

# SAFETY RECALL

NORTH AMERICA

## High Pressure Fuel Pump



Reference: Z46 / 2022-303

FCA Canada Inc.



Remedy available for  
2014 - 2020 (WK) Jeep Grand Cherokee



**RAM**

Remedy not available for  
2014 - 2019 (DS) RAM 1500 Pickup

Template Version 1.0

Revision	Edition	Detail
2	February 2024	LOP time updated.
1	February 2024	Fuel filter replacement is replicated in the non-contaminated procedure.
0	January 2024	Initial Version.

### SYMPTOM DESCRIPTION

The High-Pressure Fuel Pump ("HPFP") on about 55,711 of the above vehicles may fail prematurely. A HPFP failure may introduce internally failed component debris into the fuel system potentially causing fuel starvation. Vehicle occupants may notice a Malfunction Indicator Lamp ("MIL") illuminating, a fuel leak, abnormal engine noise, or a change in drive quality. Fuel starvation may result in an unexpected loss of motive power, which can cause vehicle crash without prior warning.

### SCOPE

This recall applies only to the above vehicles equipped with a 3.0L engine (sales codes EXF and EXN).

NOTE: Some vehicles above may have been identified as not involved in this recall and therefore have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in dealer vehicle inventory. Dealers should complete this repair on these vehicles before retail delivery. Dealers should also perform this repair on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

### REPAIR TO BE PERFORMED

Vehicles delivered to the dealer in good running condition should complete HPFP replacement only. See Service Procedure A (non-contaminated system) starting on page 5.

If the vehicle is brought to the dealer not running, the technician will follow the current diagnostic procedure to determine if there was an HPFP failure. If HPFP failure was determined, replacement of both the HPFP and fuel pump module is required, including fuel system cleaning. See Service Procedure B (contaminated system) starting on page 17.

### ALTERNATE TRANSPORTATION

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that HPFP replacement is required, and the vehicle must be held overnight.

### COMPLETION REPORTING / REIMBURSEMENT

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use the following labour operation numbers and time allowances:

Labour Description	Number	Hrs
Replace High Pressure Fuel Pump, Fuel Tubes and Fuel Filter (WK)	14-Z4-61-82	2.2
Clean Fuel Tank, Replace In-Tank Fuel Modules, Fuel Filters, Fuel Injectors, Fuel Rails, HP Fuel Tubes, and HP Fuel Pump (WK)	14-Z4-61-83	7.8

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**NOTE:** See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

### PARTS INFORMATION

Part No.	Qty.	Part Name
<b>ORDER THESE PARTS FOR ALL VEHICLES</b>		
CSSMZ461AA	1	High Pressure Fuel Pump
FOR "CAMPAIGN KIT" SEE ORDERING INFORMATION BELOW THIS TABLE (Order only CSFP01A1AA or CSFP01A2AA)		
CSFP01A1AA		Campaign Kit - English
	1	Owner's Manual Addendum
	1	Tip Card
	1	Fuel Door Decal
CSFP01A2AA		Campaign Kit - French
	1	Owner's Manual Addendum
	1	Tip Card
	1	Fuel Door Decal

Part No.	Qty.	Part Name
<b>WK PARTS</b>		
<b>ORDER THESE PARTS FOR NON-CONTAMINATED WK VEHICLES (NO HPFP FAILURE)</b>		
CSSMZ46EAA		Tube Kit and EGR Gaskets
	1	GASKET - UPPER EGR TUBE
	1	RUBBER GASKET - UPPER EGR TUBE
	4	TUBE - FUEL INJECTOR SUPPLY
CSSMZ463AA	1	FUEL/WATER SEPARATOR KIT

Part No.	Qty.	Part Name
<b>WK PARTS</b>		
<b>ORDER THESE PARTS FOR CONTAMINATED WK VEHICLES (WITH HPFP FAILURE)</b>		
68334956AA	1	Tube Kit
68211302AA	6	Fuel Injectors with NAS (50 state emissions)
CSSMZ465AA		
	6	Injector O-ring
	1	Fuel Rail Right
	1	Fuel Rail Left
	1	O-ring Fuel Pump Module
	1	Tube -fuel Injector supply (left) (NOT USED)
	4	Bolt and Washer, Driveshaft
	3	Bolt and Washer, Driveshaft
	2	Stud and Washer, Driveshaft
	1	Pickup Unit Level Module
CSGNZ961AA		
	1	Gasket, EGR Upper Tube
	1	Rubber Gasket, Upper EGR Tube
CSSMZ467AA		<b>Fuel Pump (2011-2015)</b>
	1	Fuel Pump Level Unit (Module)
	1	O-ring, Fuel Pump Module
CSSMZ468AA		<b>Fuel Pump (2016-2020)</b>
	1	Module Kit – Fuel Pump
	1	O-ring, Fuel Pump Module
CSSMZ463AA		
	1	Fuel/Water Separator Kit
55398183AA	1	Clamp, Tailpipe

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**PROCESS STEPS TO ORDER CAMPAIGN KITS**

**CSFP01A1AA (ENGLISH) OR CSFP01A2AA (FRENCH):**

1. Access the “**DealerCONNECT**” website.
2. Select the “**SERVICE CONTRACTS**” link in the header.
3. Locate the “**Digital Store Front**” listed under “**PUBLICATIONS**”.
  - a. Note: if it is GREYED OUT, your IT Administrator needs to give you access to this.
4. Locate the desired Campaign kit by:
  - a. Searching part number in “**Search Product**” bar.
  - b. Searching by **Category>Campaign Materials**.
5. Find desired materials, put in the quantity you require and click the “**ORDER**” icon.
6. Locate the “**Shopping cart**” icon at the top right corner.
7. Verify contents of cart, then at the bottom click the “**Checkout**” icon.
8. Follow the prompts on the payment screen to complete your order.
9. Note: If you experience any issues with Digital Storefront, please email [support@fcacanadaprintshop.com](mailto:support@fcacanadaprintshop.com)

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### PARTS RETURN

No parts return required for this campaign. Render the recalled HPFP unusable and discard.

### SPECIAL TOOLS

Number	Description
NPN	wiTECH MicroPod II / MDP
NPN	Laptop Computer
NPN	wiTECH Software
VM.10345	Tool, High Pressure Pump Installation
1023	Puller (Originally Shipped in Kit Number(s) 8678)
APS35IB	Blue Point Spanner Wrench or equivalent
2025400090	Remover-Installer, Fuel Rail Bolt
VM.10358A	Remover, Fuel Injector
9717	Brush, Injector Bore (Originally Shipped in Kit Number 9910)
8978A	Decay Tool, Fuel
9340	SAE Fuel Pump Lock Ring Wrench (Originally Shipped In Kit Number(s) 9327, 9327CC, 9397, 9575)

### DEALER NOTIFICATION

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification.

### OWNER NOTIFICATION / SERVICE SCHEDULING

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this

service with their dealers. A generic copy of the owner letter is attached.

### VEHICLE LISTS, GLOBAL RECALL SYSTEM, VIP AND DEALER FOLLOW UP

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by those vehicles that were unsold at recall launch, those with a phone number, city, postal code, or VIN sequence.

**Dealers must perform this repair on all unsold vehicles before retail delivery.** Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

*Recall VIN lists may contain confidential, restricted owner name and address information. Use of this information is permitted for this recall only and is strictly prohibited from all other use.*

### ADDITIONAL INFORMATION

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

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## Service Procedure – WK Vehicles

For vehicles with a non-contaminated fuel system, use the procedure below.

### A. Replace HPFP – Non-Contaminated System

**WARNING:** Observe the following precautions when working on fuel systems: No sparks, open flames or smoking. Avoid inhaling and swallowing fuel. Avoid eye and skin contact with fuel. Pour fuels only into suitable and appropriately marked containers. Wear protective clothing. Failure to observe these precautions may result in fire, explosion, property damage, and serious or fatal injury.

**WARNING:** High-pressure fuel lines deliver fuel under extreme pressure from the injection pump to the injectors. This may be as high as 1800 bar (26,106 psi). Use extreme caution when inspecting for high-pressure fuel leaks. Inspect high-pressure fuel leaks with a sheet of cardboard. Wear safety goggles and adequate protective clothing when servicing fuel system. Fuel under this amount of pressure can penetrate skin causing serious or fatal injury.

**NOTE:** The fuel injection pump can be replaced without having to perform the entire base engine valve timing procedure. This procedure gives instruction on how to remove and install the new fuel injection pump without performing the base engine timing. Do not rotate the pump shaft after removing from the vehicle. The alignment of the pump shaft must be measured and recorded using a commercially available degree wheel after the pump is removed and before transferring the pump gear over to the new pump. This is done to align the pump to the same position during installation. If the base engine valve timing must be performed as part of the repair, in Service Library, refer to 09 - Engine/Valve Timing/Standard Procedure.

**NOTE:** When key is cycled to the off position, fuel system pressure automatically bleeds down.

1. Cycle the ignition to the Off position. Be certain that all electrical accessories are turned off.
2. Position the passenger front seat forward.

**NOTE:** Shown with seat removed for clarity.

3. Remove the battery cover (1) (Figure 1).

**NOTE:** If equipped with an Intelligent Battery Sensor (“IBS”), disconnect the IBS connector first before disconnecting the negative battery cable.

4. Disconnect and isolate the negative battery cable from the battery.

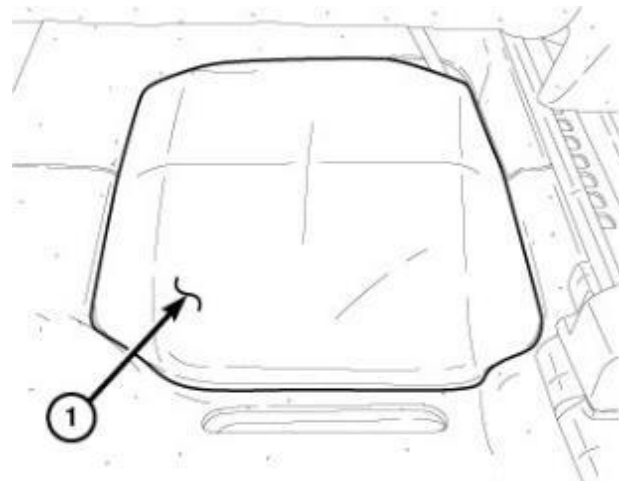


Figure 1 - Battery Cover

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5. Release the hose clamp (1) and set the degas hose (2) aside (Figure 2).

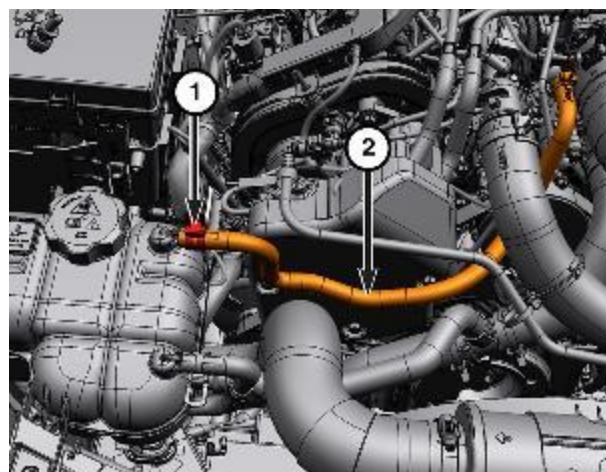


Figure 2 - Degas Hose

6. Disconnect the quick-connect fitting (1) and set the vacuum line (2) aside (Figure 3).

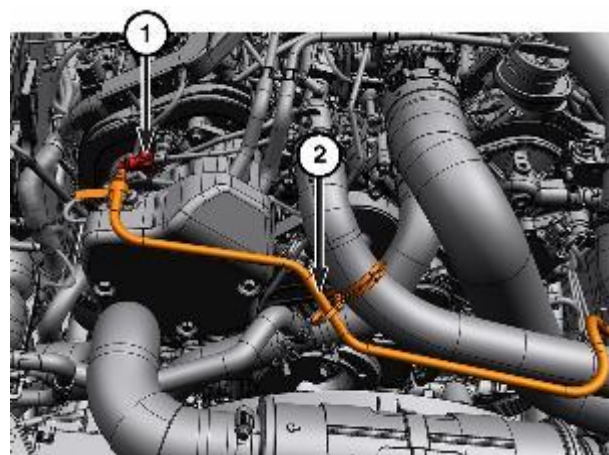


Figure 3 - Vacuum Line



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7. Remove the screws (1) that secure the cover (2) for the high-pressure fuel pump (Figure 4).

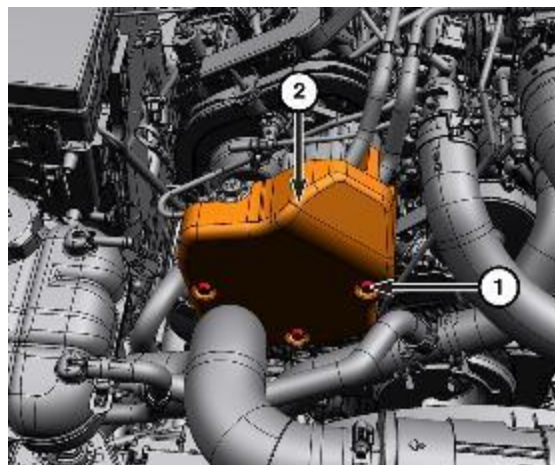


Figure 4 - Cover Screws

8. Remove the engine cover (1) (Figure 5).



Figure 5 - Engine Cover

9. Remove the cowl extension (1) and the side extensions (2), (5) (In Service Library refer to 23 - Body/Exterior/SILENCER, Cowl Extension/Removal) (Figure 6).

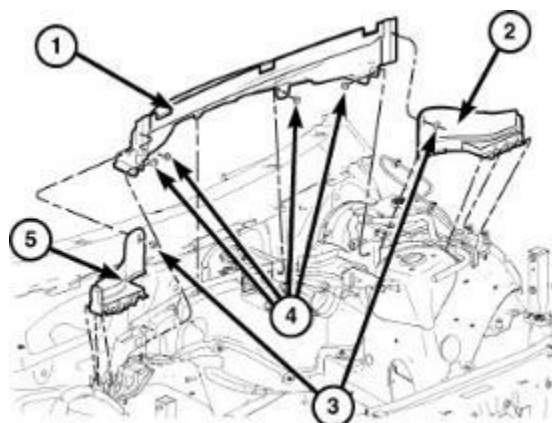


Figure 6 - Cowl Extension and Side Extensions

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10. Remove the bolts (2) and pull up on the engine wire harness assembly (1) to release retainers from the intake manifold (Figure 7).

**NOTE: Use a backing wrench on the fuel injector when unscrewing the union nut.**

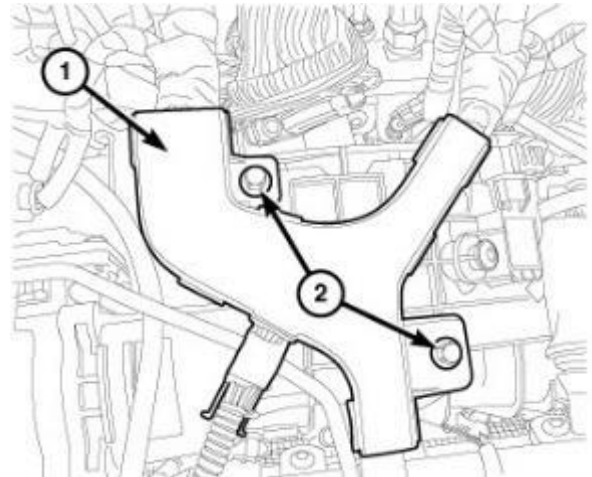


Figure 7 - Engine Wiring Harness

11. Remove and discard the right-side fuel tubes (5) and (2) from fuel injectors No. 1 and 2 (Figure 8).

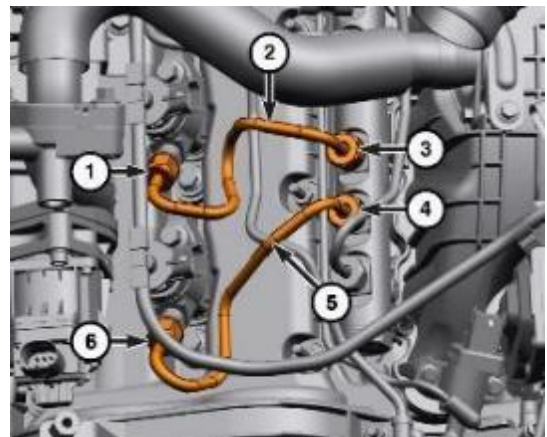


Figure 8 - Right-Side Fuel Tubes



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12. Remove the upper EGR tube bolts (1) (Figure 9) and (2) (Figure 10).
13. Remove and discard both gaskets.

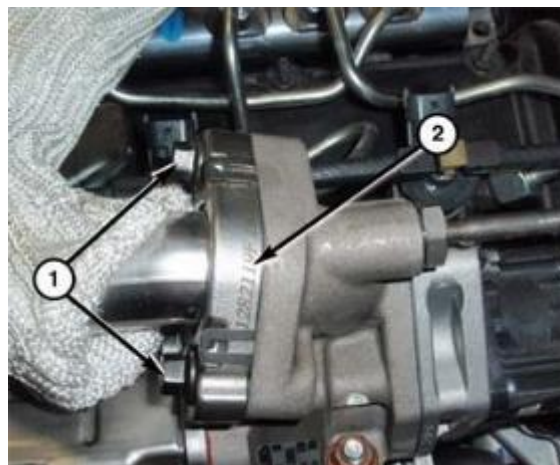


Figure 9 - Upper EGR Tube Bolts

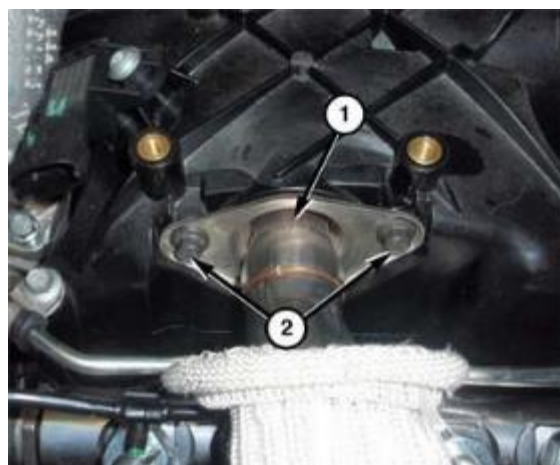


Figure 10 - Upper EGR Tube Bolts at Intake

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14. Remove the nut (1) securing the fuel tube (Figure 11).
15. Remove the union nuts (2) and (4) and the right high pressure fuel tube (3), discard the fuel tube (Figure 11).
16. Remove the bolt (9) securing the left side fuel tube (11) to EGR air flow control valve (Figure 11).
17. Loosen the union nuts (10) and (12) and remove the left high pressure fuel tube (11), discard the fuel tube (Figure 11).
18. Install protective caps to the fuel injectors and fuel rails.
19. Disconnect the low-pressure fuel supply lines (3) (Figure 12).
20. Disconnect the fuel quantity solenoid wire harness connector (2) (Figure 12).

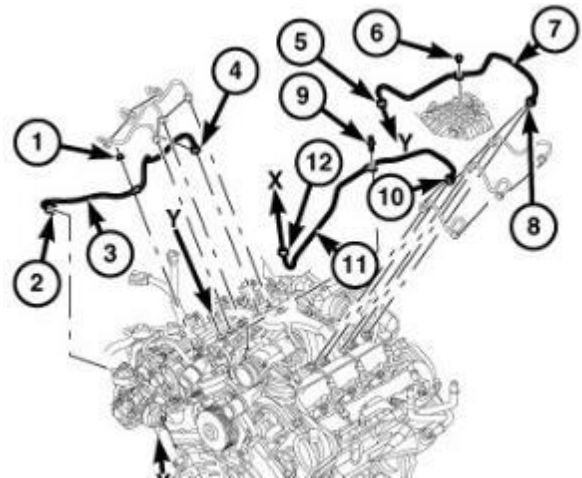


Figure 11 - Fuel Tubes and Nuts

**NOTE:** The fuel injection pump can be replaced without having to perform the entire base engine valve timing procedure. This procedure gives instruction on how to remove and install the new fuel injection pump without performing the base engine timing. Do not rotate the pump shaft after removing from the vehicle. The alignment of the pump shaft must be measured and recorded using a commercially available degree wheel after the pump is removed and before transferring the pump gear over to the new pump. This is done to align the pump to the same position during installation. If the base engine valve timing must be performed as part of the repair, In Service Library refer to 09 - Engine/Valve Timing/Standard Procedure.

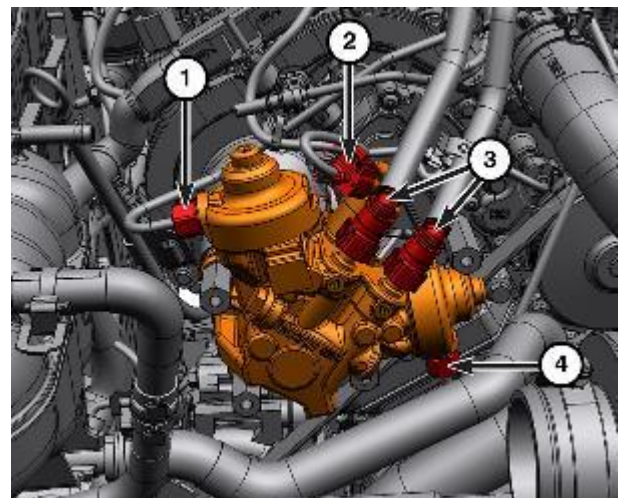


Figure 12 - HPFP Connections

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21. Remove the upper bolts (1) from the high-pressure pump (2) (Figure 13).
22. Using Tool, High Pressure Pump Installation VM.10345 Install the studs in the upper locations.

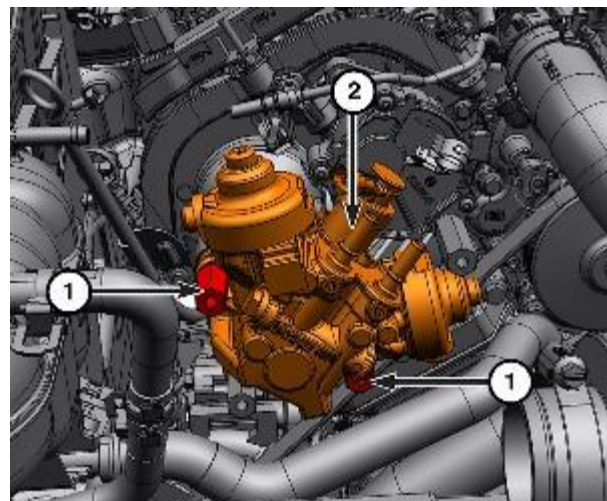


Figure 13 - Upper HPFP Bolts

23. Remove the lower bolt (1) from the HPFP (2) and remove it from the vehicle (Figure 14).

**NOTE:** The fuel injection pump needs to be timed using a commercially available degree wheel.

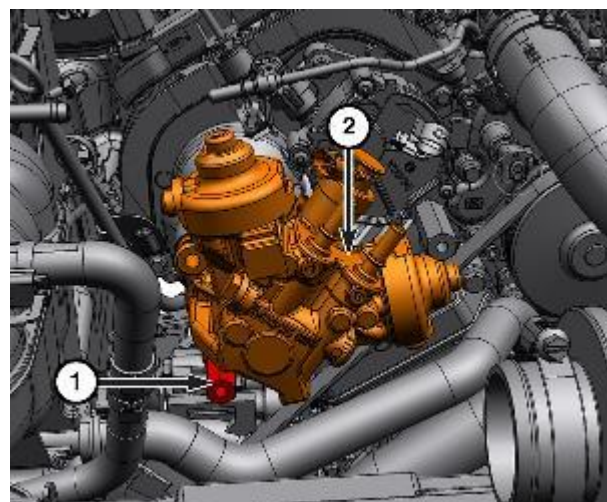


Figure 14 - Lower HPFP Bolt

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24. Install the degree wheel onto the pump with the zero at the fuel quantity solenoid then mark the location of the hole in the gear on the degree wheel (Figure 15).



**Figure 15 - Installing a Printed Paper Degree Wheel from the Internet**

25. Using a commercially available spanner wrench such as Blue Point APS351B, Snap-on APS351C or equivalent (2) to hold fuel injection pump gear. Remove the fuel injection pump gear nut (1) (Figure 16).



**Figure 16 - Spanner Wrench and Drive Gear on the HPFP**



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26. The use of Puller 1023 or a commercially available gear puller is required to remove the fuel injection pump gear (2) (Figure 17).

**WARNING:** High-pressure lines deliver diesel fuel under extreme pressure from the injection pump to the fuel injectors. This may be as high as 2000 bar (29,008 psi). Use extreme caution when inspecting for high-pressure fuel leaks. Fuel under this amount of pressure can penetrate skin causing personal injury or death. Inspect for high-pressure fuel leaks with a sheet of cardboard. Wear safety goggles and adequate protective clothing when servicing fuel system.

**WARNING:** Observe the following precautions when working on fuel systems: No sparks, open flames or smoking. Avoid inhaling and swallowing fuel. Avoid eye and skin contact with fuel. Pour fuels only into suitable and appropriately marked containers. Wear protective clothing. Failure to observe these precautions may result in fire, explosion, property damage, and serious or fatal injury.

**CAUTION:** Do Not Force the high-pressure pump into the right timing cover or attempt to seat it by drawing it in with the bolts. The pump gear must be properly aligned with the drive gear on the camshaft before the high-pressure pump will seat on the cylinder head mounting surface. Failure to properly align drive gears will damage the high-pressure pump or camshaft drive gear.

**NOTE:** The high-pressure pump needs to be timed before it can be installed. Use a commercially available degree wheel to time the high-pressure pump.

**NOTE:** The fuel injection pump can be replaced without having to perform the entire base engine valve timing procedure. This procedure gives instruction on how to remove and install the new fuel injection pump without performing the base engine timing. Do not rotate the pump shaft after removing from the vehicle. The alignment of the pump shaft must be measured and recorded using a commercially available degree wheel after the pump is removed and before transferring the pump gear over to the new pump. This is done to align the pump to the same position during installation. If the base engine valve timing must be performed as part of the repair, In Service Library, refer to 09 - Engine/Valve Timing/Standard Procedure.

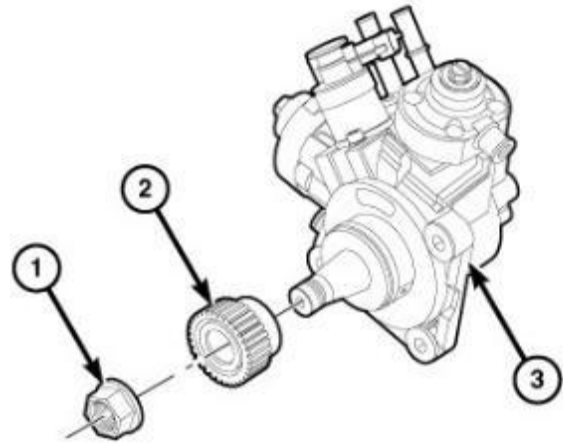


Figure 17 - Drive Gear on the HPFP



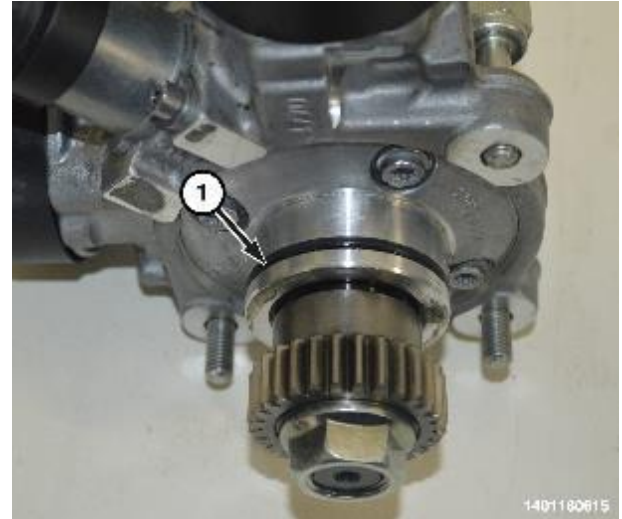
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27. Install a **NEW** O-ring seal (1) to the high-pressure fuel injection pump (Figure 18).
28. Install the gear (2) and **NEW** nut (1) onto the **NEW** high-pressure pump (3) and tighten the nut (1) finger tight (Figure 17).
29. Using a commercially available spanner wrench (2) such as Blue Point APS35IB or equivalent to hold the pump, tighten the nut (1) to 50 N·m (37 ft. lbs.) (Figure 16).
30. Install the degree wheel with the zero in line with the fuel quantity solenoid and rotate the pump shaft so that the hole aligns with the reference mark on the degree wheel referenced during the removal (Figure 15).



**Figure 18 - HPFP O-ring Seal**

31. Install the HPFP onto the Tool, High Pressure Pump Installation VM.10345 installed in the upper timing cover.
32. Install the HPFP (2) and hand tighten the bolt (1) (Figure 14).
33. Remove the Tool, High Pressure Pump Installation VM.10345 from the upper bolts location and install the bolts (Figure 13).
34. Tighten the bolts (1) that secure the fuel injection pump to 25 N·m (18 ft. lbs.).
35. Connect the fuel injection pump electrical connector (2) (Figure 12).
36. Connect the low-pressure fuel supply and return lines (3) (Figure 12).
37. Remove the protective caps from the fuel injectors and fuel rail.

**NOTE: Fuel tubes are a onetime only use and must be replaced anytime they have been removed.**

38. Install the **NEW** left high-pressure fuel tube (11) and tighten the union nuts (10) and (12) finger tight (Figure 11):
  - Tighten the union nut (10) to 5 N·m (44 in. lbs.) plus an additional 75 degrees turn.
  - Tighten the union nut (12) to 11 N·m (8 ft. lbs.) plus an additional 75 degrees turn.
39. Install the bolt (9) securing the left side high pressure fuel tube (11) to EGR air flow control valve and tighten to 11 N·m (8 ft. lbs.) (Figure 11).
40. Install the **NEW** right high-pressure fuel tube (3) and tighten union nuts (2) and (4) finger tight (Figure 11):
  - Tighten the union nut (4) to 5 N·m (44 in. lbs.) plus an additional 75 degrees turn.
  - Tighten the union nut (2) to 11 N·m (8 ft. lbs.) plus an additional 75 degrees turn.

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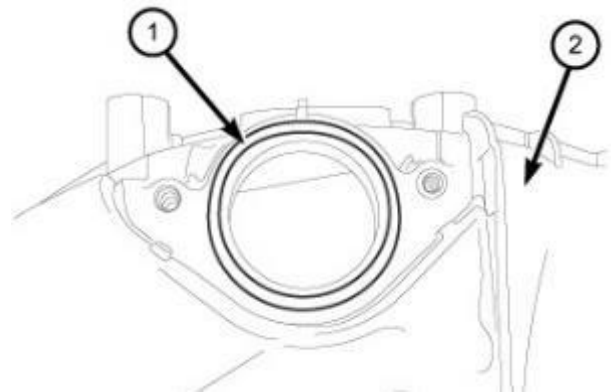
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41. Install the nut (1) securing the right-side high-pressure fuel tube (3) to right side cylinder head cover and tighten to 11 N·m (8 ft. lbs.) (Figure 11).

**NOTE: Use a backing wrench on the fuel injector when tightening the union nut.**

42. Install the **NEW** right-side fuel tubes (5) and (2) to the fuel injectors No. 1 and 2 and tighten the union nuts finger tight (Figure 8).
- Tighten the union nut (3) and (4) to 5 N·m (44 in. lbs.) plus an additional 75 degrees turn.
  - Tighten the union nut (1) and (6) to 11 N·m (8 ft. lbs.) plus an additional 75 degrees turn.



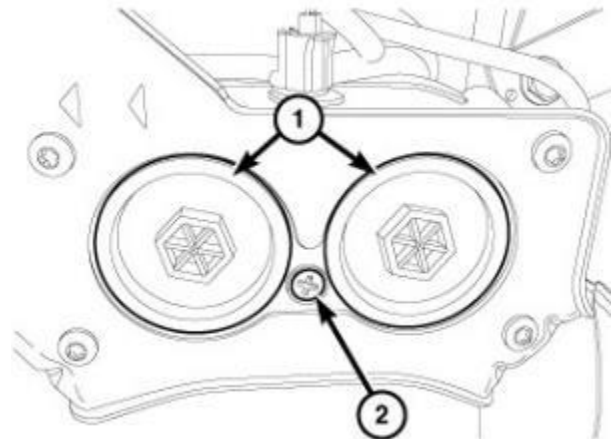
**Figure 19 - Upper EGR Tube O-ring at Intake Manifold**

43. Install the engine wire harness assembly (1) to the intake manifold and push down to seat the wire harness retainers. Tighten the bolts (2) to 11 N·m (8 ft. lbs.) (Figure 7).
44. Clean all upper EGR tube gasket sealing areas.
45. Install a **NEW** O-ring gasket (1) onto the intake manifold (2) (Figure 19).
46. Install a **NEW** EGR tube gasket (1) (Figure 20).

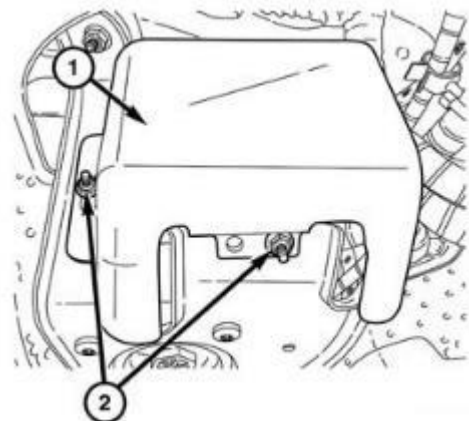


**Figure 20 - Upper EGR Tube Gasket**

47. Install the EGR tube (1) to the intake manifold. Tighten the bolts (2) to 11 N·m (8 ft. lbs.) (Figure 10).
48. Install the EGR tube bolts (1) and tighten to 25 N·m (18 ft. lbs.) (Figure 9).
49. Install the fuel injection pump cover (2) and tighten the screws (1) securely (Figure 4).
50. Set the vacuum line (2) in place and connect the quick-connect fitting (1) (Figure 3).
51. Set the degas hose (2) in place and secure the hose clamp (1) (Figure 2).
52. **Raise and support the vehicle (In Service Library, refer to 04 - Vehicle Quick Reference/Hoisting - Standard Procedure).**
53. **Remove the transmission skid plate (In Service Library, refer to 13 - Frame and Bumpers/Under Body Protection/PLATE, Skid - Removal).**
54. **Loosen the drain plug (2) and drain the diesel fuel into a suitable container (Figure 21).**
55. **Securely tighten the drain plug (2).**
56. **Remove the nuts (2) and the fuel filter shield (1) (Figure 22).**



**Figure 21 - Drain Plug**



**Figure 22 - Fuel Filter Shield**

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- 57. Disconnect the fuel filter/water separator outlet fuel line (1) (Figure 23).
- 58. Disconnect the fuel filter/water separator inlet fuel line (2) (Figure 23).
- 59. Disconnect the combination fuel heater/temperature sensor wire harness connector (3) (Figure 23).

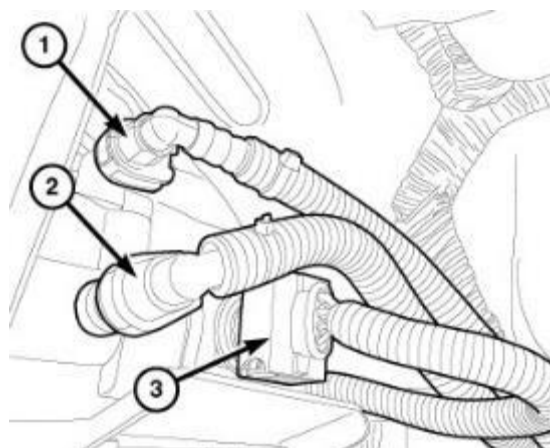


Figure 23 - Inlet and Outlet Lines

- 60. Disconnect the Water In Fuel ("WIF") sensor wire harness connector (1) (Figure 24).

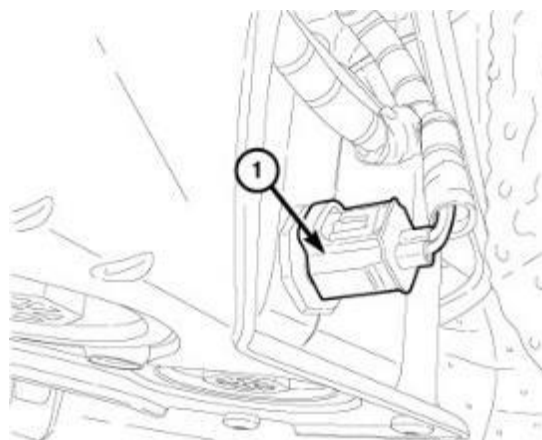


Figure 24 - WIF Sensor Connector

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61. Remove the nuts (1), bolt (3), and the fuel filter/water separator assembly (2) (Figure 25).

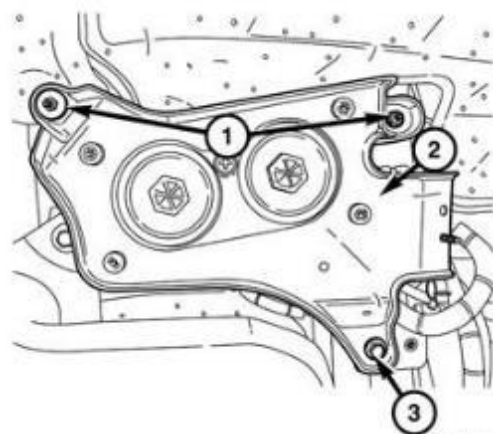


Figure 25 - Fuel Filter/Water Separator

62. Clean the outside of the housing. Remove and discard each fuel filter cover and the fuel filter element from the bottom of the fuel filter/water separator (Figure 26).



Figure 26 - Remove Old Filter Covers and Elements



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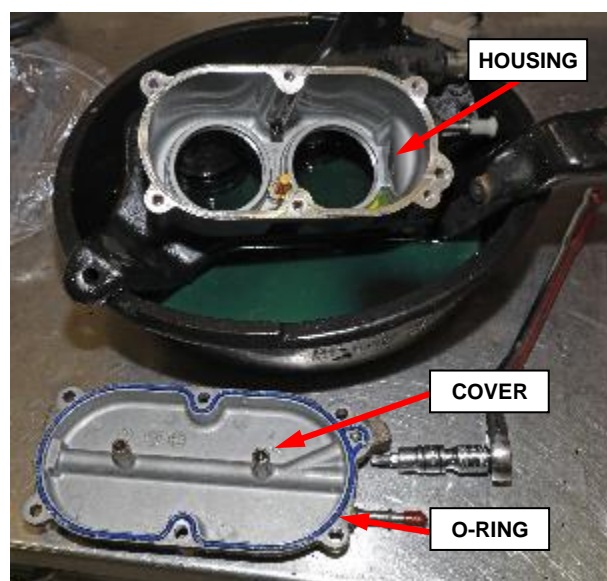


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63. From the top of the fuel filter/water separator, remove the cover (Figure 27 and Figure 28).



**Figure 27 - Remove Fuel Filter/Water Separator Cover**



**Figure 28 - Fuel Filter/Water Separator Cover Removed**

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**NOTE: The NEW Fuel Filter Kit contains two filter elements, a cover O-ring (not shown) and a filter screen (Figure 29).**

64. Thoroughly clean the inside of the housing and cover.

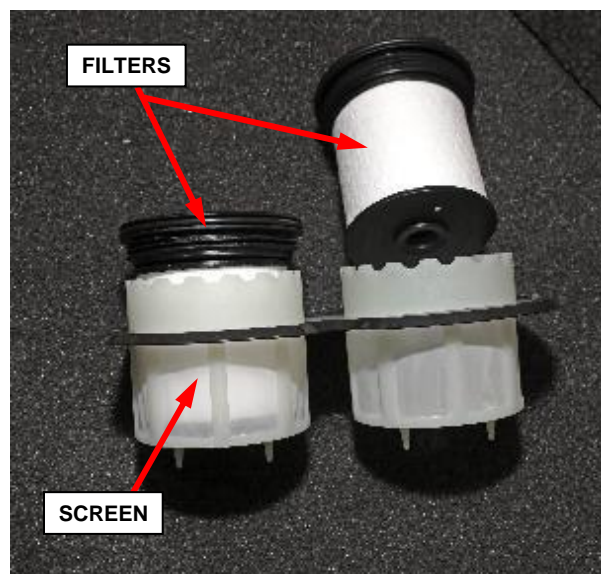


Figure 29 - New Fuel Filter Kit

65. Remove and discard the old cover O-ring. Lubricate the **NEW** seal with clean diesel and install it into the channel in the cover (Figure 30).

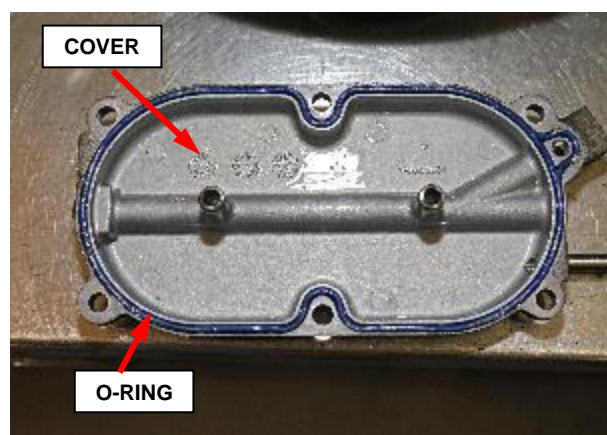


Figure 30 - Cover O-ring

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66. Install the **NEW** screen into the housing. Check that the screen is fully and evenly seating into the housing (Figure 31).
67. Install the cover. Apply fresh LocTite 270 or equivalent to the cover screws and tighten to 24 N·m (18 ft. lbs.).



Figure 31 - Screen Installed

68. Lubricate the **NEW** O-ring seal (2) on filter covers (1) with clean diesel (Figure 32).

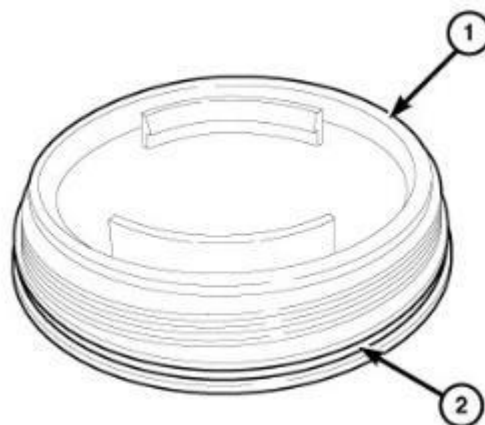


Figure 32 - Filter Cover O-ring

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69. Position and push down on **NEW** fuel filters (2) to install filter onto the cover (3) (Figure 33).
70. Lubricate the rubber seal (1) with clean diesel fluid (Figure 33).

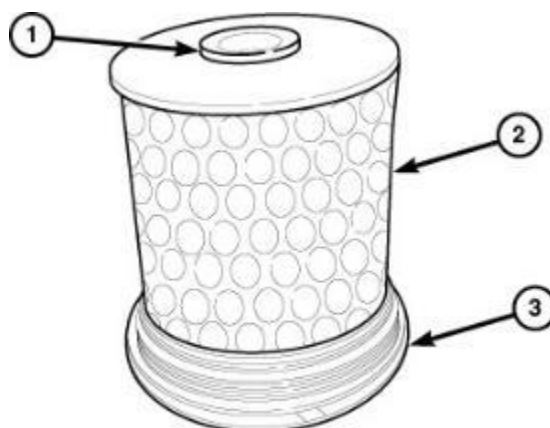


Figure 33 - Filter Seal

71. Install each fuel filter. Tighten each cover (1) to 20 N·m (15 ft. lbs.) (Figure 34).



Figure 34 - Filters Installed

72. Install the fuel filter/water separator assembly (2) to the vehicle. Tighten the two nuts (1), and one bolt (3) to 20 N·m (15 ft. lbs.) (Figure 25).

73. Connect the Water In Fuel (WIF) sensor wire harness connector (1) (Figure 24).

74. Connect the combination fuel heater/temperature sensor wire harness connector (3) (Figure 23).

75. Connect the fuel filter/water separator inlet fuel line (2) (Figure 23).

76. Connect the fuel filter/water separator outlet fuel line (1) (Figure 23).

77. Install the fuel filter shield (1). Tighten the nuts (2) 14 N·m (10 ft. lbs.) (Figure 22).

78. Lower the vehicle.

79. Connect the negative battery cable to the battery.

**NOTE: If equipped with an Intelligent Battery Sensor ("IBS"), connect the IBS connector after connecting the negative battery cable.**

80. Prime the fuel system (In Service Library, refer to 14 - Fuel System/Fuel Delivery/Standard Procedure).

81. Start engine, allow to warm, turn engine off. Check and verify there are no leaks (In Service Library, refer to 14 - Fuel System/Fuel Delivery, Diesel/Tube(s), Fuel/Diagnosis and Testing).

82. Install the cowl extension (1) and the side extensions (2) and (5) (In Service Library, refer to 23 - Body/Exterior/SILENCER - Installation) (Figure 6).

83. Install the engine cover (1) (Figure 5).

84. Install the battery cover (1) (Figure 1).



For vehicles with a contaminated fuel system, use the procedure below.

## **B. Replace HPFP – Contaminated System**

**WARNING:** Observe the following precautions when working on fuel systems: No sparks, open flames or smoking. Avoid inhaling and swallowing fuel. Avoid eye and skin contact with fuel. Pour fuels only into suitable and appropriately marked containers. Wear protective clothing. Failure to observe these precautions may result in fire, explosion, property damage, and serious or fatal injury.

**WARNING:** High-pressure fuel lines deliver fuel under extreme pressure from the injection pump to the injectors. This may be as high as 1800 bar (26,106 psi). Use extreme caution when inspecting for high-pressure fuel leaks. Inspect high-pressure fuel leaks with a sheet of cardboard. Wear safety goggles and adequate protective clothing when servicing fuel system. Fuel under this amount of pressure can penetrate skin causing serious or fatal injury.

**NOTE:** The fuel injection pump can be replaced without having to perform the entire base engine valve timing procedure. This procedure gives instruction on how to remove and install the new fuel injection pump without performing the base engine timing. Do not rotate the pump shaft after removing from the vehicle. The alignment of the pump shaft must be measured and recorded using a commercially available degree wheel after the pump is removed and before transferring the pump gear over to the new pump. This is done to align the pump to the same position during installation. If the base engine valve timing must be performed as part of the repair, In Service Library, refer to 09 - Engine/Valve Timing/Standard Procedure.

**NOTE:** When key is cycled to the off position, fuel system pressure automatically bleeds down.

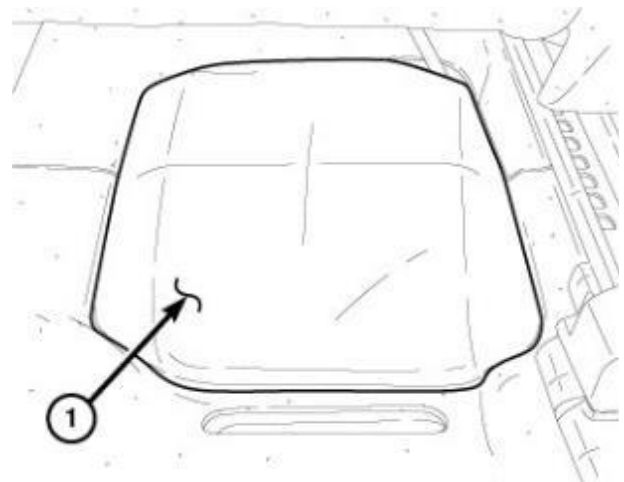
1. Cycle the ignition to the Off position. Be certain that all electrical accessories are turned off.
2. Position the passenger front seat forward.

**NOTE:** Shown with seat removed for clarity.

3. Remove the battery cover (1) (Figure 35).

**NOTE:** If equipped with an Intelligent Battery Sensor ("IBS"), disconnect the IBS connector first before disconnecting the negative battery cable.

4. Disconnect and isolate the negative battery cable from the battery.



**Figure 35 - Battery Cover**

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5. Release the hose clamp (1) and set the degas hose (2) aside (Figure 36).

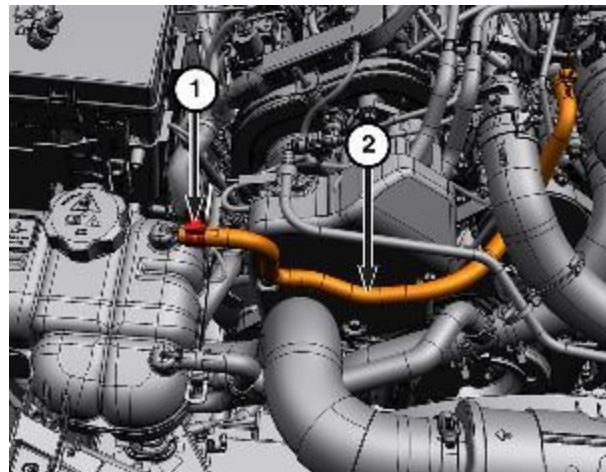


Figure 36 - Degas Hose

6. Disconnect the quick-connect fitting (1) and set the vacuum line (2) aside (Figure 37).

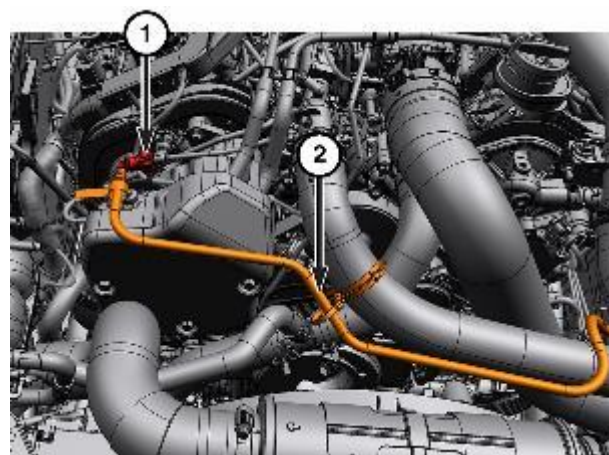


Figure 37 - Vacuum Line

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7. Remove the screws (1) that secure the cover (2) for the high-pressure fuel pump (Figure 38).

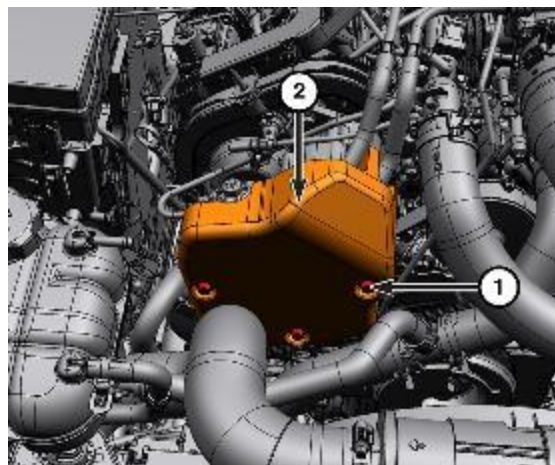


Figure 38 - Cover Screws

8. Remove the engine cover (1) (Figure 39).



Figure 39 - Engine Cover

9. Remove the cowl extension (1) and the side extensions (2), (5) (In Service Library refer to 23 - Body/Exterior/SILENCER, Cowl Extension/Removal) (Figure 40).

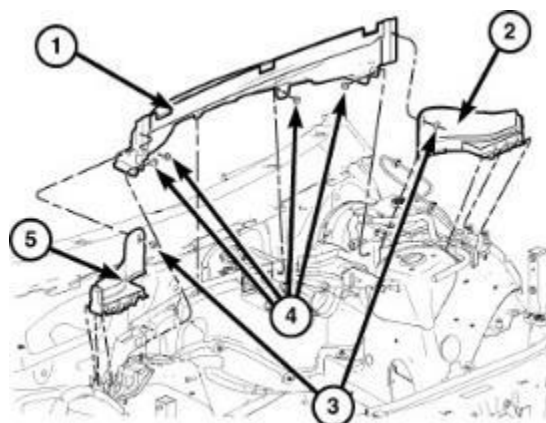


Figure 40 - Cowl Extension and Side Extensions

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10. Remove the bolts (2) and pull up on the engine wire harness assembly (1) to release retainers from the intake manifold (Figure 41).

**WARNING: No sparks, open flames or smoking. Risk of poisoning from inhaling and swallowing fuel. Risk of injury to eyes and skin from contact with fuel. Pour fuels only into suitable and appropriately marked containers. Wear protective clothing.**

**NOTE: Use a backing wrench on the fuel injector when unscrewing the union nut.**

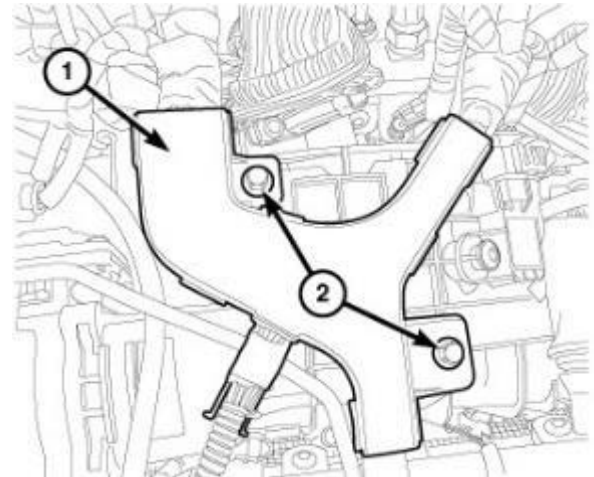


Figure 41 - Engine Wiring Harness

11. Remove the left Charge Air Cooler ("CAC") tube.
12. Remove the fuel injector silencers (1) (Figure 42).

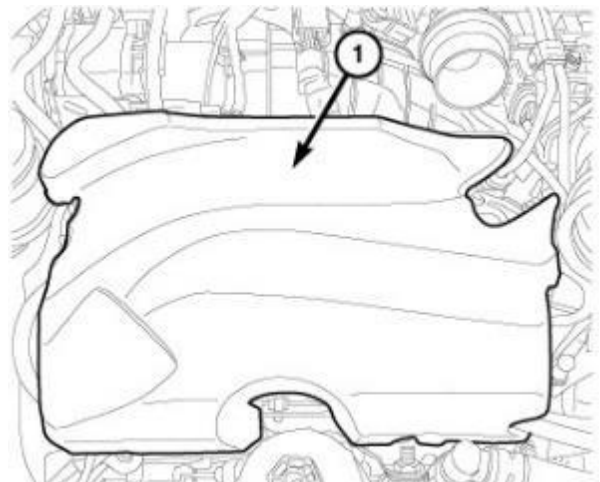


Figure 42 - Silencer Pad



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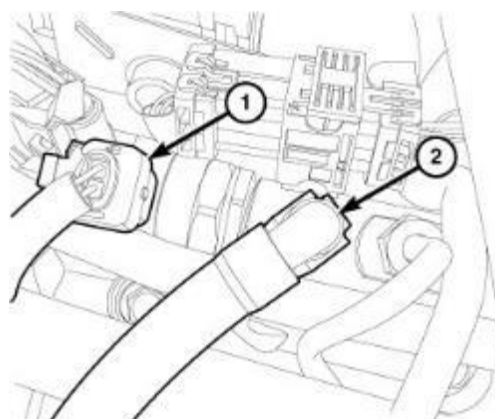
## High Pressure Fuel Pump



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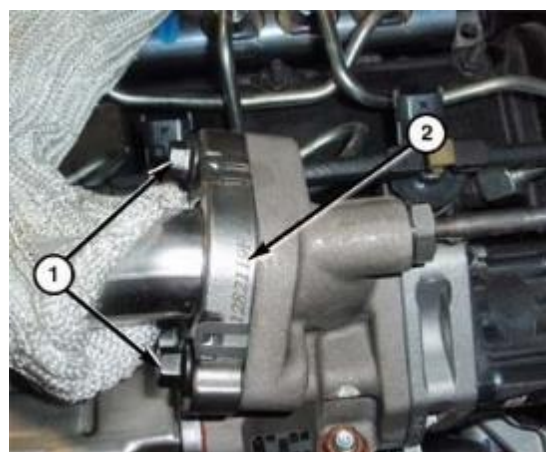
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13. Disconnect the fuel pressure solenoid wire harness connector (1) (Figure 43).
14. Disconnect the fuel rail return line (2) and position aside (Figure 43).



**Figure 43 - Harness Connector and Return Line**

15. Remove the upper EGR tube bolts (1) (Figure 44) and (2) (Figure 45).
16. Remove and discard both gaskets.



**Figure 44 - Upper EGR Tube Bolts**



**Figure 45 - Upper EGR Tube Bolts at Intake**



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17. Unscrew the union nuts (1) and (3) and remove and discard the left and right side fuel tubes (2) (Figure 46).
18. Install protective caps onto the fuel injectors and fuel rail.

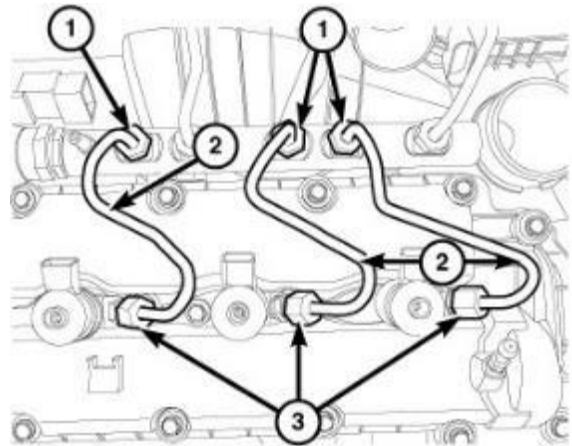


Figure 46 - Fuel Tubes (Left side shown right side similar)

19. Remove the nut (1) securing the right high-pressure fuel tube (3) to cylinder head cover (Figure 47).
20. Remove the union nuts (2) and (4) and the right high-pressure fuel tube (3), discard the fuel tube (Figure 47).
21. Remove the bolt (6) securing the high-pressure crossover fuel tube (7) to top of intake manifold (Figure 47).
22. Remove the union nuts (5) and (8) and the high-pressure crossover fuel tube (7), discard the fuel tube (Figure 47).
23. Remove the bolt (9) securing the left side fuel tube (11) to EGR air flow control valve (Figure 47).
24. Remove the union nuts (10) and (12) and the left high pressure fuel tube (11), discard the fuel tube (Figure 47).

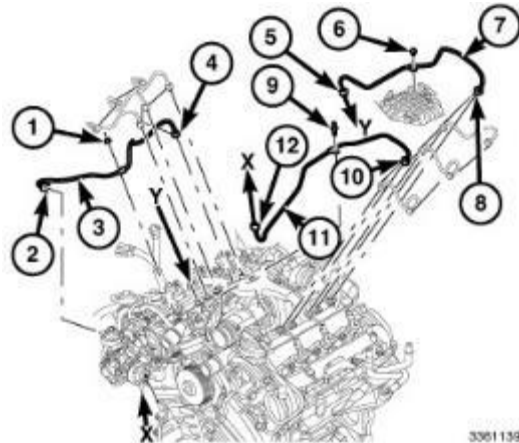


Figure 47 - Fuel Tubes and Nuts

**NOTE:** The fuel injection pump can be replaced without having to perform the entire base engine valve timing procedure. This procedure gives instruction on how to remove and install the new fuel injection pump without performing the base engine timing. Do not rotate the pump shaft after removing from the vehicle. The alignment of the pump shaft must be measured and recorded using a commercially available degree wheel after the pump is removed and before transferring the pump gear over to the new pump. This is done to align the pump to the same position during installation. If the base engine valve timing must be performed as part of the repair (In Service Library, refer to 09 - Engine/Valve Timing/Standard Procedure).

**NOTE:** When key is cycled to the off position, fuel system pressure automatically bleeds down.

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25. Disconnect the low-pressure fuel supply lines (3) (Figure 48).
26. Disconnect the fuel quantity solenoid wire harness connector (2) (Figure 48).

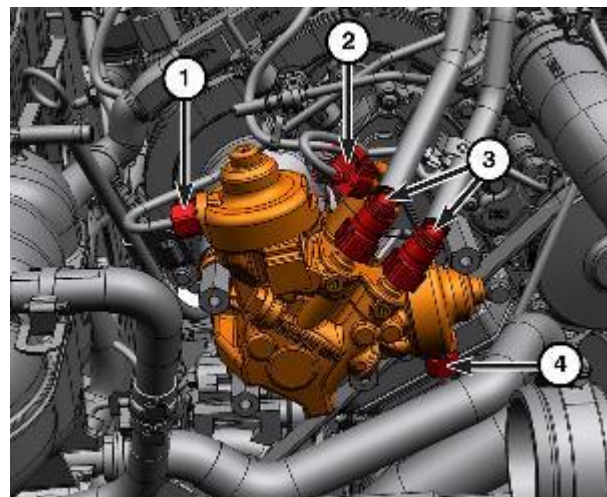


Figure 48 - HPFP Connections

27. Remove the upper bolts (1) from the high-pressure pump (2) (Figure 49).
28. Using Tool, High Pressure Pump Installation VM.10345 Install the studs in the upper locations.

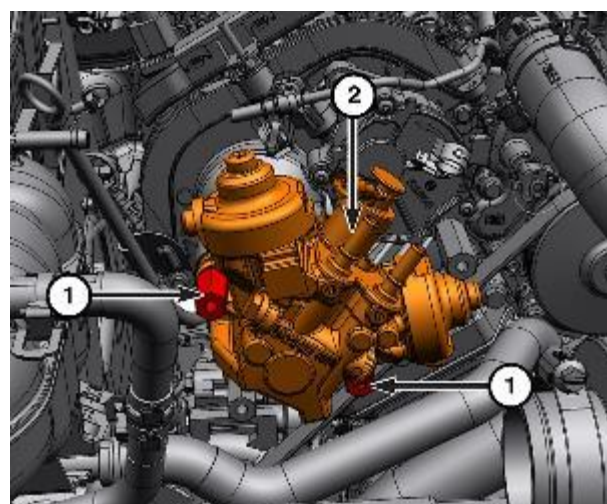


Figure 49 - Upper HPFP Bolts

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29. Remove the lower bolt (1) from the HPFP (2) and remove it from the vehicle (Figure 50).

**NOTE: The fuel injection pump needs to be timed using a commercially available degree wheel.**

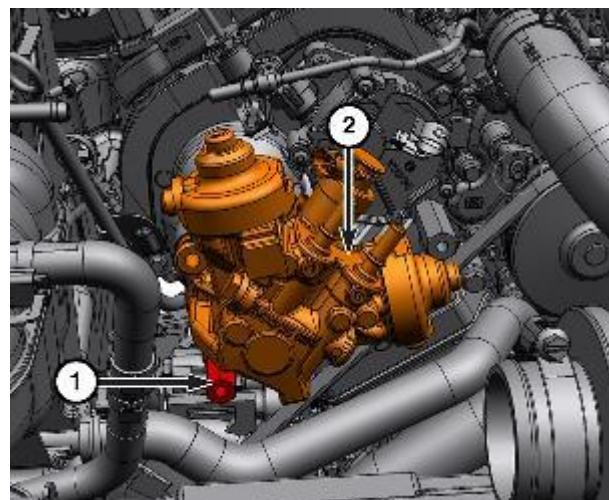


Figure 50 - Lower HPFP Bolt

30. Install the degree wheel onto the pump and record the position of the hole in the gear on the degree wheel (Figure 51).



Figure 51 - Installing a Printed Paper Degree Wheel from the Internet

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**NOTE:** The use of Puller 1023 or a commercially available gear puller is required to remove the fuel injection pump gear (2) (Figure 52).

**CAUTION:** Do Not Force the high-pressure pump into the right timing cover or attempt to seat it by drawing it in with the bolts. The pump gear must be properly aligned with the drive gear on the camshaft before the high-pressure pump will seat on the cylinder head mounting surface. Failure to properly align drive gears will damage the high-pressure pump or camshaft drive gear.

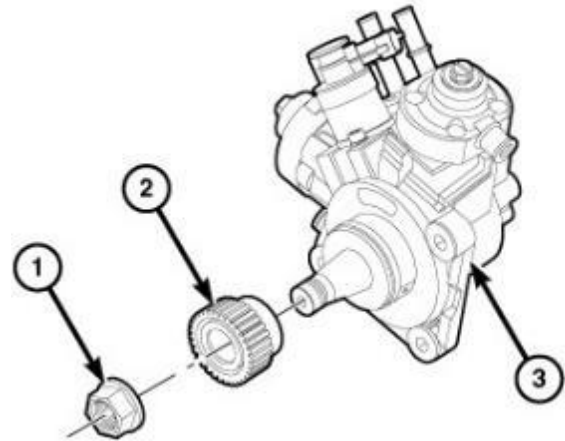


Figure 52 - Drive Gear on the HPFP

31. Using a commercially available spanner wrench such as Blue Point APS351B, Snap-on APS351C or equivalent (2) to hold fuel injection pump gear. Remove the fuel injection pump gear nut (1) (Figure 53).



Figure 53 - Spanner Wrench and Drive Gear on the HPFP



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32. Install a **NEW** O-ring seal (1) to the high-pressure fuel injection pump (Figure 54).
33. Install the gear (2) and NEW nut (1) onto the NEW high-pressure pump (3) and tighten the nut (1) finger tight (Figure 52).
34. Using a commercially available spanner wrench (2) such as Blue Point APS35IB or equivalent to hold the pump, tighten the nut (1) to 50 N·m (37 ft. lbs.) (Figure 53).
35. Install the degree wheel and rotate the pump shaft so that the hole aligns with the reference mark on the degree wheel referenced during the removal (Figure 51).

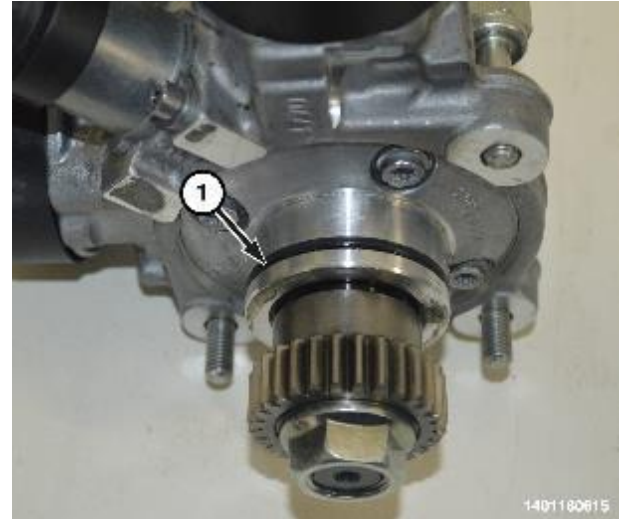


Figure 54 - HPFP O-ring Seal

36. Disconnect the injector electrical connector (1) (Figure 55).
37. Lift up on the locking retaining tab on the fuel return lines (2) to unlock the lock. Remove the fuel return hose (3) by wiggling hose free at the fuel injector (4) (Figure 55).

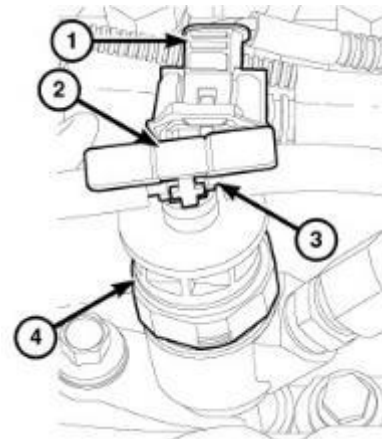


Figure 55 - Fuel Injector Return Line and Locking Tab



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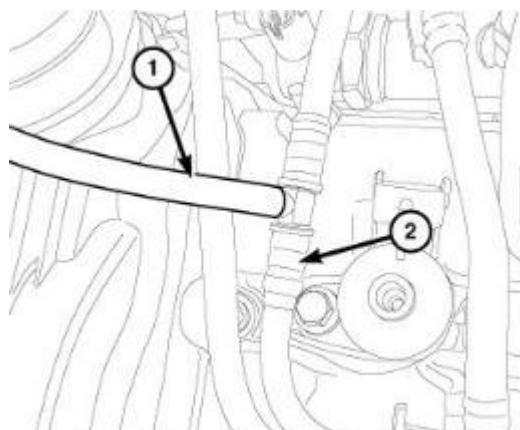
## High Pressure Fuel Pump



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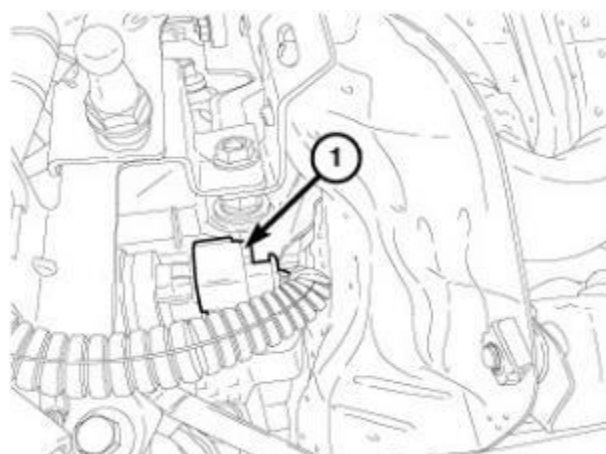
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38. Remove the fuel injector return line (1) from the main low pressure return line (2) (Figure 56).



**Figure 56 - Fuel Injector Return Line to Low Pressure Return Line**

39. Disconnect the right fuel rail pressure sensor wire harness connector (1) (Figure 57).



**Figure 57 - Fuel Rail Pressure Sensor Connector**

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40. Using the Remover-Installer, Fuel Rail Bolt 2025400090 (1) remove the bolts from both fuel rails and remove and discard the rails from the engine (Figure 58).
41. Clean the area around the fuel injector to be removed, so no debris falls into the injector bore.

**NOTE:** Use care not to drop or lose the old washer.



Figure 58 - Fuel Rail Bolts

42. Remove the fuel injector hold-down bolt (2), washer (3), and retaining claw (4) (Figure 59).
43. Using your hand, pull fuel injector (1) straight up from cylinder head for removal. Discard lower sealing washer and injector (Figure 59).

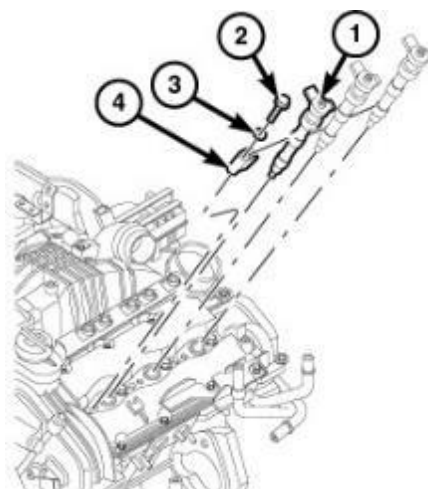


Figure 59 - Fuel Injector Removal

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44. If the fuel injector cannot be removed by hand, install the Remover, Fuel Injector VM.10358A (1) to remove the fuel injector (2) (Figure 60).

**NOTE:** Check and make sure that the copper sealing washer did not remain in the cylinder head.

**NOTE:** Before cleaning the injector bore, seal the injector holes in the injector bore with the appropriate cap to prevent debris from falling into the cylinder.

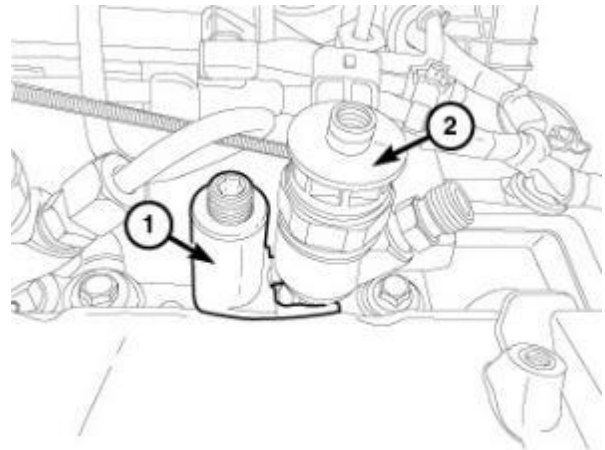


Figure 60 - Fuel Injector Removal Tool

45. Using a lint-free rag, wipe the cylinder head around the fuel injector.

46. Wipe out injector bore with a lint-free cloth.

**CAUTION:** Make sure the injector bore bottom is clean of debris otherwise a leak could occur.

47. Clean the bottom of the fuel injector bore with Brush, Injector Bore 9717 and **make sure the old copper sealing washer (2) is not stuck in the bore** (Figure 61).
48. Blow out the recess with shop air and clean again with a lint-free cloth and cover over.
49. Perform these steps for each injector recess.

**NOTE:** Do Not apply anti-seize lubricant to the injector nozzle, only apply anti-seize lubricant to the injector body.

50. Lubricate the **NEW** fuel injector body with Nickel Anti-Seize lubricant.

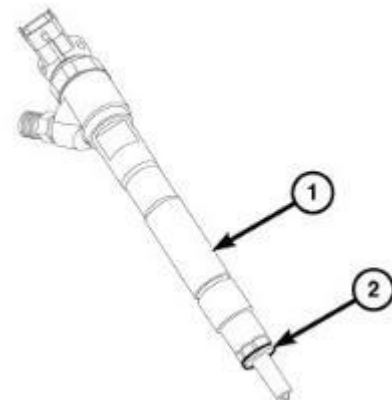


Figure 61 - Fuel Injector

**NOTE:** Always replace the seals in the cylinder head cover and replace the copper sealing washer on the bottom of injector.

**NOTE:** Any time a new injector is installed, or if an existing injector is installed in any location other than its original location, the injector quantity adjustment procedure must be performed (In Service Library, refer to 14 - Fuel System/Fuel Injection - Standard Procedure).

51. Remove protective cap from the appropriate injector bore.

**NOTE: Make sure the old copper sealing washer is not stuck in bore.**

52. Install a **NEW** fuel injector seal (1) in the cylinder head cover (2) (Figure 62).

**NOTE: Do Not apply any lubricant to the fuel injector nozzle. Care must be taken not to restrict the discharge orifices in the nozzle.**

53. Install a **NEW** sealing washer (2) onto the fuel injector (1) (Figure 61).

54. Lubricate the injector body with Nickel Anti-Seize Lubricant.

**NOTE: Make a note of the seven-digit alphanumeric codes and the physical location of each injector. You will need to enter them into the scan tool during the Injector Quantity Adjustment procedure.**

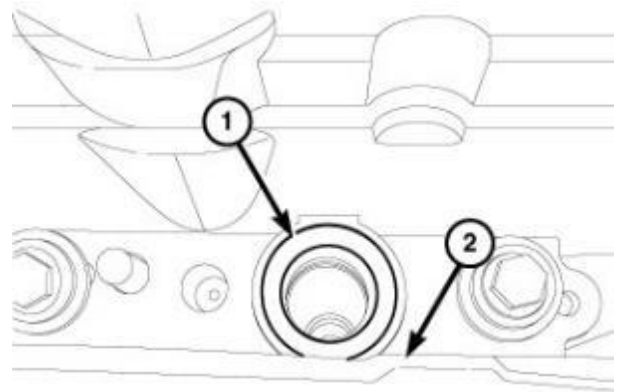


Figure 62 - Fuel Injector Seal

55. Install the fuel injector (1), tensioning claws (4), washer (3) and bolt (2). Tighten the bolt (2) to 33 N·m (24 ft. lbs.) (Figure 59).

**NOTE: Fuel tubes are a one-time only use and must be replaced anytime they have been removed.**

56. Install the fuel rails. Using the Remover-Installer, Fuel Rail Bolt 2025400090 (1), tighten bolts to 25 N·m (18 ft. lbs.) (Figure 58).

57. Connect the right fuel rail pressure sensor wire harness connector (1) (Figure 57).

**NOTE: The one-way check valves on the fuel injector lines are NOT serviceable and should not be taken apart. If the one-way check valve is bad then a NEW fuel injector return line will need to be installed.**

**NOTE: Before installing the fuel injector return line assembly, verify the arrow on the one-way valve point towards the fuel tank**

**NOTE: Do not use any type of lubrication when installing the fuel injector return line.**

**NOTE: BE SURE THE FUEL INJECTOR RETURN LINE LOCK TAB (2) IS IN THE UNLOCKED POSITION.**

58. Inspect the fuel injector return line for cracks and inspect the O-ring seals for damage. Replace the fuel injector return line if a problem exists.

59. Install the fuel injector return line (1) to the main low pressure return line (2) (Figure 56).

60. Install the fuel injector return line (3) and **BE SURE IT IS FULLY SEATED**, then push down on the lock tab (2) to lock in place. (Figure 55).

61. Connect the fuel injector harness connector (1) (Figure 55).

**CAUTION: Do Not Force the high-pressure pump into the right timing cover or attempt to seat it by drawing it in with the bolts. The pump gear must be properly aligned with the drive gear on the camshaft before the high-pressure pump will seat on the cylinder head mounting surface. Failure to properly align drive gears will damage the high-pressure pump or camshaft drive gear.**

62. Install the Tool, High Pressure Pump Installation VM.10345 into the studs installed in the upper timing cover.

63. Install the lower fuel injection pump (2) and hand tighten the bolt (1) (Figure 50).

64. Remove the Tool, High Pressure Pump Installation VM.10345 from the upper bolts location and install the bolts.

65. Tighten the bolts (1) that secure the fuel injection pump to 25 N·m (18 ft. lbs.) (Figure 49 and Figure 50).

66. Connect the fuel injection pump electrical connector (2) (Figure 48).

67. **Do not** connect the low-pressure fuel supply and return lines (3) at this time (Figure 48).

**NOTE: Fuel tubes are a one-time only use and must be replaced anytime they have been removed.**

68. Install the **NEW** left high pressure fuel tube (11) and tighten the union nut (10) and (12) finger tight (Figure 47):

- Tighten the union nut (10) to 5 N·m (44 in. lbs.) plus an additional 75 degrees turn.
- Tighten the union nut (12) to 11 N·m (8 ft. lbs.) plus an additional 75 degrees turn.

69. Install the bolt (9) securing the left side high pressure fuel tube (11) to EGR air flow control valve and tighten to 11 N·m (8 ft. lbs.) (Figure 47).

70. Install the **NEW** high pressure crossover fuel tube (7) and tighten the union nuts (5) and (8) finger tight (Figure 47):

- Tighten the union nut (5) and (8) to 5 N·m (44 in. lbs.) plus an additional 75 degrees turn.

71. Install the bolt (6) securing the high-pressure crossover fuel tube (7) to intake manifold and tighten to 11 N·m (8 ft. lbs.) (Figure 47).

72. Install the **NEW** right high-pressure fuel tube (3) and tighten union nut (2) and (4) finger tight (Figure 47):

- Tighten the union nut (4) to 5 N·m (44 in. lbs.) plus an additional 75 degrees turn.
- Tighten the union nut (2) to 11 N·m (8 ft. lbs.) plus an additional 75 degrees turn.

73. Install the nut (1) securing the right-side high-pressure fuel tube (3) to right side cylinder head cover and tighten to 11 N·m (8 ft. lbs.) (Figure 47).

74. Remove the protective caps from the fuel injectors and fuel rail.

**NOTE: Use a backing wrench on the fuel injector when tightening the union nut.**



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75. Install the **NEW** right side fuel tubes (2) and tighten the union nuts (1) and (3) finger tight (Figure 46):

- Tighten the union nut (1) to 5 N·m (44 in. lbs.) plus an additional 75 degrees turn.
- Tighten the union nut (3) to 11 N·m (8 ft. lbs.) plus an additional 75 degrees turn.

76. Clean all EGR gasket sealing areas.

77. Install a **NEW** O-ring gasket (1) onto the intake manifold (2) (Figure 63).

78. Install a **NEW** gasket to the EGR pipe (Figure 64).

79. Install the EGR tube (1) to the intake manifold and tighten the bolts (2) to 11 N·m (8 ft. lbs.) (Figure 45).

80. Install the EGR tube bolts (1) and tighten to 25 N·m (18 ft. lbs.) (Figure 44).

81. Install the cowl extension (1) and the side extensions (2) and (5) (In Service Library, refer to 23 - Body/Exterior/SILENCER - Installation) (Figure 40).

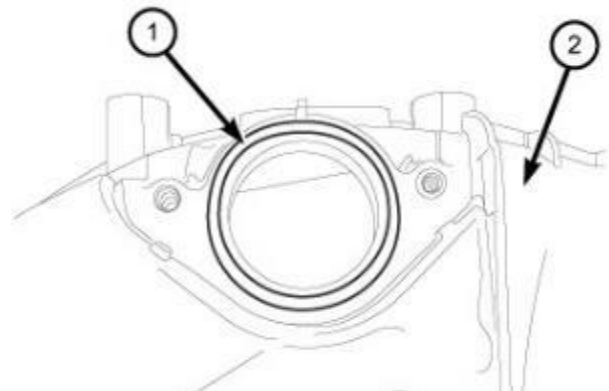


Figure 63 - Upper EGR Tube O-ring at Intake Manifold

**NOTE: If the fuel system has been contaminated with Metal or Other Foreign Objects, the following procedure must be followed.**

**NOTE: With the electric fuel pump not operating, the fuel tank must be removed and drained through the fuel pump module opening of the fuel tank.**



Figure 64 - Upper EGR Tube Gasket

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82. Raise and support the vehicle (In Service Library, refer to 04 - Vehicle Quick Reference/Hoisting - Standard Procedure).
83. Remove fuel pump module (In Service Library, refer to 14 - Fuel System/Fuel Delivery/MODULE, Fuel Pump - Removal).
84. After fuel pump module has been removed, drain fuel into an approved diesel fuel draining station.

**CAUTION: Dispose of petroleum-based products in a manner consistent with all applicable Local, State, Federal, and Provincial regulations.**

85. Ensure the swirl pot indentation below the in-tank electric fuel pump inlet is completely drained of any contaminated fuel and thoroughly clean the fuel tank.
86. Install the **NEW** Fuel Pump and **New** Transfer Pump.
87. Install the fuel tank and fill with clean diesel fuel. **Do Not** connect the low pressure return line at this time.
88. Remove the transmission skid plate (In Service Library, refer to 13 - Frame and Bumpers/Under Body Protection/PLATE, Skid - Removal).
89. Loosen the drain plug (2) and drain the diesel fuel into a suitable container (Figure 65).
90. Securely tighten the drain plug (2).
91. Remove the nuts (2) and the fuel filter shield (1) (Figure 66).

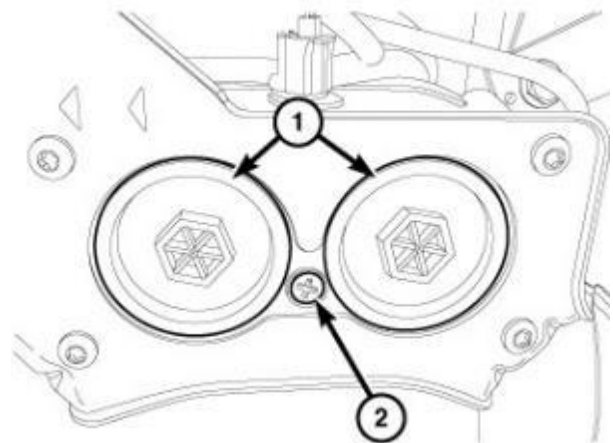


Figure 65 - Drain Plug

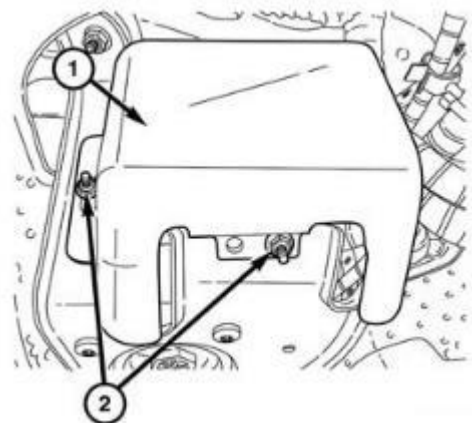


Figure 66 - Fuel Filter Shield

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92. Disconnect the fuel filter/water separator outlet fuel line (1) (Figure 67).
93. Disconnect the fuel filter/water separator inlet fuel line (2) (Figure 67).
94. Disconnect the combination fuel heater/temperature sensor wire harness connector (3) (Figure 67).

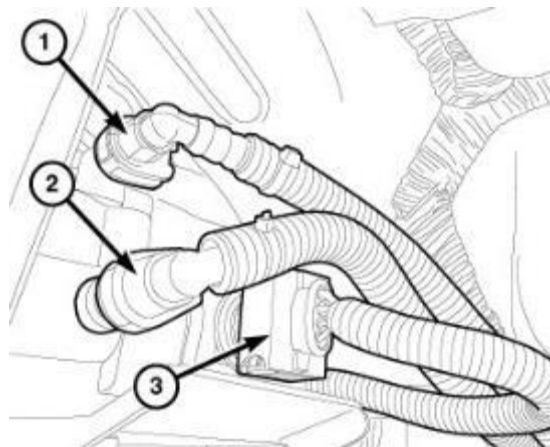


Figure 67 - Inlet and Outlet Lines

95. Disconnect the Water In Fuel ("WIF") sensor wire harness connector (1) (Figure 68).

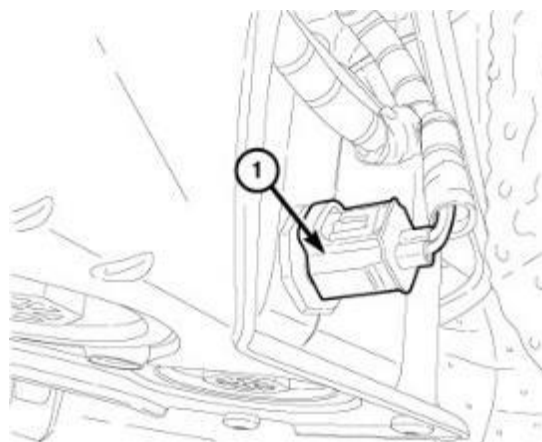


Figure 68 - WIF Sensor Connector

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96. Remove the nuts (1), bolt (3), and the fuel filter/water separator assembly (2) (Figure 69).

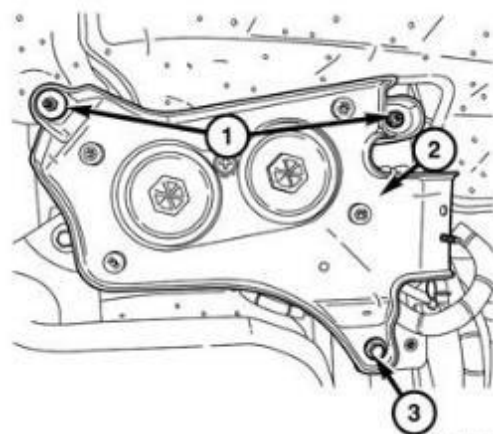


Figure 69 - Fuel Filter/Water Separator

97. Clean the outside of the housing. Remove and discard each fuel filter cover and the fuel filter element from the bottom of the fuel filter/water separator (Figure 70).



Figure 70 - Remove Old Filter Covers and Elements

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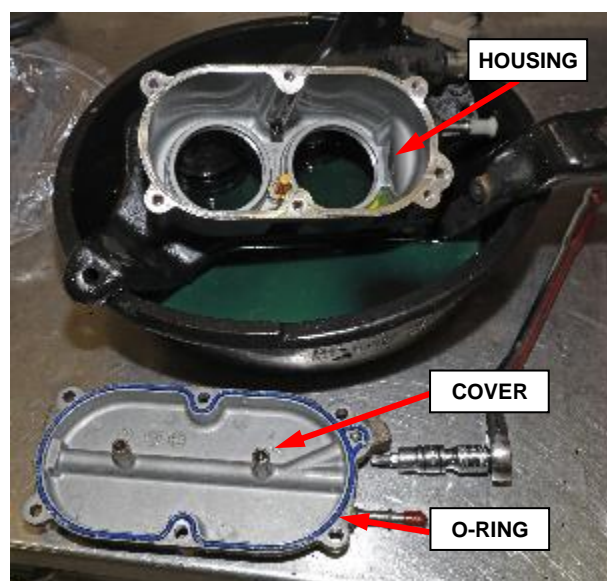


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98. From the top of the fuel filter/water separator, remove the cover (Figure 71 and Figure 72).



**Figure 71 - Remove Fuel Filter/Water Separator Cover**



**Figure 72 - Fuel Filter/Water Separator Cover Removed**



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**NOTE:** The **NEW** Fuel Filter Kit contains two filter elements, a cover O-ring (not shown) and a filter screen (Figure 73).

99. Thoroughly clean the inside of the housing and cover.

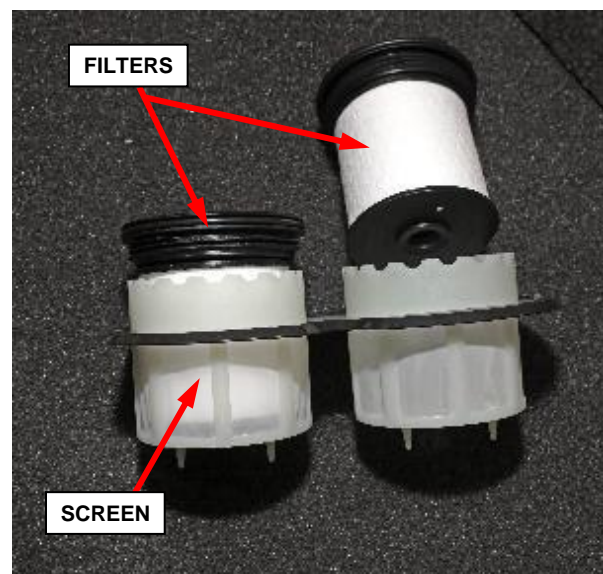


Figure 73 - New Fuel Filter Kit

100. Remove and discard the old cover O-ring. Lubricate the **NEW** seal with clean diesel and install it into the channel in the cover (Figure 74).

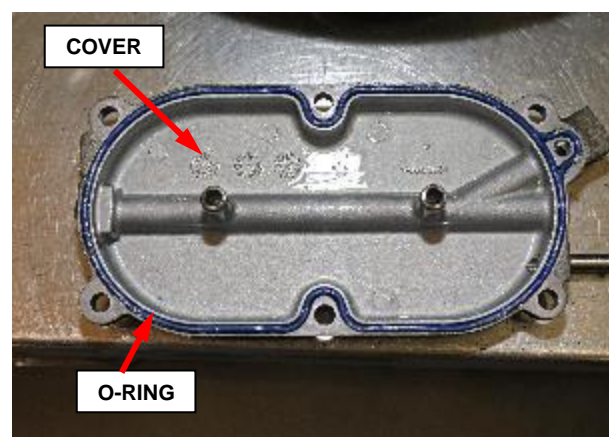


Figure 74 - Cover O-ring

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101. Install the **NEW** screen into the housing. Check that the screen is fully and evenly seating into the housing (Figure 75).
102. Install the cover. Apply fresh LocTite 270 or equivalent to the cover screws and tighten to 24 N·m (18 ft. lbs.).

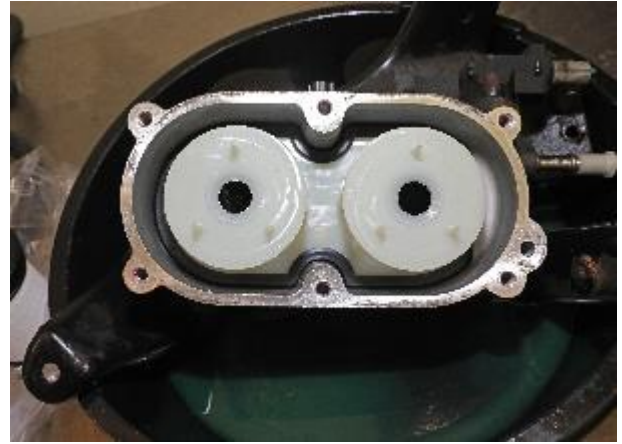


Figure 75 - Screen Installed

103. Lubricate the **NEW** O-ring seal (2) on filter covers (1) with clean diesel (Figure 76).

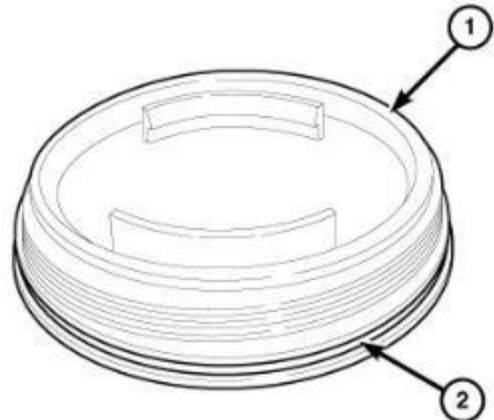


Figure 76 - Filter Cover O-ring

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104. Position and push down on **NEW** fuel filters (2) to install filter onto the cover (3) (Figure 77).
105. Lubricate the rubber seal (1) with clean diesel fluid (Figure 77).

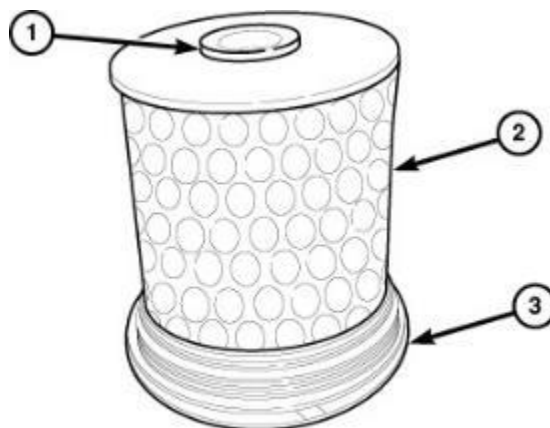


Figure 77 - Filter Seal

106. Install each fuel filter. Tighten each cover (1) to 20 N·m (15 ft. lbs.) (Figure 78).



Figure 78 - Filters Installed

107. Install the fuel filter/water separator assembly (2) to the vehicle. Tighten the two nuts (1), and one bolt (3) to 20 N·m (15 ft. lbs.) (Figure 69).
108. Connect the Water In Fuel (WIF) sensor wire harness connector (1) (Figure 68).
109. Connect the combination fuel heater/temperature sensor wire harness connector (3) (Figure 67).
110. Connect the fuel filter/water separator inlet fuel line (2) (Figure 67).
111. Connect the fuel filter/water separator outlet fuel line (1) (Figure 67).
112. Install the fuel filter shield (1). Tighten the nuts (2) 14 N·m (10 ft. lbs.) (Figure 66).
113. Lower the vehicle.
114. Connect the negative battery cable to the battery.

**NOTE: If equipped with an Intelligent Battery Sensor (“IBS”), connect the IBS connector after connecting the negative battery cable.**

115. Install the battery cover (1) (Figure 35).
116. Place a suitable container under the low-pressure fuel feed line previously left disconnected at the HPFP.
117. Using a diagnostic scan tool, activate the fuel pump to flush the low-pressure fuel lines from the tank to the HPFP.
118. Connect the low-pressure fuel feed at the HPFP.
119. Place a suitable container under the low-pressure fuel return line previously left disconnected at the fuel tank.
120. Using a diagnostic scan tool, activate the fuel pump to flush the low-pressure fuel return lines from the HPFP to the fuel tank.
121. Connect the low pressure fuel return line at the fuel tank.

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## INJECTOR CLASSIFICATION PROCEDURE

**NOTE: The engine must not be running for this procedure.**

122. Turn the ignition switch **"ON"**.
123. Using a scantool, select the **"PCM View"**, then **"MISCELLANEOUS FUNCTIONS"**.
124. Select the **"Injector Quantity Adjustment"**, then **"NEXT"**.
125. Select the injector(s) that has been replaced, access the keyboard function, and type the seven-digit alphanumeric code next to the cylinder number that corresponds to the physical location where the injector has been installed.
126. Click **"NEXT"**. The scan tool will prompt to turn the ignition switch off for 12 seconds.
127. Repeat steps **127** and **128** for the other injectors that are new.
128. Once the seven-digit alphanumeric codes for all injectors have been entered into the PCM, cycle ignition to complete the procedure.

**NOTE: When ever a fuel injector is replaced run oxygen sensor value reset function.**

129. Using the scan tool, perform **"Oxygen Sensor Value Reset"** function found under **"ENGINE MISCELLANEOUS FUNCTIONS"**.
130. Connect the vacuum line (Figure 37).
131. Connect the degas hose (Figure 36).
132. Start engine, allow to warm, turn engine off. Check and verify there are no leaks (In Service Library, refer to 14 - Fuel System/Fuel Delivery, Diesel/Tube(s), Fuel/Diagnosis and Testing).
133. Install the fuel injection pump cover (2) and tighten the screws (1) securely (Figure 38).
134. Install the engine silencer pads (Figure 27) and engine cover (Figure 39).



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**C. Owner's Manual Addendum and Tip Card:**

From Campaign kit CSFP01A1AA (English) / CSFP01A2AA (French), place the Owner's Manual Addendum in the glovebox with the Owner's Manual.

Place the Tip Card in a conspicuous location that will be visible to the driver so that they will review it. Suggestions would be the top of the instrument panel, in front of the instrument cluster, etc. Please review the information on the card with the owner when the vehicle is returned to them.

## **D. Fuel Door Label:**

**NOTE: Do not apply the label over an existing label. Apply the label on a flat surface on the inside of the fuel door. For example, on the top of the fuel door hinge (Figure 80)**

From Campaign kit CSFP01A1AA (English) / CSFP01A2AA (French), install the fuel door decal.

1. Open the fuel door.
2. Clean the top surface of the hinge with isopropyl alcohol or equivalent and a soft cloth. Repeat as needed until the soft cloth comes off the surface clean.
3. Remove the fuel door label from its paper backing.
4. Apply the fuel door label (Figure 79) to the top of the fuel door hinge (Figure 80).
5. Firmly press and smooth the fuel door label to ensure good adhesion.
6. Close the fuel door.



**Figure 79 - Fuel Door Label**



**Figure 80 - Fuel Door Hinge Location**



**URGENT VEHICLE RECALL**  
Your vehicle has a safety recall.  
**Rappel urgent du véhicule**  
Votre véhicule a un rappel de sécurité.

SCAN TO VIEW  
RECALLS



FIAT CHRYSLER AUTOMOBILES

**SAFETY RECALL Z46  
(TRANSPORT CANADA 2022-303)  
HIGH PRESSURE FUEL PUMP**

Dear Vehicle Owner:

This Notice is sent to you in accordance with the requirements of the **Motor Vehicle Safety Act**.

This is to inform you that your vehicle may contain a defect that could affect the safety of a person.

**FCA CANADA INC., HAS DETERMINED THAT A DEFECT, WHICH RELATES TO MOTOR VEHICLE SAFETY, EXISTS IN CERTAIN 2014-2020 JEEP GRAND CHEROKEE VEHICLES.**

**Your vehicle must be repaired because:**

The High-Pressure Fuel Pump (“HPFP”) on your vehicle may fail prematurely. A HPFP failure may introduce internally failed component debris into the fuel system potentially causing fuel starvation. Fuel starvation may result in an unexpected loss of motive power, which can cause a vehicle crash without prior warning.

We apologize for any inconvenience and thank you for your attention to this very important matter.

**FCA Canada Inc.**  
National Service and Parts Manager

Note to lessors receiving this recall notice: Federal regulations requires that you forward this recall notice to the lessee within 10 days.



**What You Must Do To  
Ensure Your Safety:**

Contact an authorized FCA Canada dealer to schedule a service appointment.



**What Your Dealer  
Will Do:**

**FCA will repair your vehicle free of charge.** To do this, your dealer will replace the HPFP, inspect and, if necessary, replace additional fuel system components. The estimated repair time is estimated to be between two hours to eight hours depending on the repair needed. However, additional time may be necessary depending on how dealer appointments are scheduled and processed.

**FREQUENTLY ASKED QUESTIONS**

**WHERE CAN I FIND MORE INFORMATION ON THIS RECALL OR ANY OTHER RECALL AFFECTING MY VEHICLE?**

- By Web: [recalls.mopar.ca](https://recalls.mopar.ca)
- By Phone: (800) 465-2001
- By Email: [www.fcacanada.ca/en/contact\\_us.php](https://www.fcacanada.ca/en/contact_us.php)
- By Mail: FCA Canada Customer Care Centre  
P.O. Box 1621, Windsor, ON N9A 4H6

**WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?**

If you have already experienced this specific condition and have paid to have it repaired, you will still be required to have the campaign performed by an authorized FCA Canada dealer at no charge to you. Once completed, please send your original receipts and/or adequate proof of payment along with the campaign invoice to the following address for **further review of possible reimbursement**: FCA Canada Customer Care Centre, P.O. Box 1621, Windsor, ON N9A 4H6.

**HOW DO I UPDATE MY NAME AND ADDRESS OR IF I NO LONGER OWN THIS VEHICLE?**

Contact the Customer Name & Address Call Centre at 1-800-373-1474 to update your information.

FCA IS THE MANUFACTURER OF THE FOLLOWING

