

Fuel Rail

Material

Item	Specification
Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil XO-5W30-QSP (US); Motorcraft® SAE 5W-30 Super Premium Motor Oil CXO-5W30-LSP12 (Canada); or equivalent	WSS-M2C929-A

Removal and Installation



WARNING: Do not smoke, carry lighted tobacco or have an open flame of any type when working on or near any fuel-related component. Highly flammable mixtures are always present and may be ignited. Failure to follow these instructions may result in serious personal injury.



WARNING: Do not carry personal electronic devices such as cell phones, pagers or audio equipment of any type when working on or near any fuel-related component. Highly flammable mixtures are always present and may be ignited. Failure to follow these instructions may result in serious personal injury.



WARNING: Before working on or disconnecting any of the fuel tubes or fuel system components, relieve the fuel system pressure to prevent accidental spraying of fuel. Fuel in the fuel system remains under high pressure, even when the engine is not running. Failure to follow this instruction may result in serious personal injury.



WARNING: Clean all fuel residue from the engine compartment. If not removed, fuel residue may ignite when the engine is returned to operation. Failure to follow this instruction may result in serious personal injury.



WARNING: Always disconnect the battery ground cable at the battery when working on an evaporative emission (EVAP) system or fuel-related component. Highly flammable mixtures are always present and may be ignited. Failure to follow these instructions may result in serious personal injury.

Both sides

1. Release the fuel system pressure. For additional information, refer to [Section 310-00](#).
2. Disconnect the battery ground cable. For additional information, refer to [Section 414-01](#).

RH side

3. Remove the wiring harness retainer from the RH valve cover stud bolt.
4. Disconnect the 3 fuel injector electrical connectors.
5. Remove the 2 fuel rail supply tube bolts from the RH side fuel rail.
 - To install, tighten to 6 Nm (53 lb-in).
6. **NOTICE:** Use O-ring seals that are made of special fuel-resistant material. The use of ordinary O-

ring seals may cause the fuel system to leak. Do not reuse the O-ring seals.

Remove and discard the fuel rail supply tube O-ring seal.

7. Remove the 2 bolts and the RH side fuel rail.
 - To install, tighten to 23 Nm (17 lb-ft).
8. Remove the 3 fuel injectors from the fuel rail.
9. **NOTICE: Use O-ring seals that are made of special fuel-resistant material. The use of ordinary O-ring seals may cause the fuel system to leak. Do not reuse the O-ring seals.**

Remove and discard the fuel injector O-ring seals.

LH side

10. Disconnect the fuel rail pressure and temperature sensor electrical connector and vacuum hose.
11. Disconnect the radio capacitor electrical connector.
12. Remove the 2 ignition coil bracket upper bolts.
 - To install, tighten to 9 Nm (80 lb-in).
13. Remove the (M8) ignition coil bracket lower bolt.
 - To install, tighten to 24 Nm (18 lb-ft).
14. Remove the (M12) ignition coil bracket lower bolt.
 - To install, tighten to 34 Nm (25 lb-ft).
15. Position the ignition coil and bracket aside.
16. Remove the wiring harness retainer from the LH valve cover stud bolt.
17. Disconnect the 3 fuel injector electrical connectors.
18. Remove the 2 fuel rail supply tube bolts from the LH side fuel rail.
 - To install, tighten to 6 Nm (53 lb-in).
19. **NOTICE: Use O-ring seals that are made of special fuel-resistant material. The use of ordinary O-ring seals may cause the fuel system to leak. Do not reuse the O-ring seals.**

Remove and discard the fuel rail supply tube O-ring seal.

20. Remove the 2 bolts and the LH side fuel rail.
 - To install, tighten to 23 Nm (17 lb-ft).
21. Remove the 3 fuel injectors from the fuel rail.
22. **NOTICE: Use O-ring seals that are made of special fuel-resistant material. The use of ordinary O-ring seals may cause the fuel system to leak. Do not reuse the O-ring seals.**

Remove and discard the fuel injector O-ring seals.

Both sides

23. To install reverse the removal procedure.
 - Lubricate the new O-ring seals with clean engine oil prior to installation.
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