REMOVAL AND INSTALLATION

Fuel Pump Module

Special Tool(s)

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Storage Tanker</td>
<td>164-R3202 or equivalent</td>
</tr>
<tr>
<td>Fuel Tank Lock Ring Wrench</td>
<td>310-D006</td>
</tr>
</tbody>
</table>

Material

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil</td>
<td>WSS-M2C930-A</td>
</tr>
<tr>
<td>XO-5W20-QSP (in Canada)</td>
<td></td>
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</tbody>
</table>

Removal and Installation

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

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

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.

3. Remove the fuel tank filler cap.

4. Insert a suitable fuel drain hose into the fuel tank filler pipe until it reaches the fuel tank inlet tube.

5. ⚠️ CAUTION: The fuel pump (FP) module and fuel level sensor will be below the fuel level in the tank when the tank is full. Make sure to drain 1/8 of the fuel capacity through the filler pipe prior to removing the pumps or fuel spillage will occur.

   NOTE: When draining a completely full fuel tank, this step will remove approximately 1/8 of fuel from the LH side of the fuel tank.

   Attach the fuel storage tanker to the fuel drain hose and remove as much fuel as possible from the fuel tank filler pipe.

6. Remove the rear seat bottom and any insulation padding covering the FP module access cover. For additional information, refer to Section 501-10.
7. Remove the FP module access cover.

8. Disconnect the FP module electrical connector.

9. Release the quick connect coupling on the fuel pump module. For additional information, refer to Section 310-00.

10. Using the special tool, remove the FP module retaining lock ring.

11. **CAUTION:** The FP module must be handled carefully to avoid damage to the float arm, filter and the convolute hoses.

   Carefully lift the FP module out of the fuel tank enough to access and release the fuel cross over tube quick connect coupling from the FP module. For additional information, refer to Section 310-00.

12. Completely remove the FP module from the fuel tank.

13. **CAUTION:** Inspect the surfaces of the FP module mounting flange and fuel tank O-ring seal contact surfaces. Do not polish or adjust the O-ring seal contact area of the fuel tank flange or the fuel tank. Install a new FP module or fuel tank if the O-ring seal contact area is bent, scratched or corroded.

   **CAUTION:** Make sure to install a new FP module O-ring seal and lock ring.

   **NOTE:** To install, apply clean engine oil to the O-ring seal.

   Remove the FP module O-ring seal.
REMOVAL AND INSTALLATION (Continued)

Installation

1. Install the FP module O-ring seal.

2. Position the FP module into the fuel tank.

3. Connect the cross-over fuel tube quick connect coupling to the FP module. For additional information, refer to Section 310-00.

4. **NOTE:** Make sure the alignment arrows on the FP module and the fuel tank meet before tightening the FP module lock ring.
   Using the special tool, install the FP module and lock ring.
   - Tighten the lock ring until it meets the stops on the fuel tank.

5. Connect the quick connect coupling on the FP module. For additional information, refer to Section 310-00.

6. Connect the FP module electrical connector.

7. Install the FP module access cover.

8. Install the rear bottom and any insulation padding covering the fuel pump module. For additional information, refer to Section 501-10.

9. Install the fuel tank filler cap.

10. Connect the battery ground cable. For additional information, refer to Section 414-01.

11. **NOTE:** It may take more than one key cycle to pressurize the fuel system. Cycle the ignition key and wait 3 seconds to pressurize the fuel system.
    Check for leaks before starting the engine.

12. Start the engine and check for leaks.