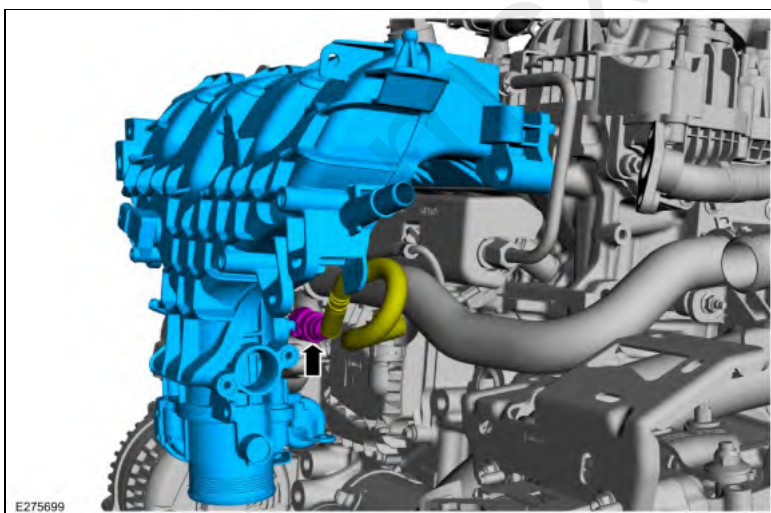
15. Remove the nuts and the crash bracket.



16. Remove the bolts and position the intake manifold forward.

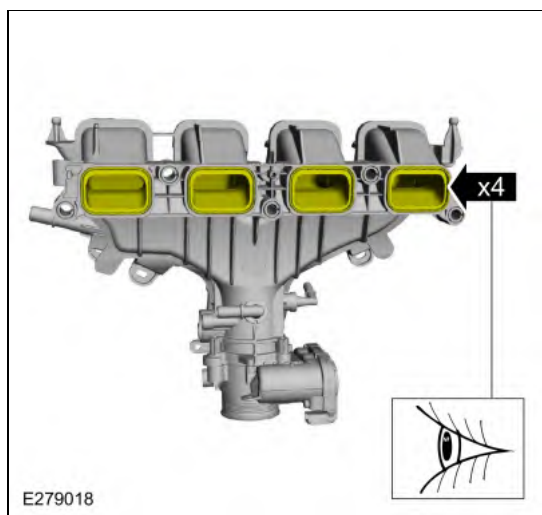


17. Disconnect the crankcase vent oil separator tube quick release coupling and remove the intake manifold.
Refer to: Quick Release Coupling (310-00 Fuel System - General Information - 2.0L EcoBoost (184kW/250PS) â€“ MI4) .

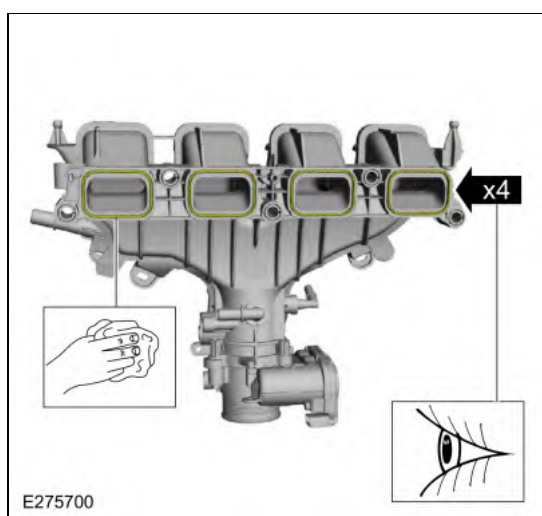


18. **NOTICE:** If the engine is repaired or replaced because of upper engine failure, typically including valve or piston damage, check the intake manifold for metal debris. If metal debris is found, install a new intake manifold. Failure to follow these instructions can result in engine damage.

- Visually inspect the intake manifold for metal debris.

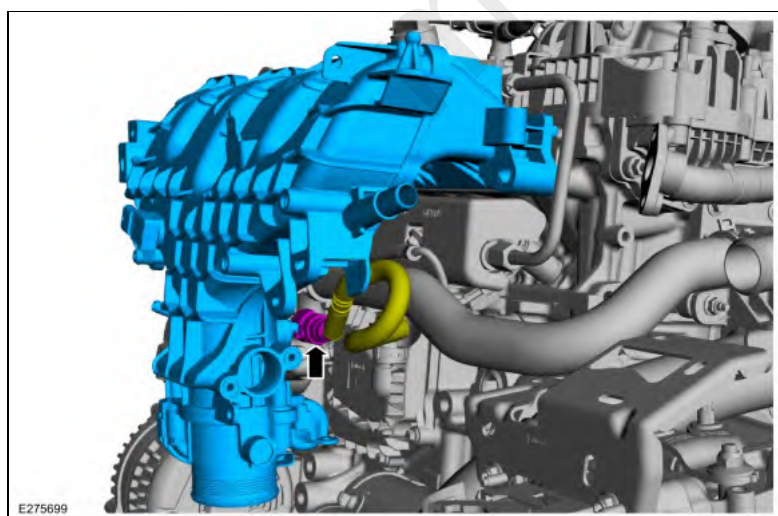


- 19.
- Visually inspect the intake manifold gaskets for nicks, cuts and abrasions. If these conditions are not present, the gaskets may be reused.
 - Clean and inspect all of the sealing surfaces of the intake manifold.

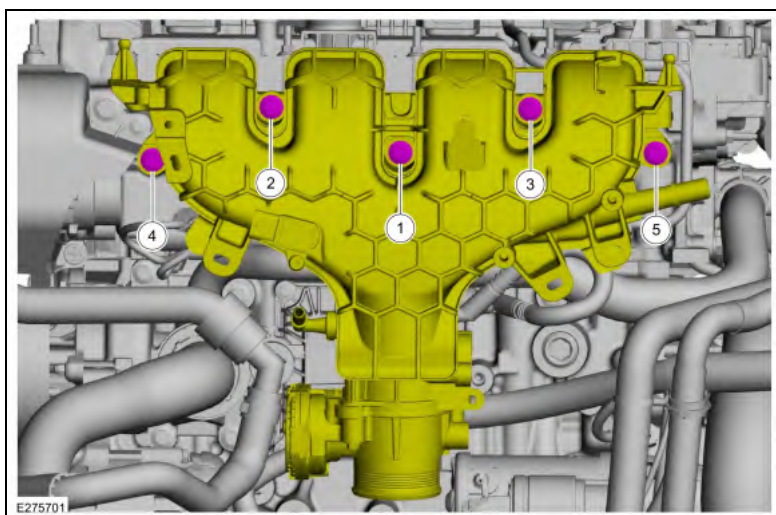


Installation

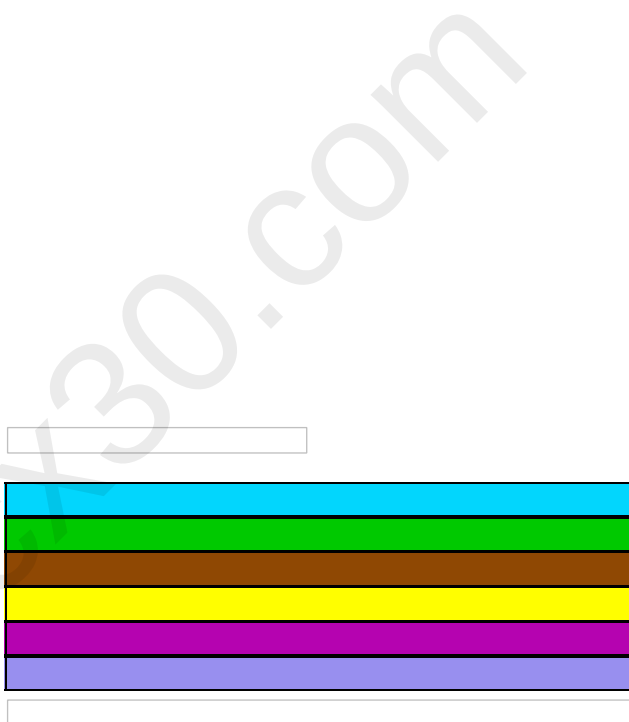
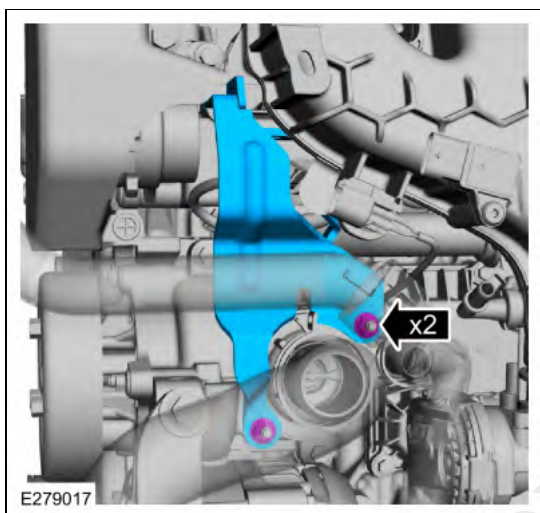
1. Install the intake manifold and connect the crankcase vent oil separator tube quick release coupling.
Refer to: Quick Release Coupling (310-00 Fuel System - General Information - 2.0L EcoBoost (184kW/250PS) à€“ MI4) .



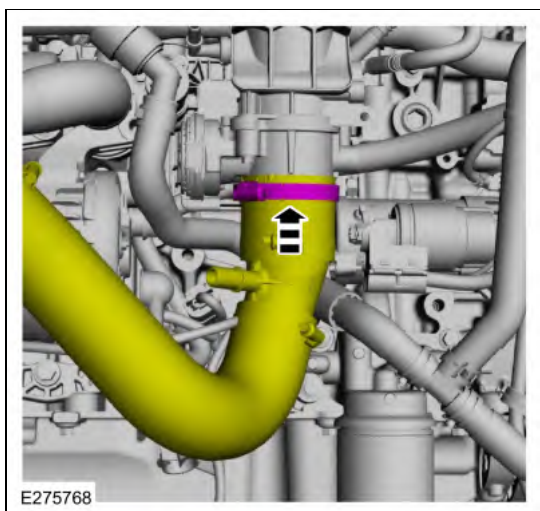
2. Position the intake manifold and install the bolts.
Torque: 18 lb.ft (25 Nm)



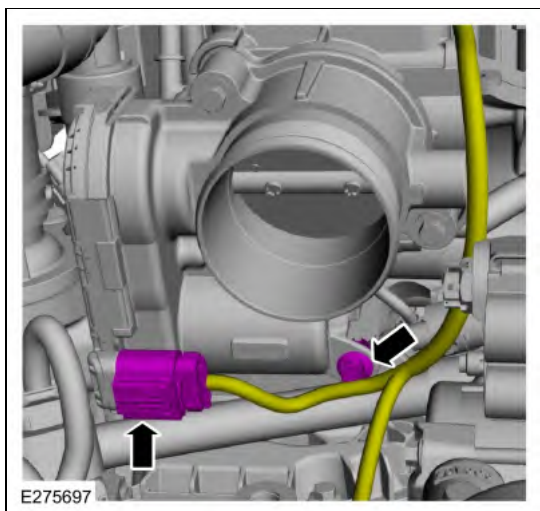
3. Install the crash bracket and the nuts.
Torque: 97 lb.in (11 Nm)



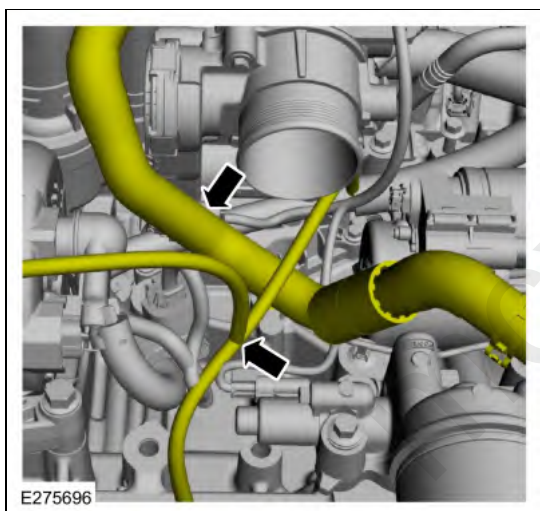
4. Position the CAC tube on the throttle body and tighten the clamp.
Torque: 48 lb.in (5.4 Nm)



5. Connect the throttle body electrical connector and retainer.



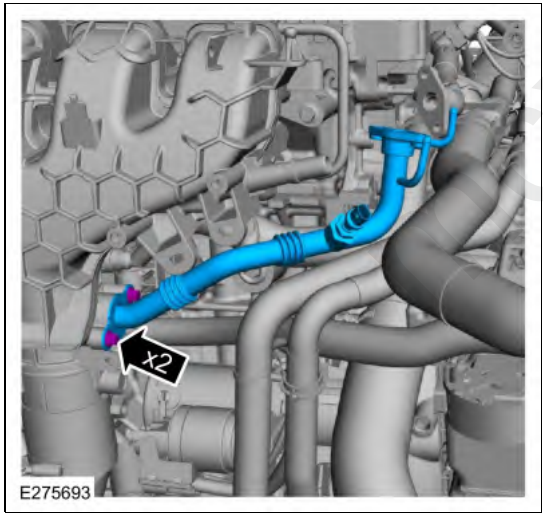
6. Position back the coolant hose and wiring harness.



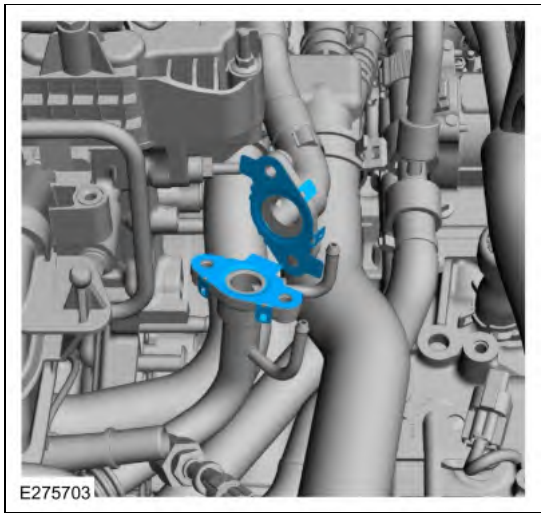
7. Install a new EGR outlet tube assembly O-ring seal and lubricate with clean engine oil.



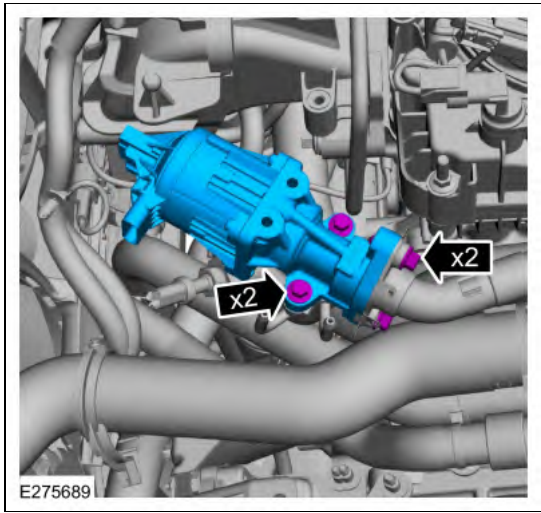
8. Install the EGR outlet tube assembly and the bolts finger tight.



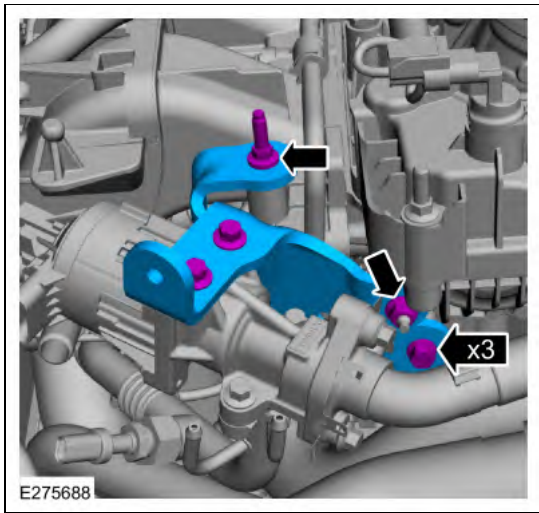
9. Install new EGR valve gaskets.



10. Install the EGR valve and bolts finger tight.

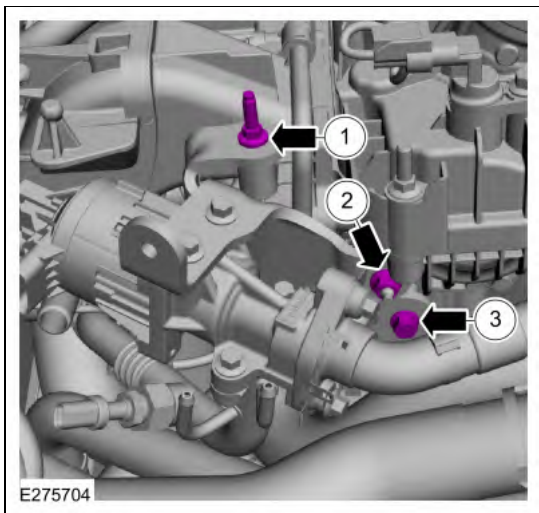


11. Install the EGR bracket the stud bolt, nut, bolts finger tight.



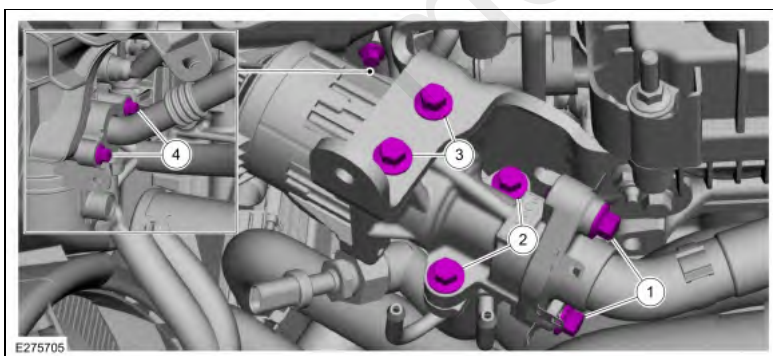
12.

1. Tighten the stud bolt.
Torque: 97 lb.in (11 Nm)
2. Tighten the nut.
Torque: 97 lb.in (11 Nm)
3. Tighten the bolt.
Torque: 97 lb.in (11 Nm)



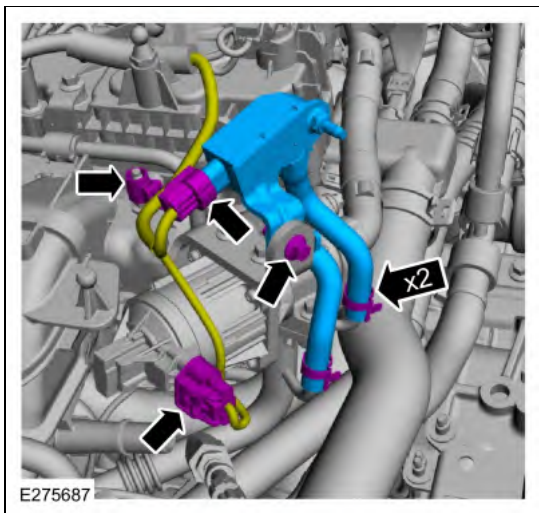
13.

1. Tighten the EGR inlet tube bolts.
Torque: 97 lb.in (11 Nm)
2. Tighten the EGR valve bolts.
Torque: 97 lb.in (11 Nm)
3. Tighten the EGR bracket-to- EGR valve bolts.
Torque: 97 lb.in (11 Nm)
4. Tighten the EGR outlet tube bolts.
Torque: 97 lb.in (11 Nm)



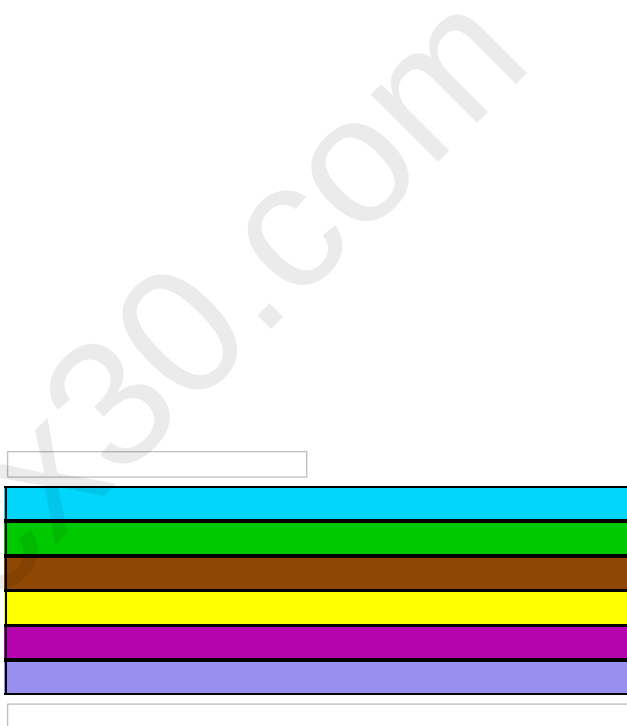
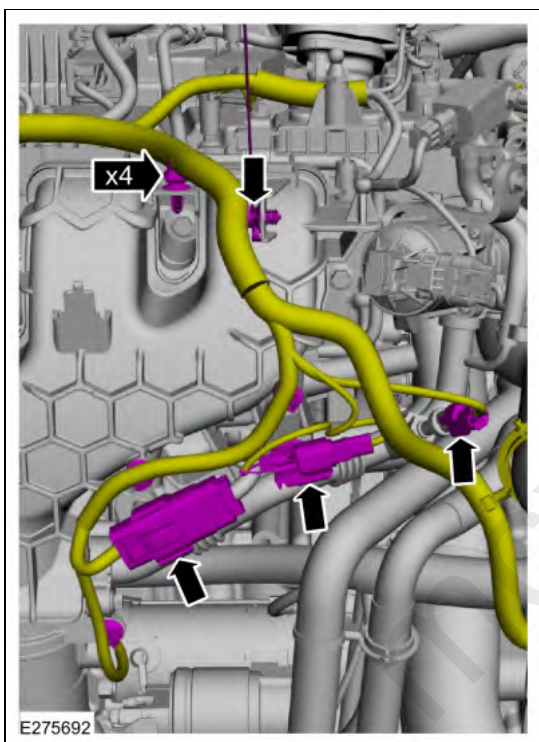
14.

- Install the EGR transducer assembly and the bolt.
Torque: 97 lb.in (11 Nm)
- Install the EGR transducer hoses.
- Connect the wiring harness electrical connectors and retainer.



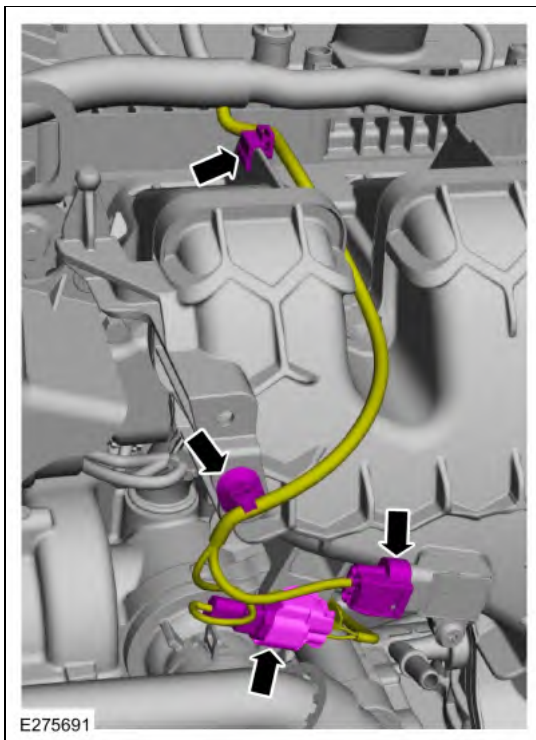
15.

- Attach the wiring harness retainers.
- Connect and attach the fuel rail wiring harness electrical connector.
- Connect and attach the LH KS wiring harness electrical connector.
- Connect the EGR cooler outlet temperature sensor wiring harness electrical connector.

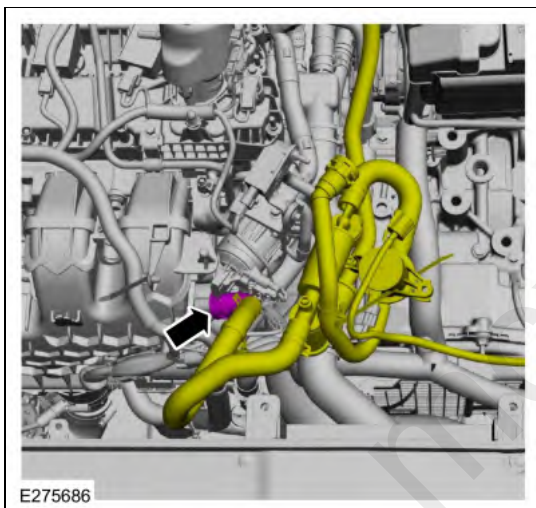


16.

- Attach the wiring harness retainers.
- Connect and attach the RH KS wiring harness electrical connector.
- Connect the MAP sensor wiring harness electrical connector.



17. Position and connect the brake vacuum tube quick release coupling to the intake manifold.
 Refer to: Quick Release Coupling (310-00 Fuel System - General Information - 2.0L EcoBoost (184kW/250PS) â€“ MI4) .



18. Install the following items:
1. Install the EVAP canister purge valve.
 Refer to: Evaporative Emission Canister Purge Valve (303-13A Evaporative Emissions - 2.0L EcoBoost (184kW/250PS) â€“ MI4, Removal and Installation).
 2. Install the air cleaner.
 Refer to: Air Cleaner (303-12A Intake Air Distribution and Filtering - 2.0L EcoBoost (184kW/250PS) â€“ MI4, Removal and Installation).
 3. Install the air cleaner outlet pipe.
 Refer to: Air Cleaner Outlet Pipe (303-12A Intake Air Distribution and Filtering - 2.0L EcoBoost (184kW/250PS) â€“ MI4, Removal and Installation).
19. Connect the battery ground.
 Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).

Oil Pan

Special Tool(s) / General Equipment

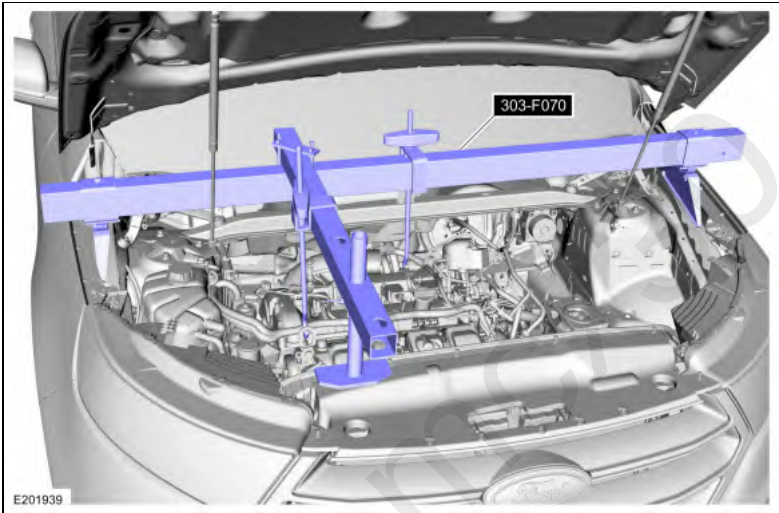
	303-F070
	Support Bar, Engine
	TKIT-1999A-F/LT
	TKIT-1999A-FM/FLM
Oil Drain Equipment	
Trolley Jack	
Wooden Block	

Materials

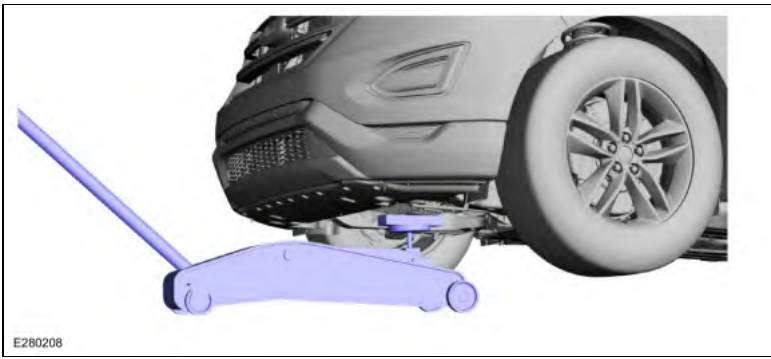
Name	Specification
Motorcraft® High Performance Engine RTV Silicone TA-357	WSE-M4G323-A6

Removal

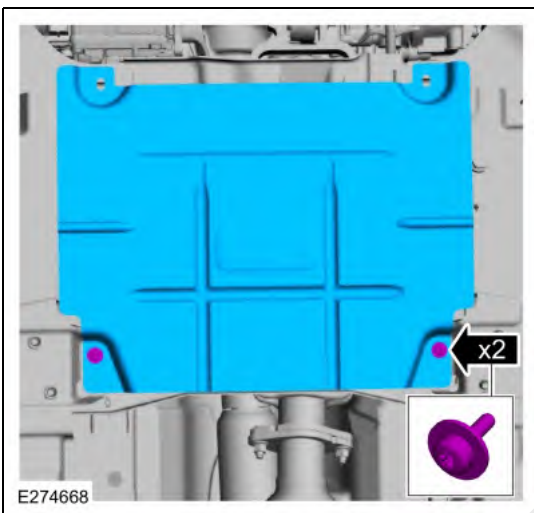
1. Remove the engine front cover.
Refer to: Engine Front Cover (303-01A Engine - 2.0L EcoBoost (184kW/250PS) â€™ MI4, Removal and Installation).
2. Using the special tools, support the engine.
Install Special Service Tool: 303-F070 Support Bar, Engine.



3. Remove the jack and wooden block.
Use the General Equipment: Trolley Jack
Use the General Equipment: Wooden Block



4. Remove the retainers and the underbody shield.



- 5.
- Disconnect the electrical connectors and wiring retainers.
 - Remove the nut and stud.
 - Remove the bolts and position the A/C compressor aside and support.