

2008 Ford Mustang
2008 ENGINE Fuel Tank & Lines - Mustang

2008 ENGINE

Fuel Tank & Lines - Mustang

SPECIFICATIONS

Material

Item	Specification	Fill Capacity
Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil XO-5W20-QSP (US); Motorcraft SAE 5W-20 Super Premium Motor Oil CXO-5W20-LSP12 (Canada); or equivalent	WSS-M2C930-A	-

GENERAL SPECIFICATIONS

Item	Specification
Fuel tank capacity	60.56L (16 gal)

TORQUE SPECIFICATIONS

Description	Nm	lb-ft	lb-in
Fuel tank deflector bolt	25	18	-
Fuel tank deflector nuts	25	18	-
Fuel tank filler pipe bracket bolt	25	18	-
Fuel tank filler pipe hose clamp	6	-	53
Fuel tank strap bolts	52	38	-
Fuel tube bundle bracket bolt	8	-	71
Fuel tube bundle retainer nuts	5	-	44
Fuel tube bundle shield bolts	5	-	44
Fuel tube bundle shield nuts	5	-	44
Inertia Fuel Shutoff (IFS) switch bolts	2	-	18
Lateral stiffener bar-to-body bolts	62	46	-
Lateral stiffener bar-to-body mount nut	115	85	-

DESCRIPTION AND OPERATION

FUEL TANK AND LINES

The fuel tank and lines consists of the:

- saddle-type fuel tank.
- fuel tank filler pipe.
- fuel tank filler cap.

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- Fuel Pump (FP) module.
- fuel level sensor.
- fuel tubes.
- Fuel Tank Pressure (FTP) sensor.
- Inertia Fuel Shutoff (IFS) switch.

The vehicle:

- utilizes an Electronic Returnless Fuel System (ERFS).
- has a dual-container (saddle-type) stamped steel fuel tank, each half equipped with a fuel level sender.
- has a FP module that supplies fuel under pressure to the fuel rail.
- has a fuel tank filler pipe which contains a restrictor plate to permit only unleaded fuel to be pumped into the fuel tank.
- has a fuel tank filler pipe assembly that cannot be modified in any way. The fuel tank filler pipe is serviced only by installing a new filler pipe assembly.
- has a one-fourth turn fuel tank filler cap.
- has a fuel filter that is mounted in front of the fuel tank on the left hand side of the vehicle providing filtration to protect the fuel injectors.
- has fuel tubes (liquid and vapor) combined in a bundle along with the brake tubes mounted on the underside of the floorpan and covered with a protective cover shield.
- has a FTP sensor (part of the fuel vapor tube assembly).
- has quick connect and spring lock fuel tube couplings.

The FP module is controlled by the PCM. Electrical power to the FP is provided through the IFS switch located in the passenger footwell area.

DIAGNOSTIC TESTS

FUEL TANK AND LINES

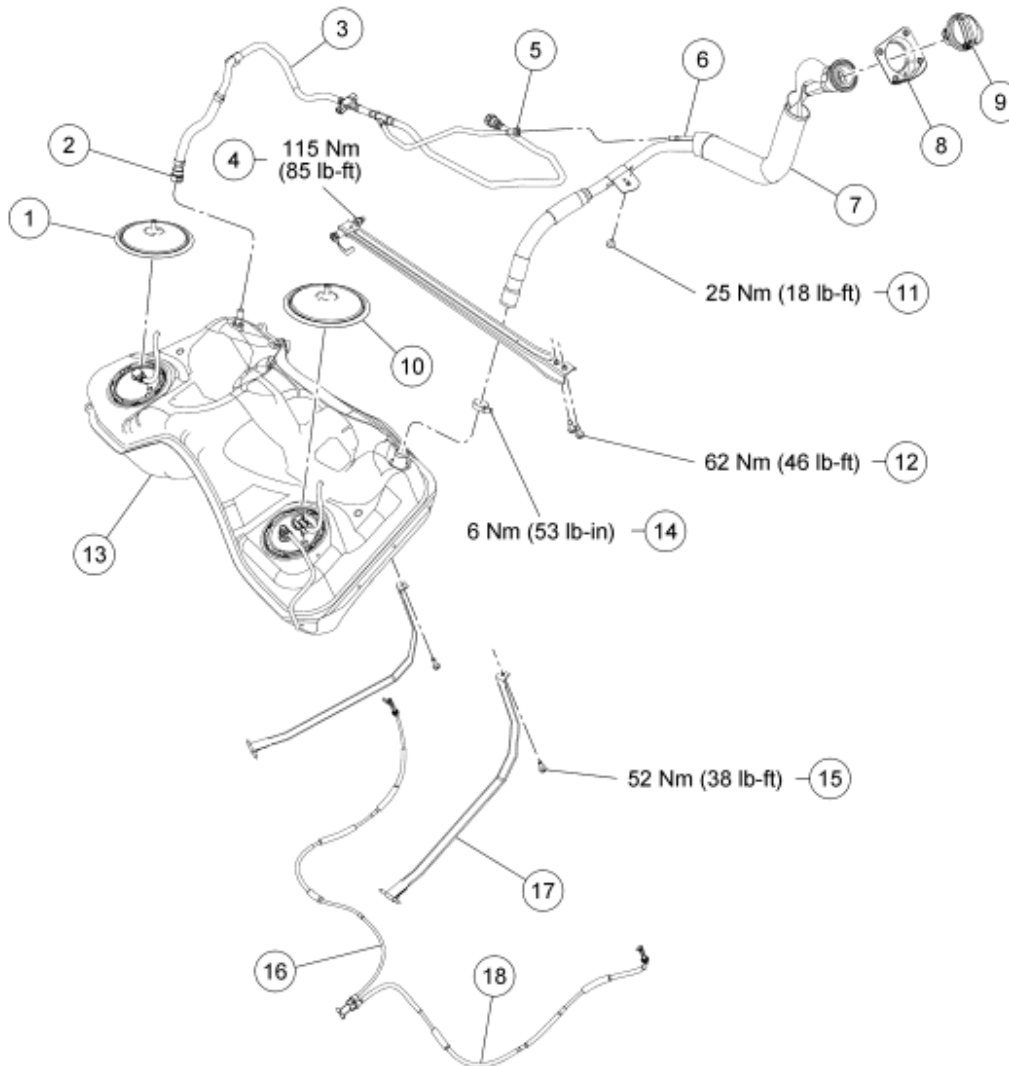
Refer to the [Introduction - Gasoline Engines](#) article.

REMOVAL AND INSTALLATION

FUEL TANK AND FILLER PIPE - EXPLODED VIEW

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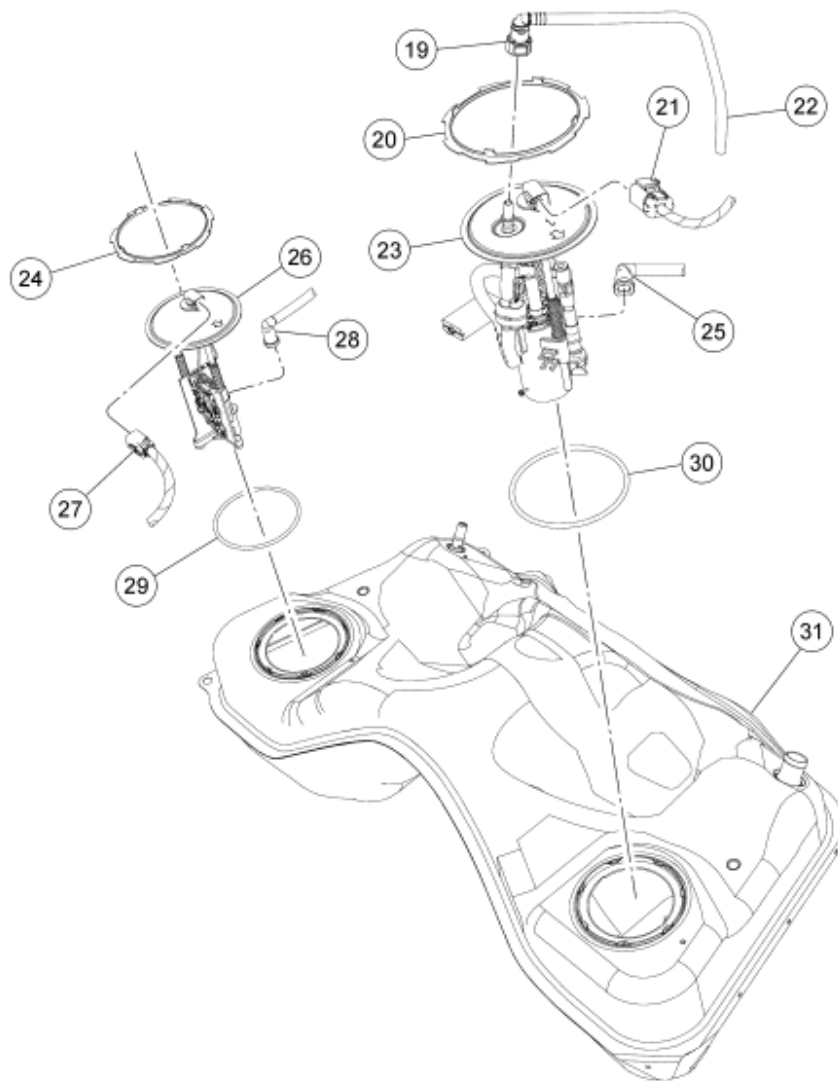
Fig. 1: Exploded View Of Fuel Tank & Filler Pipe With Torque Specifications
Courtesy of FORD MOTOR CO.

Item	Part Number	Description
1	9C335	Fuel level sensor access cover
2	-	Fuel vapor tube assembly-to-fuel tank quick connect coupling (part of 9E325)
3	9E325	Fuel vapor tube assembly
4	W520214	Lateral stiffener bar-to-body mount nut
5	-	Fuel vapor tube assembly-to-fuel tank filler pipe recirculation tube spring lock coupling (part of 9E325)
6	-	Fuel tank filler pipe recirculation tube (part of 9034)
7	9034	Fuel tank filler pipe
8	9A212	Fuel tank filler pipe upper retainer
9	9030	Fuel tank filler cap

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10	9C335	Fuel Pump (FP) module access cover
11	W713388	Fuel tank filler pipe bracket bolt
12	W711331	Lateral stiffener bar-to-body bolt (2 required)
13	9002	Fuel tank
14	W525937	Fuel tank filler pipe hose clamp
15	W710947	Fuel tank strap bolt (2 required)
16	2A635	Rear parking brake cable (RH)
17	9055	Fuel tank strap (2 required)
18	2A823	Rear parking brake cable (LH)



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Fig. 2: Exploded View Of Fuel Pump Module, Fuel Level Sensor & Fuel Tank
Courtesy of FORD MOTOR CO.

Item	Part Number	Description
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19	-	Rear fuel tube-to-FP module quick connect coupling (part of 9J279)
20	9C385	FP module lock ring
21	14A464	FP module electrical connector
22	9J279	Rear fuel tube
23	9H307	FP module
24	9C385	Fuel level sensor lock ring
25	-	Internal fuel tube-to-FP module quick connect coupling (part of 9002)
26	9275	Fuel level sensor
27	14A464	Fuel level sensor electrical connector
28	-	Internal fuel tube-to-fuel level sensor quick connect coupling (part of 9002)
29	9E275	Fuel level sensor O-ring seal
30	9E275	FP module O-ring seal
31	9002	Fuel tank

1. For additional information, refer to the procedures.

FUEL TANK

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: When handling fuel, always observe fuel handling precautions and be prepared in the event of fuel spillage. Spilled fuel may be ignited by hot vehicle components or other ignition sources. Failure to follow these instructions may result in serious personal injury.

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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.

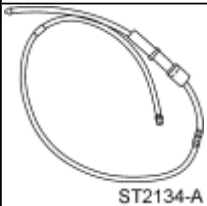
1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING AND LIFTING** article.
2. Disconnect the battery ground cable. For additional information, refer to **BATTERY, MOUNTING AND CABLES** article.
3. Drain the fuel tank. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
4. If equipped, remove the rear support braces. For additional information, refer to **UNI-BODY, SUBFRAME AND MOUNTING SYSTEM** article.
5. Remove the exhaust intermediate pipe(s). For additional information, refer to **EXHAUST SYSTEM** article.
6. Remove the driveshaft. For additional information, refer to **DRIVESHAFT** article.
7. Disconnect the fuel vapor tube assembly-to-fuel tank quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.

NOTE: Some residual fuel may remain in the fuel tank filler pipe after draining the fuel tank. Carefully drain any residual fuel into a suitable container.

8. Release the clamp and disconnect the fuel tank filler pipe-to-fuel tank hose.
 - To install, tighten clamp to 6 N.m (53 lb-in).
9. Position a suitable lifting device under the fuel tank.
10. Position the emergency brake cables away from the fuel tank.
11. Remove the 2 bolts and the fuel tank straps.
 - To install, tighten to 52 N.m (38 lb-ft).
12. Completely lower and remove the fuel tank from the vehicle.
13. To install, reverse the removal procedure.

FUEL TANK FILLER PIPE

Special Tools

Illustration	Tool Name	Tool Number
 ST2134-A	Fuel Draining Hose	310-102

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Fuel Storage Tanker

164-R3202 or equivalent

REMOVAL AND INSTALLATION

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WARNING: Remove the fuel filler cap slowly. The fuel system may be under pressure. If the fuel filler cap is venting vapor or if you hear a hissing sound, wait until it stops before completely removing the fuel filler cap. Otherwise, fuel may spray out. Failure to follow these instructions 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.

WARNING: When handling fuel, always observe fuel handling precautions and be prepared in the event of fuel spillage. Spilled fuel may be ignited by hot vehicle components or other ignition sources. Failure to follow these instructions may result in serious personal injury.

All vehicles

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING AND LIFTING** article.
2. Disconnect the battery ground cable. For additional information, refer to **BATTERY, MOUNTING AND CABLES** article.
3. Remove the LH rear wheel and tire. For additional information, refer to **WHEELS AND TIRES** article.
4. Carefully turn the fuel tank filler cap counterclockwise approximately one-fourth turn until the thread disengages and position aside.

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NOTE: When removing the Fuel Draining Hose, the fitting on the end of the hose can become detained by the safety valve. Carefully remove the hose using a gentle agitating motion to avoid detaching the hose from the fitting.

NOTE: The Fuel Draining Hose must be inserted into the fuel tank filler pipe until the fitting on the end of the hose enters into the fuel tank, opening the safety valve.

5. Insert the Fuel Draining Hose into the fuel tank filler pipe.

NOTE: This step will remove approximately one-eighth tank of fuel from a completely full fuel tank and the majority of any residual fuel from the fuel tank filler pipe. Also the fuel in the fuel tank will be below the fuel tank inlet or fuel tank filler pipe removal without fuel spillage.

6. Attach the Fuel Storage Tanker to the Fuel Draining Hose and remove approximately one-eighth tank of fuel (from a completely full tank), lowering the fuel below the fuel tank inlet.
7. Release the 4 clips and remove the fuel tank filler pipe upper retainer.

NOTE: Some fuel may remain in the fuel tank filler pipe after draining. Carefully disconnect the fuel tank filler pipe hose from the fuel tank and drain any residual fuel into a suitable container.

8. Release the clamp and disconnect the fuel tank filler pipe-to-fuel tank hose.
 - To install, tighten to 6 N.m (53 lb-in).
9. Disconnect the fuel vapor tube assembly-to-fuel tank filler pipe recirculation tube spring lock coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
10. Remove the fuel tank filler pipe bracket bolt.
 - To install, tighten to 25 N.m (18 lb-ft).
11. Loosen the lateral stiffener bar-to-body mount nut.
 - To install, tighten to 115 Nm (85 lb-ft).

NOTE: Suspension fasteners are critical parts because they affect performance of vital components and systems and their failure may result in major service expense. New parts must be installed with the same part numbers or equivalent part, if replacement is necessary. Do not use a replacement part of lesser quality or substitute design. Torque values must be used as specified during reassembly to make sure of correct retention of these parts.

NOTE: Make sure to install new lateral stiffener bar-to-body bolts.

12. Remove and discard the 2 lateral stiffener bar-to-body bolts and position the bar aside.

- To install, tighten to 62 Nm (46 lb-ft).

4.6L and 5.4L vehicles

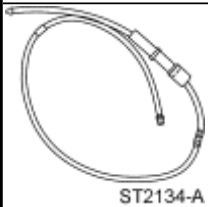
- Remove the LH exhaust intermediate pipe. For additional information, refer to **EXHAUST SYSTEM** article.

All vehicles

- Remove the fuel tank filler pipe.
- To install, reverse the removal procedure.

FUEL PUMP MODULE

Special Tools

Illustration	Tool Name	Tool Number
	Fuel Draining Hose	310-102
	Fuel Storage Tanker	164-R3202 or equivalent
	Socket, Fuel Tank Sender Unit	310-D006 (D90P-9275-A) or equivalent

Material

Item	Specification
Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil XO-5W20-QSP (US); Motorcraft SAE 5W-20 Super Premium Motor Oil CXO-5W20-LSP12 (Canada); or equivalent	WSS-M2C930-A

REMOVAL AND INSTALLATION

WARNING: Do not smoke, carry lighted tobacco or have an open flame of any type

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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: When handling fuel, always observe fuel handling precautions and be prepared in the event of fuel spillage. Spilled fuel may be ignited by hot vehicle components or other ignition sources. 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: 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.

1. Release the fuel system pressure. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
2. Disconnect the battery ground cable. For additional information, refer to **BATTERY, MOUNTING AND CABLES** article.
3. Carefully turn the fuel tank filler cap counterclockwise approximately one-fourth turn until the thread disengages and position aside.

NOTE: When removing the Fuel Draining Hose, the fitting on the end of the hose can become detained by the safety valve. Carefully remove the hose using a gentle agitating motion to avoid detaching the hose from the fitting.

NOTE: The Fuel Draining Hose must be inserted into the fuel tank filler pipe until the fitting on the end of the hose enters into the fuel tank, opening the safety valve.

4. Insert the Fuel Draining Hose into the fuel tank filler pipe.

NOTE: This step will remove approximately one-eighth tank of fuel from a

completely full fuel tank and the majority of any residual fuel from the fuel tank filler pipe. Also the fuel in the fuel tank will be below the Fuel Pump (FP) module mounting flange for FP module removal without fuel spillage.

5. Attach the Fuel Storage Tanker to the Fuel Draining Hose and remove approximately one-eighth tank of fuel (from a completely full tank), lowering the fuel below the FP module mounting flange.
6. Remove the rear seat cushion. For additional information, refer to **SEATING** article.
7. Remove the FP module access cover and position aside.

NOTE: **Clean the FP module connections, couplings, flange surfaces and the immediate surrounding area of any dirt or foreign material.**

8. Disconnect the FP module electrical connector.

NOTE: **Place absorbent pads in the general work area in case of fuel spillage.**

9. Disconnect the rear fuel tube-to-FP module quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.

NOTE: **Carefully install the Fuel Tank Sender Unit Socket to avoid damaging the FP module when removing the lock ring.**

10. Using the Fuel Tank Sender Unit Socket, remove and discard the FP module lock ring.

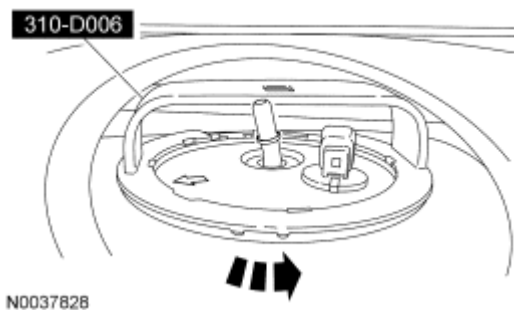


Fig. 3: Identifying Special Tool For FP Module Retaining Lock Ring
Courtesy of FORD MOTOR CO.

NOTE: **The Fuel Pump (FP) module must be handled carefully to avoid damage to the float arm.**

11. Carefully lift the FP module out of the fuel tank allowing access and disconnect the internal fuel tube-to-FP module quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.

NOTE: Drain any residual fuel in the FP module into a suitable container.

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

NOTE: Inspect the surfaces of the FP module 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.

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

13. Remove and discard the FP module O-ring seal.

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

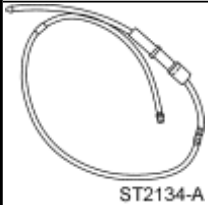
NOTE: Make sure the alignment arrows on the FP module and the fuel tank meet before tightening the FP module lock ring.

14. To install, reverse the removal procedure.

- Tighten the FP module lock ring until it meets the stop tabs on the fuel tank.

FUEL LEVEL SENSOR

Special Tools

Illustration	Tool Name	Tool Number
	Fuel Draining Hose	310-102
	Fuel Storage Tanker	164-R3202 or equivalent
	Socket, Fuel Tank Sender Unit	310-D006 (D90P-9275-A) or equivalent

Material

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Item	Specification
Motorcraft SAE 5W-20 Premium Synthetic Blend Motor Oil XO-5W20-QSP (US); Motorcraft SAE 5W-20 Super Premium Motor Oil CXO-5W20-LSP12 (Canada); or equivalent	WSS-M2C930-A

REMOVAL AND INSTALLATION

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WARNING: When handling fuel, always observe fuel handling precautions and be prepared in the event of fuel spillage. Spilled fuel may be ignited by hot vehicle components or other ignition sources. 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: 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.

1. Release the fuel system pressure. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
2. Disconnect the battery ground cable. For additional information, refer to **BATTERY, MOUNTING AND CABLES** article.
3. Carefully turn the fuel tank filler cap counterclockwise approximately one-fourth turn until the thread disengages and position aside.

NOTE: When removing the Fuel Draining Hose, the fitting on the end of the hose

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can become detained by the safety valve. Carefully remove the hose using a gentle agitating motion to avoid detaching the hose from the fitting.

NOTE: The Fuel Draining Hose must be inserted into the fuel tank filler pipe until the fitting on the end of the hose enters into the fuel tank, opening the safety valve.

4. Insert the Fuel Draining Hose into the fuel tank filler pipe.

NOTE: This step will remove approximately one-eighth tank of fuel from a completely full fuel tank and the majority of any residual fuel from the fuel tank filler pipe. Also the fuel in the fuel tank will be below the Fuel Pump (FP) module mounting flange for FP module removal without fuel spillage.

5. Attach the Fuel Storage Tanker to the Fuel Draining Hose and remove approximately one-eighth tank of fuel (from a completely full tank), lowering the fuel below the FP module mounting flange.
6. Remove the rear seat cushion. For additional information, refer to [SEATING](#) article.
7. Remove the FP module and fuel level sensor access covers and position aside.

NOTE: Clean the FP module connections, couplings, flange surfaces and the immediate surrounding area of any dirt or foreign material.

8. Disconnect the FP module electrical connector.

NOTE: Place absorbent pads in the general work area in case of fuel spillage.

9. Disconnect the rear fuel tube-to-FP module quick connect coupling. For additional information, refer to [FUEL SYSTEM - GENERAL INFORMATION](#) article.

NOTE: Carefully install the Fuel Tank Sender Unit Socket to avoid damaging the FP module when removing the lock ring.

10. Using the Fuel Tank Sender Unit Socket, remove and discard the FP module lock ring.

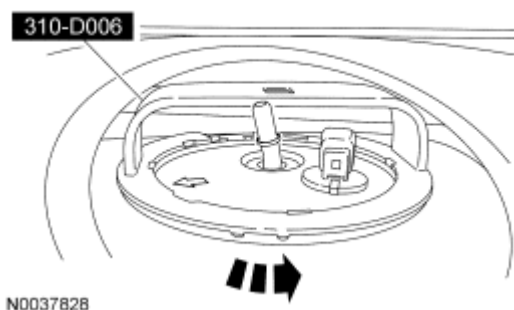


Fig. 4: Identifying Special Tool For FP Module Retaining Lock Ring

Courtesy of FORD MOTOR CO.

NOTE: The Fuel Pump (FP) module must be handled carefully to avoid damage to the float arm.

11. Position the FP module aside. Using the Fuel Storage Tanker, completely drain the remaining fuel from the LH saddle of the fuel tank.

NOTE: Inspect the surfaces of the FP module 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.

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

12. Remove and discard the FP module O-ring seal.

NOTE: Clean the fuel level sensor connections, flange surfaces and the immediate surrounding area of any dirt or foreign material.

13. Disconnect the fuel level sensor electrical connector.

NOTE: Carefully install the Fuel Tank Sender Unit Socket to avoid damaging the fuel level sensor when removing the lock ring.

14. Using the Fuel Tank Sender Unit Socket, remove and discard the fuel level sensor lock ring.

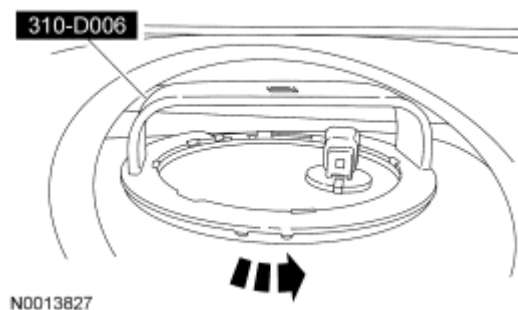


Fig. 5: Removing Fuel Level Sensor Retaining Lock Ring Using Special Tool 310-D006

Courtesy of FORD MOTOR CO.

NOTE: The fuel level sensor must be handled carefully to avoid damage to the float arm.

15. Carefully lift the fuel level sensor out of the fuel tank allowing access and disconnect the internal fuel

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tube-to-fuel level sensor quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.

NOTE: Drain any residual fuel in the fuel level sensor into a suitable container.

16. Completely remove the fuel level sensor from the fuel tank.

NOTE: Inspect the surfaces of the fuel level sensor 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 fuel level sensor or fuel tank if the O-ring seal contact area is bent, scratched or corroded.

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

17. Remove and discard the fuel level sensor O-ring seal.

NOTE: Make sure to install a new FP module and fuel level sensor lock ring and O-ring seal.

NOTE: Make sure the alignment arrows on the FP module and the fuel level sensor meet with the fuel tank before tightening the lock rings.

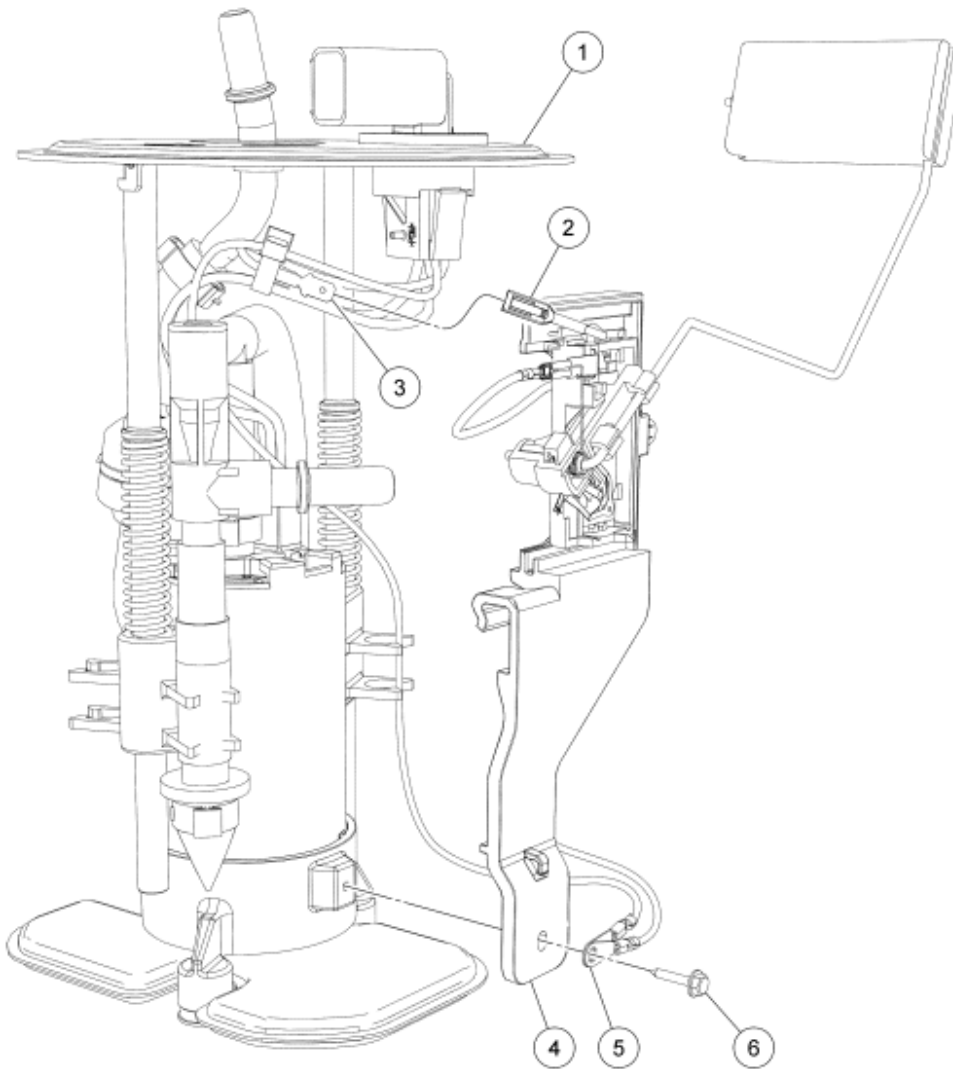
18. To install, reverse the removal procedure.

- Tighten the lock rings until they meet the stop tabs on the fuel tank.

FUEL LEVEL SENDER

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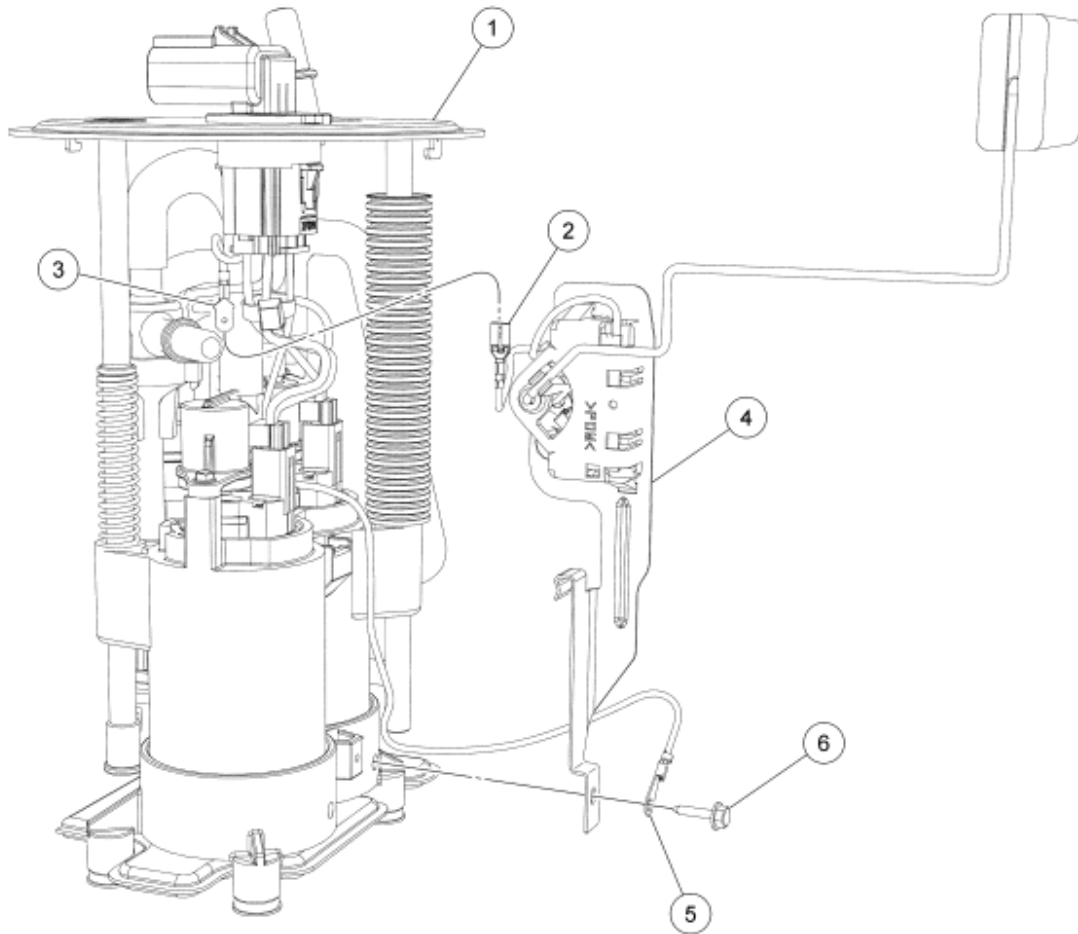
Fig. 6: Exploded View Of Fuel Level Sender - 4.0L Single Overhead Camshaft (SOHC) & 4.6L (3V) Vehicles

Courtesy of FORD MOTOR CO.

Item	Part Number	Description
1	9H307	Fuel Pump (FP) module
2	-	Fuel level sender electrical connector (part of 9A299)
3	-	Fuel level sender electrical connector (part of 9H307)
4	9A299	Fuel level sender
5	-	Fuel level sender electrical connector eyelets (part of 9A299 and 9H307)
6	-	Fuel level sender screw (part of 9H307)

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Fig. 7: Exploded View Of Fuel Level Sender - 5.4L (4V) Vehicles
Courtesy of FORD MOTOR CO.

Item	Part Number	Description
1	9H307	Fuel Pump (FP) module
2	-	Fuel level sender electrical connector (part of 9A299)
3	-	Fuel level sender electrical connector (part of 9H307)
4	9A299	Fuel level sender
5	-	Fuel level sender electrical connector eyelets (part of 9H307)
6	-	Fuel level sender screw (part of 9H307)

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REMOVAL AND INSTALLATION

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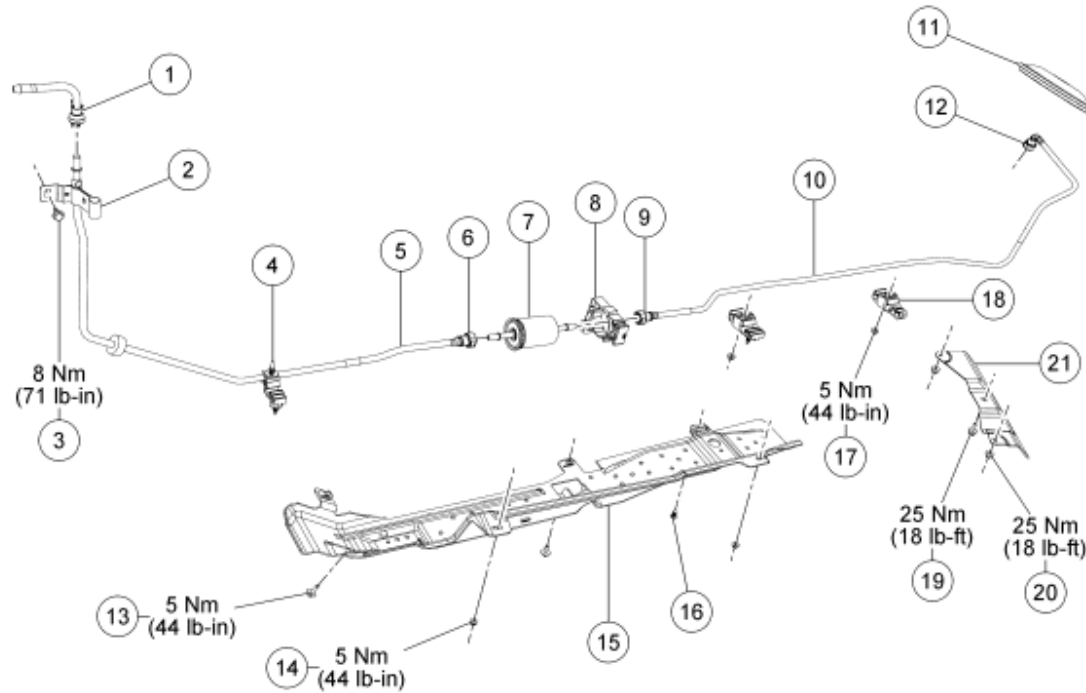
WARNING: Always disconnect the battery ground cable at the battery when working on an evaporative emission (EVAP) system or fuel-related component. Highly flammable mixtures are always present and may be ignited. Failure to follow these instructions may result in serious personal injury.

1. Remove the Fuel Pump (FP) module. For additional information, refer to **Fuel Pump Module**.
2. Disconnect the fuel level sender electrical connectors.
3. Remove the screw and the electrical connector eyelet(s), and remove the fuel level sender from the FP module.
4. To install, reverse the removal procedure.

FUEL LINES AND FUEL FILTER - EXPLODED VIEW

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Fig. 8: Exploded View Of Fuel Lines & Fuel Filter With Torque Specifications
Courtesy of FORD MOTOR CO.

Item	Part Number	Description
1	-	Fuel jumper tube-to-front fuel tube spring lock coupling (part of 9J280)
2	-	Fuel tube bundle bracket (part of 9J279)
3	W712583	Fuel tube bundle bracket bolt
4	-	Fuel tube bundle pin-type retainer (part of 9J279)
5	9J279	Front fuel tube
6	-	Front fuel tube-to-fuel filter quick connect coupling (part of 9J279)
7	9155	Fuel filter
8	9180	Fuel filter bracket
9	-	Rear fuel tube-to-fuel filter quick connect coupling (part of 9J279)
10	9J279	Rear fuel tube
11	9C335	Fuel Pump (FP) module access cover
12	-	Rear fuel tube-to-FP module quick connect coupling (part of 9J279)
13	W704652	Fuel tube bundle shield bolt (2 required)
14	W520101	Fuel tube bundle shield nut (2 required)
15	9E313	Fuel tube bundle shield
16	-	Fuel tube bundle shield pin-type retainer (part of 9E313)

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17	W520101	Fuel tube bundle retainer nut (2 required)
18	-	Fuel tube bundle retainer (2 required) (part of 9J279)
19	W703617	Fuel tank deflector bolt
20	W804620	Fuel tank deflector nut (2 required)
21	9N226	Fuel tank deflector

1. For additional information, refer to the procedures.

FUEL LINES

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: When handling fuel, always observe fuel handling precautions and be prepared in the event of fuel spillage. Spilled fuel may be ignited by hot vehicle components or other ignition sources. Failure to follow these instructions 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.

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING AND LIFTING** article.
2. Release the fuel system pressure. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
3. Disconnect the battery ground cable. For additional information, refer to **BATTERY, MOUNTING**

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AND CABLES article.

4. Remove the LH front tire and wheel. For additional information, refer to **WHEELS AND TIRES** article.
5. Remove the LH front splash shield. For additional information, refer to **FRONT END BODY PANELS** article.
6. Disconnect the fuel jumper tube-to-front fuel tube spring lock coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
7. Remove the bolt and the fuel tube bundle bracket.
 - To install, tighten to 8 Nm (71 lb-in).
8. Remove the 2 fuel tube bundle shield bolts.
 - To install, tighten to 5 Nm (44 lb-in).
9. Remove the 2 fuel tube bundle shield nuts.
 - To install, tighten to 5 Nm (44 lb-in).
10. Remove the pin-type retainer and the fuel tube bundle shield.
11. Remove the fuel tube bundle pin-type retainer.
12. Disconnect the front fuel tube-to-fuel filter quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.

NOTE: **Some residual fuel may remain in the fuel tubes. Upon removal, carefully drain into a suitable container.**

13. Remove the front fuel tube.
14. Disconnect the rear fuel tube-to-fuel filter quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
15. Remove the nuts and the 2 fuel tube bundle retainers.
 - To install, tighten to 5 Nm (44 lb-in).
16. Remove 2 nuts, 1 bolt and the LH fuel tank deflector.
 - To install, tighten to 25 Nm (18 lb-ft).
17. Remove the rear seat cushion. For additional information, refer to **SEATING** article.
18. Remove the Fuel Pump (FP) module access cover.
19. Disconnect the rear fuel tube-to-FP module quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.

NOTE: **Some residual fuel may remain in the fuel tubes. Upon removal, carefully drain into a suitable container.**

20. Remove the rear fuel supply tube.

NOTE: **Make sure the fuel tubes are completely seated and that the quick connect couplings are locked correctly in place. Pull on the tube to make sure it is fully seated. Upon completion, pressurize the system and check for leaks.**

21. To install, reverse the removal procedure.

FUEL FILTER

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: When handling fuel, always observe fuel handling precautions and be prepared in the event of fuel spillage. Spilled fuel may be ignited by hot vehicle components or other ignition sources. Failure to follow these instructions 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.

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING AND LIFTING** article.
2. Release the fuel system pressure. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
3. Disconnect the battery ground cable. For additional information, refer to **BATTERY, MOUNTING AND CABLES** article.
4. Remove the 2 fuel tube bundle shield bolts.
 - To install, tighten to 5 N.m (44 lb-in).
5. Remove the 2 fuel tube bundle shield nuts.
 - To install, tighten to 5 N.m (44 lb-in).

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6. Remove the pin-type retainer and the fuel tube bundle shield.
7. Disconnect the front fuel tube-to-fuel filter quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.
8. Disconnect the rear fuel tube-to-fuel filter quick connect coupling. For additional information, refer to **FUEL SYSTEM - GENERAL INFORMATION** article.

NOTE: **Some residual fuel may remain in the fuel filter. Upon removal, carefully drain into a suitable container.**

9. Remove the fuel filter from the fuel filter bracket.

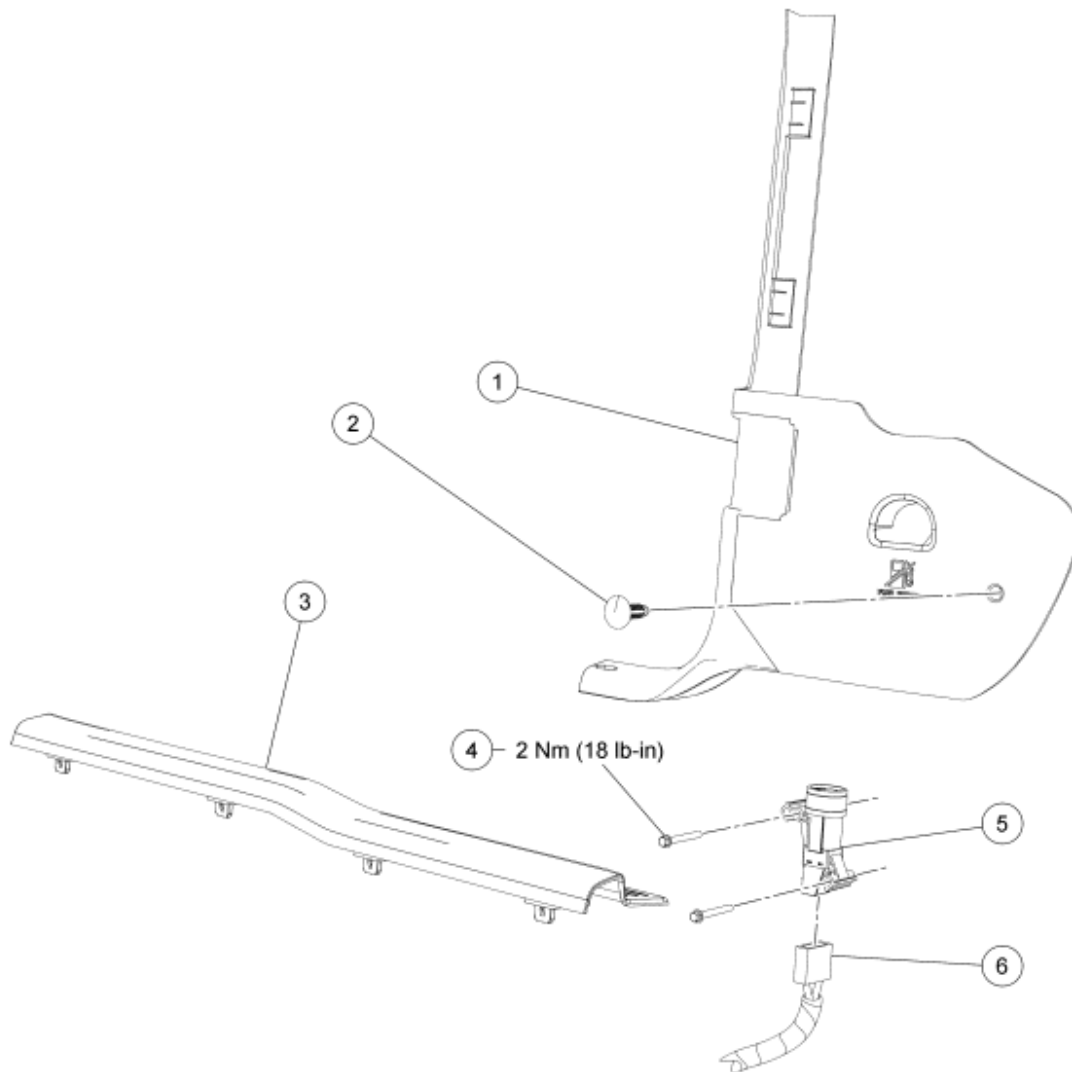
NOTE: **Make sure the fuel tubes are completely seated and that the quick connect couplings are locked correctly in place. Pull on the tube to make sure it is fully seated. Pressurize the system and check for leaks.**

10. To install, reverse the removal procedure.

INERTIA FUEL SHUTOFF (IFS) SWITCH

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N0071960

Fig. 9: Exploded View Of Inertia Fuel Shutoff (IFS) Switch With Torque Specification
Courtesy of FORD MOTOR CO.

Item	Part Number	Description
1	02345	LH A-pillar lower trim panel
2	390018	A-pillar lower trim panel pin-type retainer
3	13209	LH door scuff plate
4	W504148	Inertia Fuel Shutoff (IFS) mounting bolts (2 required)
5	9341	IFS switch
6	14A464	IFS switch electrical connector

REMOVAL AND INSTALLATION

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1. Remove the LH door scuff plate.
2. Remove the LH A-pillar lower trim panel.
 - Remove the pin-type retainer and the trim panel.
3. Disconnect the Inertia Fuel Shutoff (IFS) switch electrical connector.

NOTE: **Do not overtighten the fasteners or damage to the switch will occur.**

4. Remove the 2 bolts and the IFS switch.
 - To install, tighten to 2 N.m (18 lb-in).
5. To install, reverse the removal procedure.
 - If necessary, reset the IFS switch after the installation has been completed.