

Intake Manifold

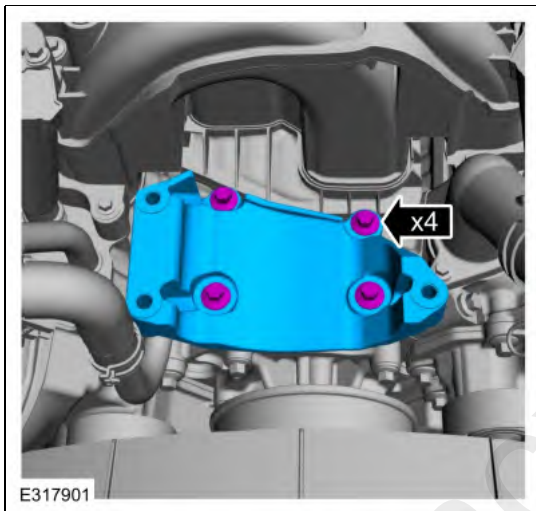
Special Tool(s) / General Equipment

Hose Clamp Remover/Installer

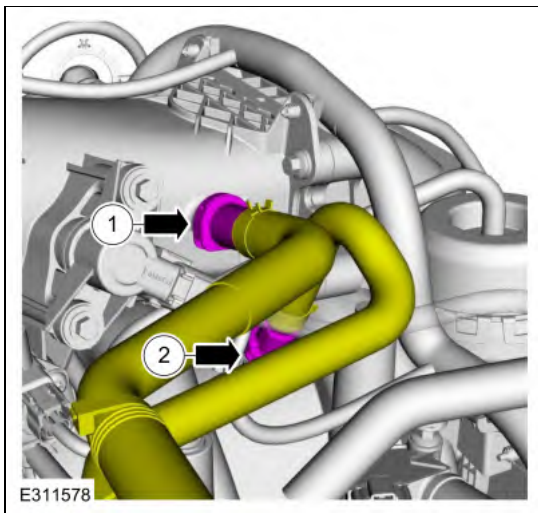
Removal

NOTICE: During engine repair procedures, cleanliness is extremely important. Any foreign material, including any material created while cleaning gasket surfaces, that enters the oil passages, coolant passages or the oil pan, can cause engine failure.

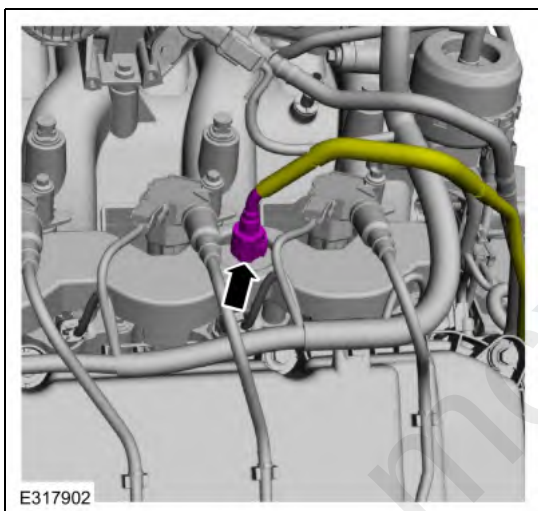
1. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: Jacking and Lifting - Overview (100-02 Jacking and Lifting, Description and Operation).
2. Release the fuel system pressure.
Refer to: Fuel System Pressure Release (310-00A Fuel System - General Information - 6.2L V8, General Procedures).
3. Disconnect the battery ground cable.
Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).
4. Remove the generator.
Refer to: Generator - 6.2L V8 (414-02 Generator and Regulator, Removal and Installation).
5. Remove the bolts and the generator bracket.



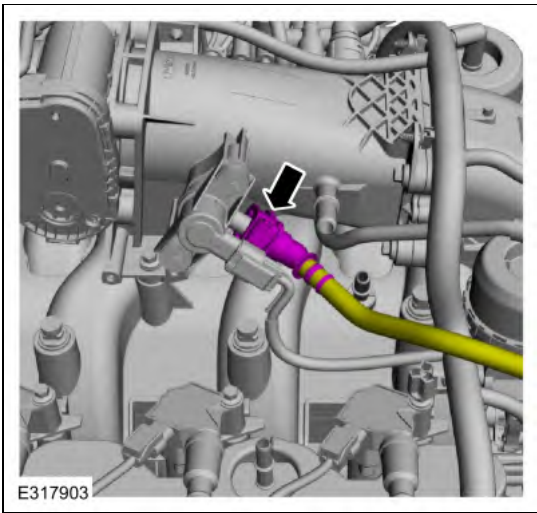
6.
 1. If equipped with brake booster, follow directions to release the quick release coupling type 24. Disconnect the brake vacuum tube from the intake manifold.
Refer to: Quick Release Coupling (310-00A).
 2. Follow directions to release the quick release coupling type 24. Disconnect the brake vacuum tube from the intake manifold.
Refer to: Quick Release Coupling (310-00A).



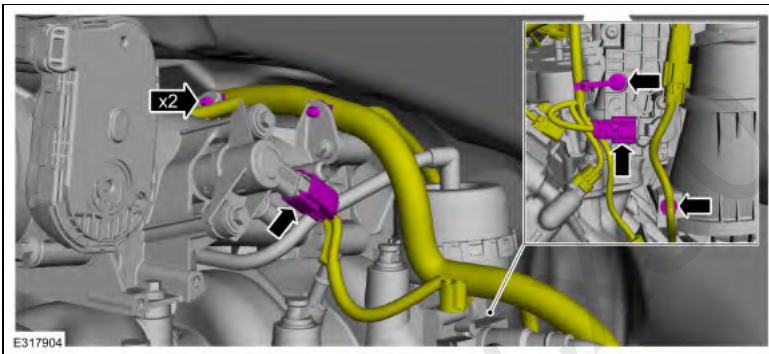
7. Follow directions to release the quick release coupling type 10. Disconnect the fuel supply line-to-fuel rail quick release coupling. Refer to: Quick Release Coupling (310-00 Fuel System - General Information - 6.2L V8) .



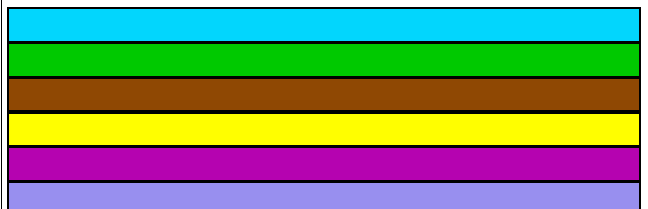
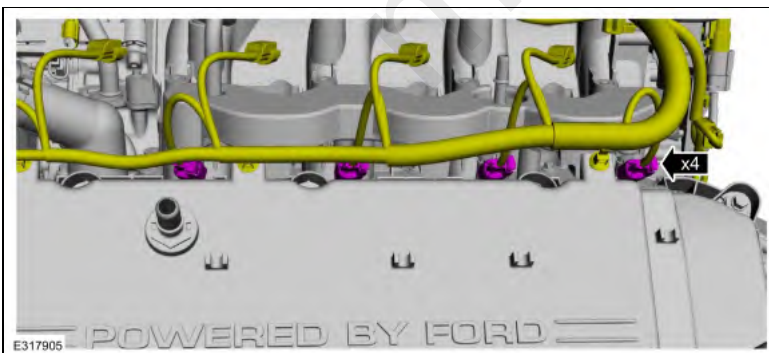
8. Follow directions to release the quick release coupling type 1. Disconnect the EVAP canister vent solenoid tube quick release coupling and position aside. Refer to: Quick Release Coupling (310-00 Fuel System - General Information - 6.2L V8) .



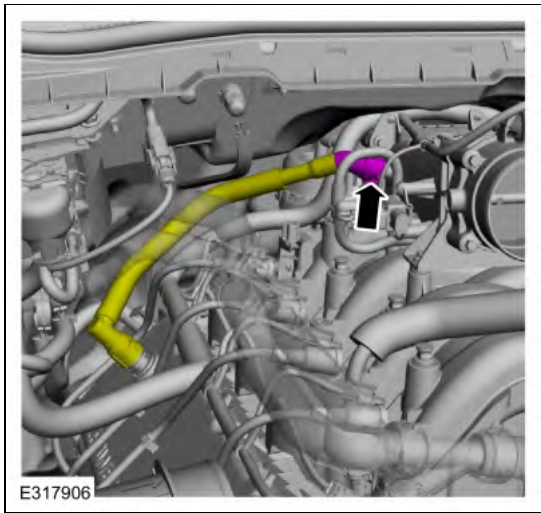
9. Remove the ignition coil-on-plugs.
Refer to: Ignition Coil-On-Plug (303-07A Engine Ignition - 6.2L V8, Removal and Installation).
10. Disconnect the wiring harness electrical connectors and retainers.



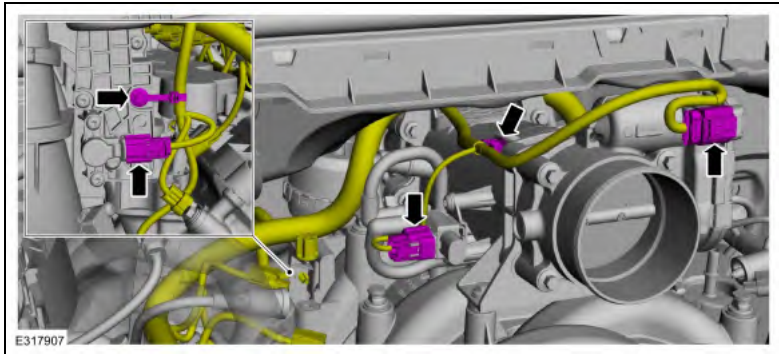
11. Disconnect the LH fuel rail electrical connectors.



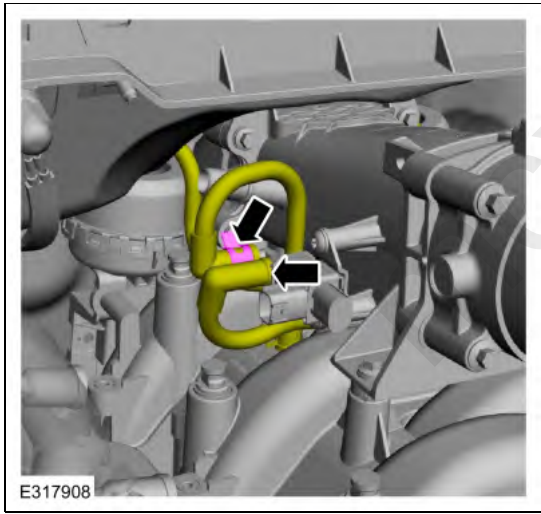
12. Follow directions to release the quick release coupling type 3. Disconnect the PCV tube from the intake manifold and position aside.



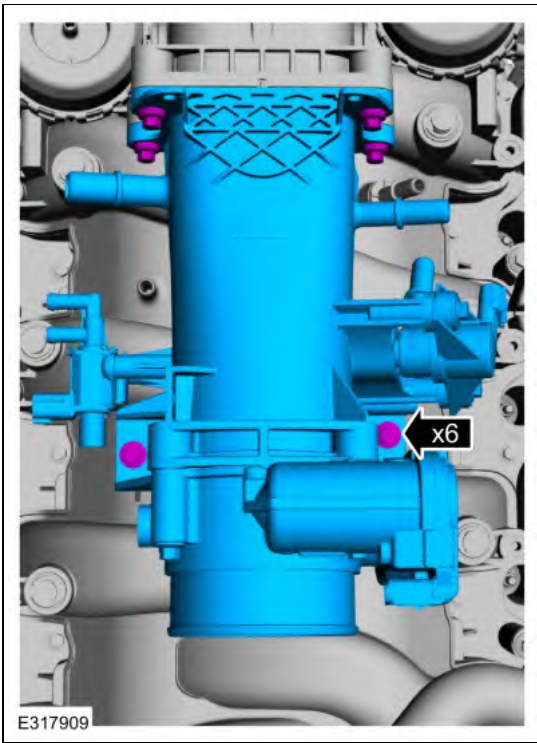
13. Disconnect the wiring harness electrical connectors and retainers.



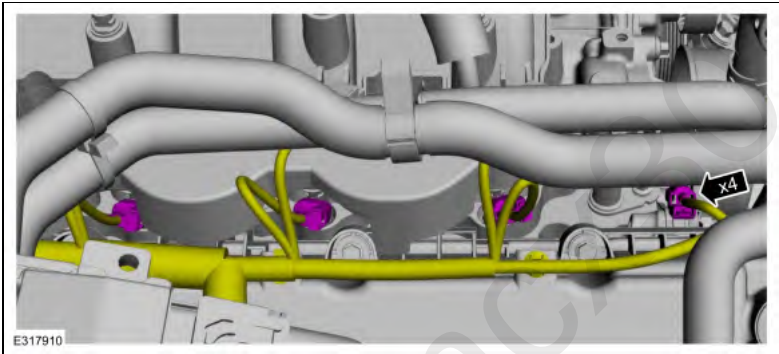
14. Disconnect the vacuum both hoses from the valve on the intake manifold.
Use the General Equipment: Hose Clamp Remover/Installer



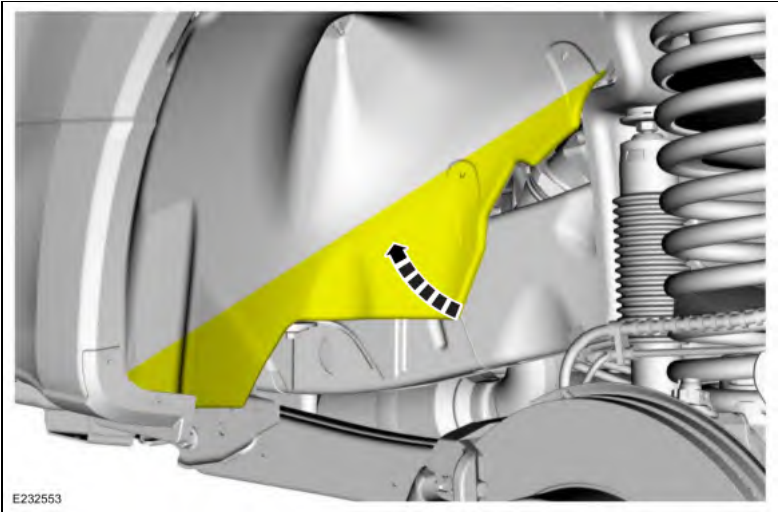
15. Remove the bolts and the throttle body and housing.



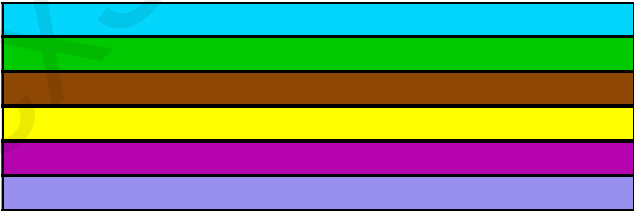
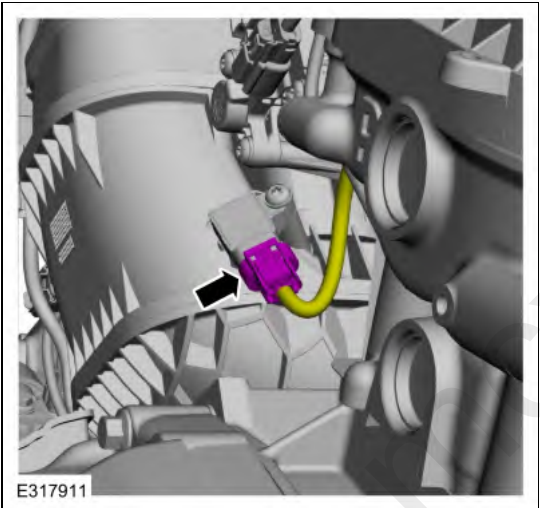
16. Disconnect the RH fuel rail electrical connectors.



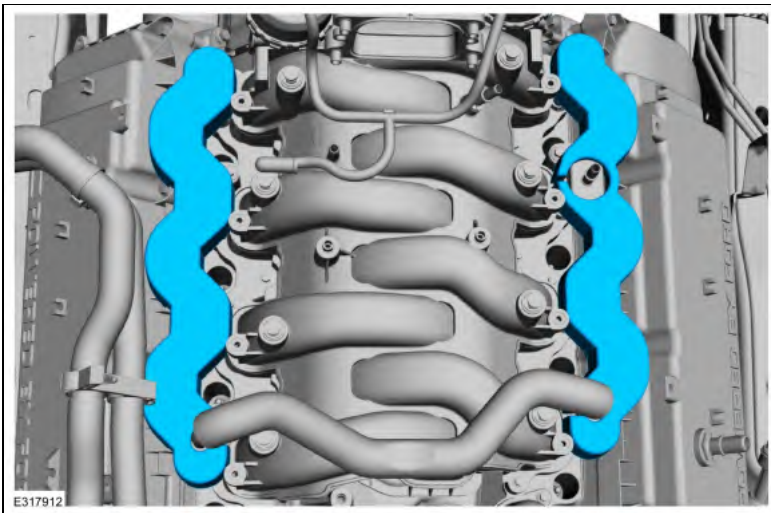
17. Remove the RHF wheel and tire.
 Refer to: Wheel and Tire - Vehicles With: Single Rear Wheels (204-04A Wheels and Tires, Removal and Installation).
 Refer to: Wheel and Tire - Vehicles With: Dual Rear Wheels (204-04A Wheels and Tires, Removal and Installation).
18. Position the RH fender splash shield aside.



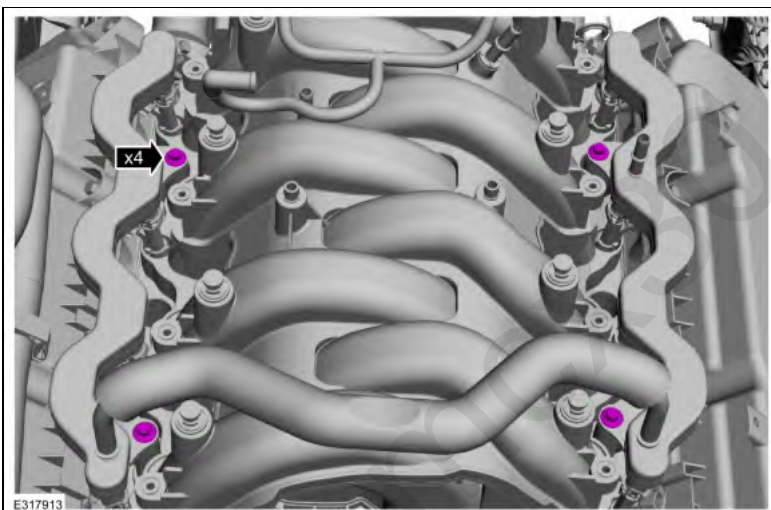
19. Working through the RH fender well, disconnect the MAP sensor electrical connector.



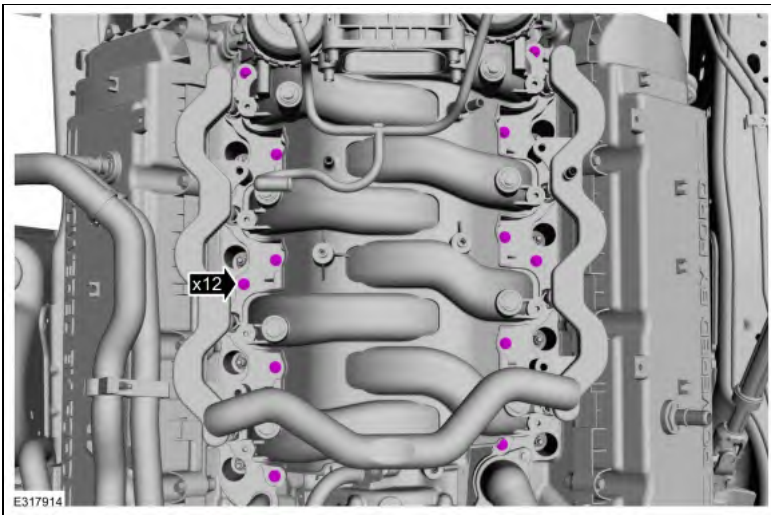
20. Remove the fuel rail insulators.



21. Remove the fuel rail bolts.



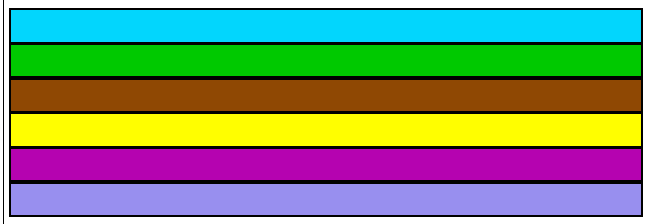
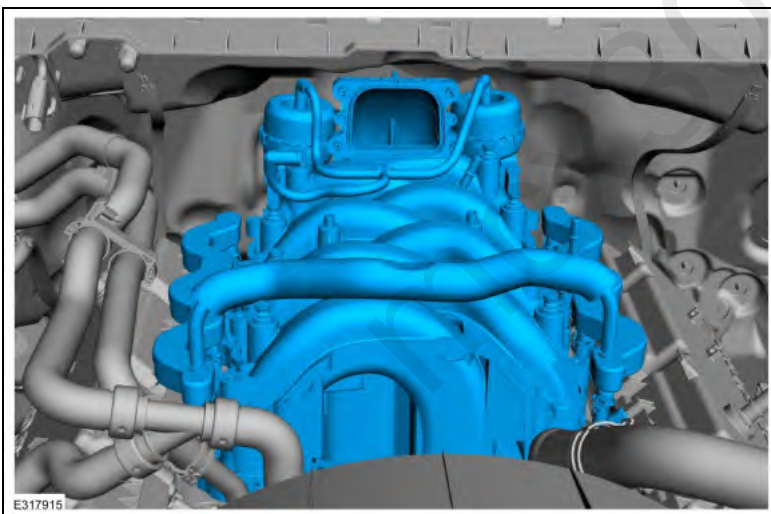
22. Loosen the intake manifold bolts.



23.

- Remove the intake manifold and fuel rail as an assembly.
- **NOTICE: 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 which make leak paths.**

Clean and inspect the cylinder head sealing surfaces.



Installation

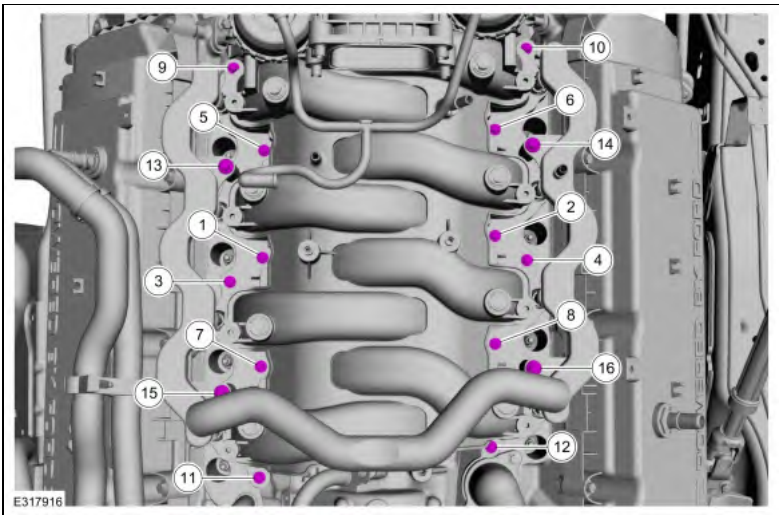
1. **NOTICE: If the engine is repaired or replaced because of upper engine failure, typically including valve or piston damage, check the intake manifold for metal debris. If metal debris is found, install a new intake manifold. Failure to follow these instructions can result in engine damage.**

Inspect the intake manifold gaskets for damage and install new gaskets if necessary.

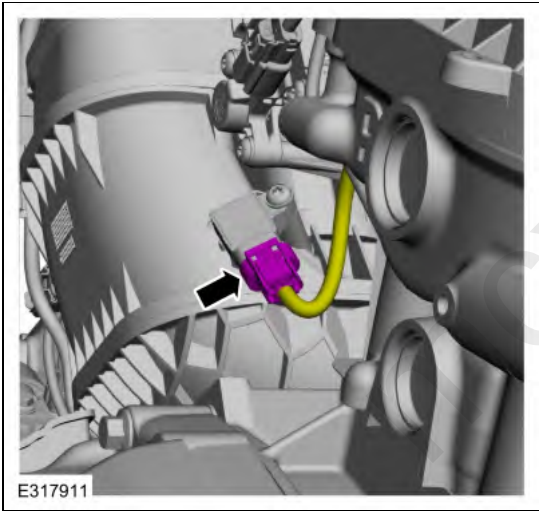


- Install the fuel rail bolts and tighten all the bolts finger-tight.
- Tighten the bolts in 4 stages in the sequence shown.

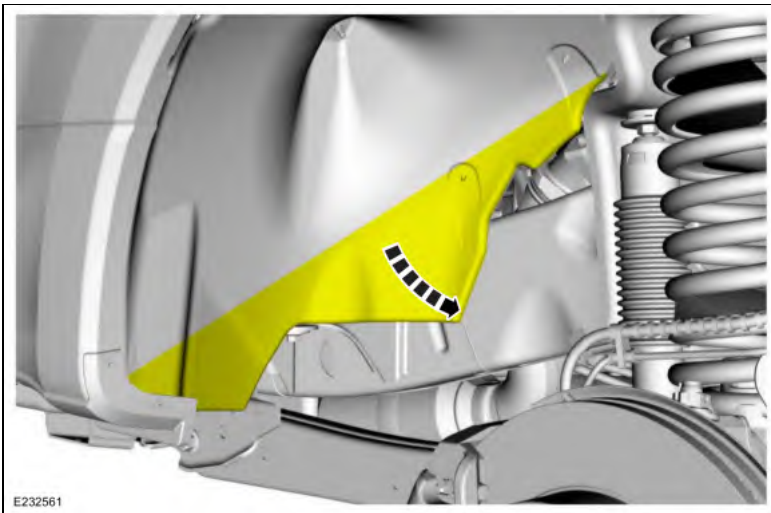
Stage 1: Tighten the intake manifold bolts 1 through 12 to: 89 lb.in (10 Nm)
 Stage 2: Tighten the intake manifold bolts 1 through 12 an additional: 45°
 Stage 3: Tighten the fuel rail bolts 13 through 16 to: 89 lb.in (10 Nm)
 Stage 4: Tighten the fuel rail bolts 13 through 16 an additional: 90°

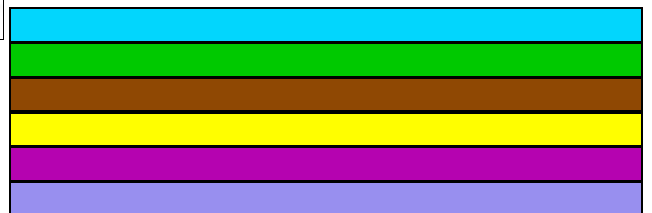


4. Working through the RH fender well, connect the MAP sensor electrical connector.



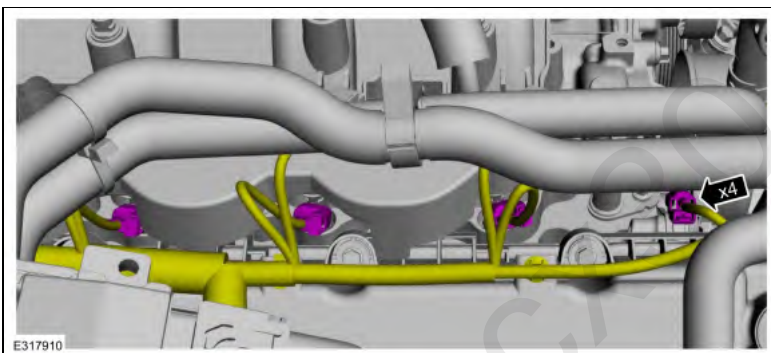
5. Position the RH fender splash shield back.





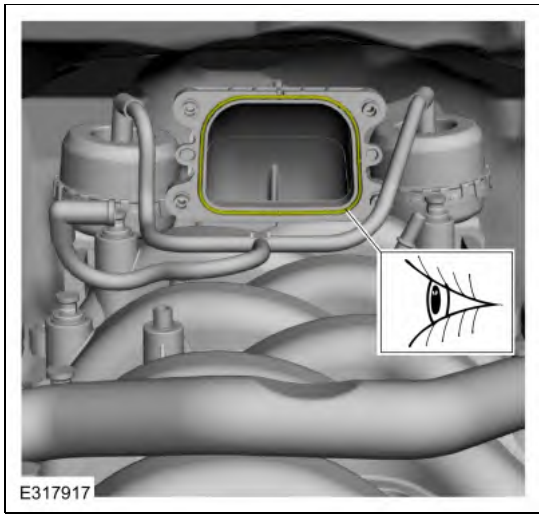
6. Install the RHF wheel and tire.
 Refer to: Wheel and Tire - Vehicles With: Single Rear Wheels (204-04A Wheels and Tires, Removal and Installation).
 Refer to: Wheel and Tire - Vehicles With: Dual Rear Wheels (204-04A Wheels and Tires, Removal and Installation).

7. Connect the RH fuel rail electrical connectors.

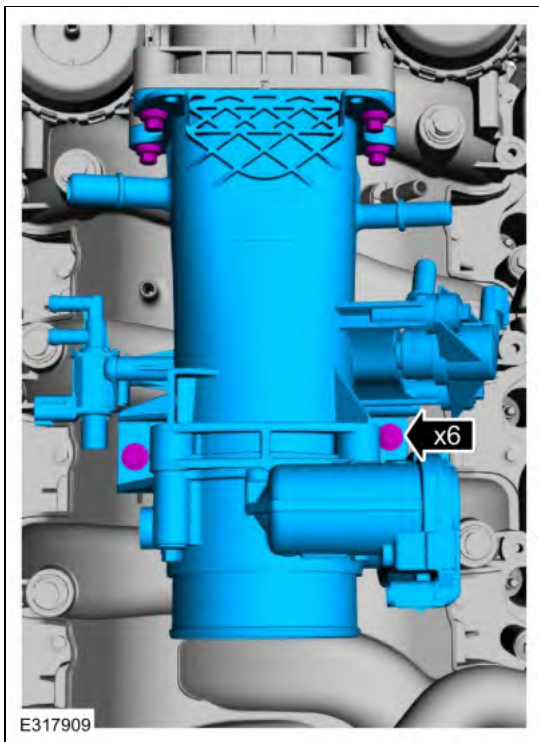




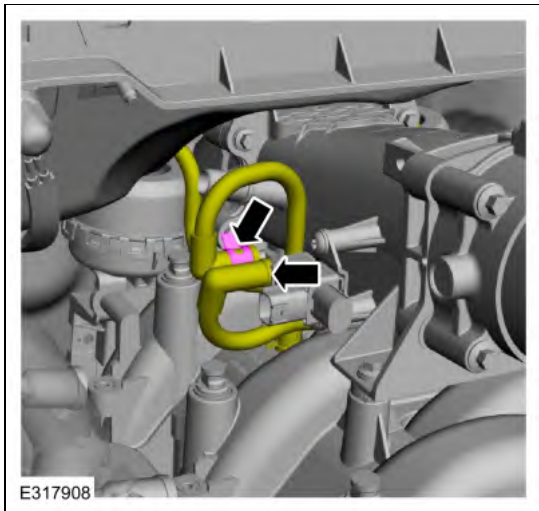
8. Inspect the gasket for damage and install new gasket if necessary.



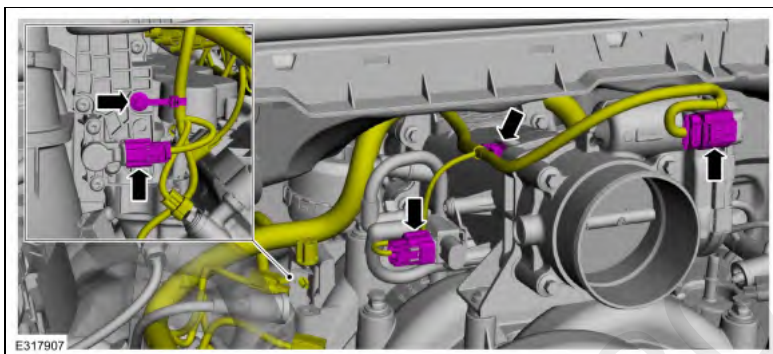
9. Install the throttle body housing and the bolts.
Torque: 89 lb.in (10 Nm)



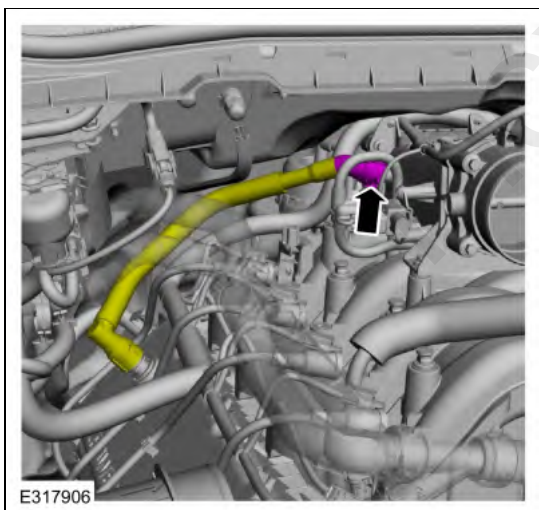
10. **NOTE:** *Ensure the hoses is fully seated.*
- Connect the vacuum hoses to the valve on the intake manifold.
Use the General Equipment: Hose Clamp Remover/Installer



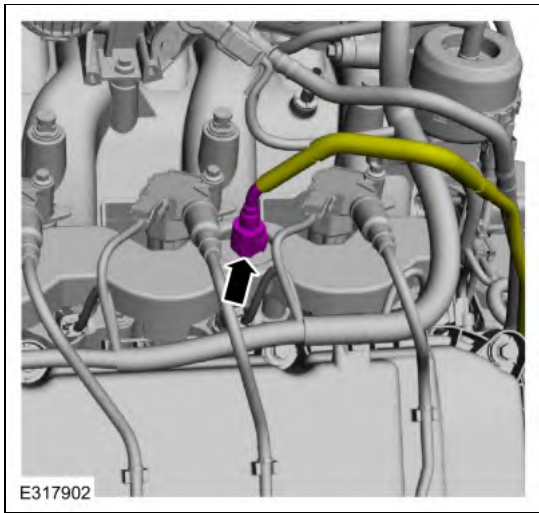
11. Connect the wiring harness electrical connectors and retainers.



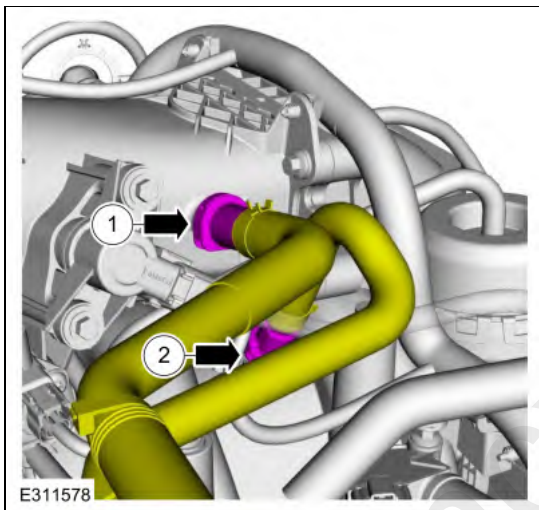
12. Follow directions to connect the quick release coupling type 3. Connect the PCV tube to the intake manifold.



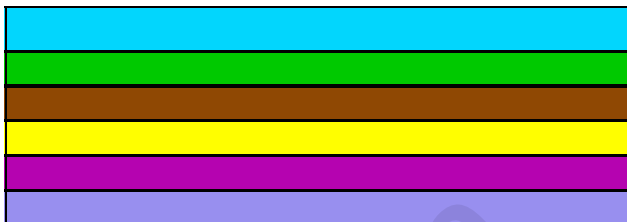
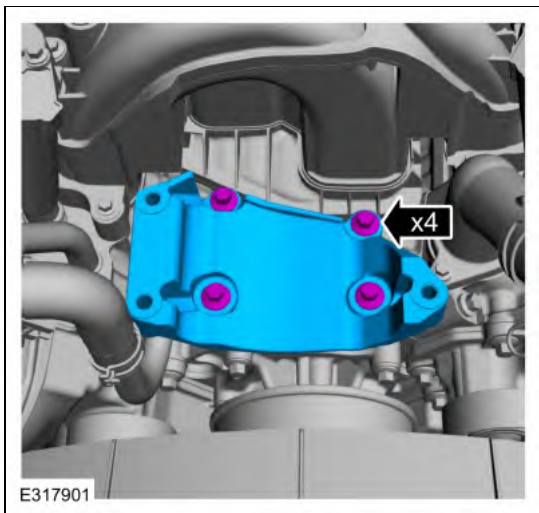
13. Connect the LH fuel rail electrical connectors.



- 18.
1. If equipped with brake booster, follow directions to connect the quick release coupling type 24. Connect the brake vacuum tube to the intake manifold.
 2. Follow directions to connect the quick release coupling type 24. Connect the brake vacuum tube to the intake manifold.



19. Install the generator bracket and the bolts.
Torque:
 Stage 1: 177 lb.in (20 Nm)
 Stage 2: 45°



20. Install the generator.
Refer to: Generator - 6.2L V8 (414-02 Generator and Regulator, Removal and Installation).
21. Connect the battery ground cable.
Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).
22. Pressurize the fuel system.
Refer to: Fuel System Pressure Release (310-00A Fuel System - General Information - 6.2L V8, General Procedures).