

Electronic Pressure Relief Valve (EPRV) Delete & Fuel Rail Pressure Sensor Update

Service Category Service Department

Section Function Group 237

Technician Skill Level A

Market North America

Applicability

VOLVO

| Model Years | Models |
|-------------|--------------|
| 2018 - 2019 | VAH, VHD, VN |

Introduction

Volvo Trucks has identified through Remote Diagnostics that the vehicles in this Service Campaign have experienced faults with the Electronic Pressure Relief Valve (EPRV). To address this issue follow the repair outlined within this bulletin to remove the EPRV, inspect the Fuel Rail Pressure Sensor (FRPS) and wiring harness, followed by running an accessory kit to reprogram the vehicle.

Production Change Information

This bulletin applies to vehicles built within the specified production changes below.

| Brand | Engine | Emission Level | Starting Build Date | Ending Build Date |
|-------|----------|----------------------------|---------------------|-------------------|
| Volvo | D11, D13 | EM-USA17 OBDEP-A & OBDEP-B | 14-November-2016 | 20-December-2018 |

Warranty Information

| This repair may be eligible for reimbursement if a product failure was experienced with in time and mileage limits of the applicable Warranty coverage. Reimbursement is obtained via the normal claim handling process. | | |
|---|---|---------------------------------|
| Claim Type (used only when uploading from the Dealer Bus. Sys.) | | B |
| Labor Code | Description | Hours |
| 2373-01-09-01 (Main) | Valve, common rail remove | 0.6 hrs |
| 1700-22-03-06 | Accessory Kit, programming | 0.1 hrs |
| 2841-22-02-01 | ECM and ACM, Reprogramming | 0.4 hrs |
| 2115-03-02-02 | Valve Cover, Replacement | Use Impact Time (0.9 - 1.9 hr.) |
| If Applicable | | |
| 2373-03-03-06 | Pressure Sensor, Common Rail, Replacement, Valve Cover Removed | 0.2 hrs |
| 2861-03-03-03 | Wiring Harness, Injector, Replacement (Rear), Valve Cover removed | Use Impact Time (0.3-0.4 hrs) |
| Causal Part | 22720232 | |
| SCC Authorization Code | S7568 | |

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Expiration Date

March 31, 2022

Parts Information

Special Order Information if applicable

| Configuration | Part Numbers | Part Names | Quantity |
|---|--------------|------------------------------------|----------|
| All | 85156544 | EPRV delete kit | 1 |
| If Applicable Parts (Reference Step 18) | | | |
| 13L Engine Only | 23488939 | Pressure Sensor, F2 Common Rail | 1 |
| 13L Engine Only | 23502054 | Wiring Harness, Rear | 1 |
| 11L Engine Only | 23488937 | Pressure Sensor, F2 Common Rail | 1 |
| 11L Engine Only | 23502057 | Wiring Harness, Rear | 1 |

Required Tools & Equipment

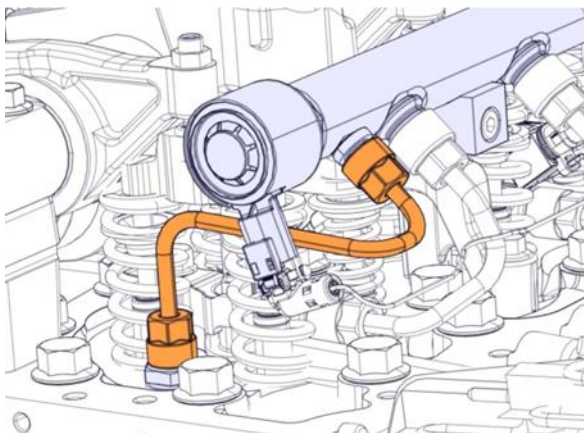
- Premium Tech Tool (PTT) with latest version
- 88800634 - Wrench

Calibration Information

- Accessory Kit: **85156014**

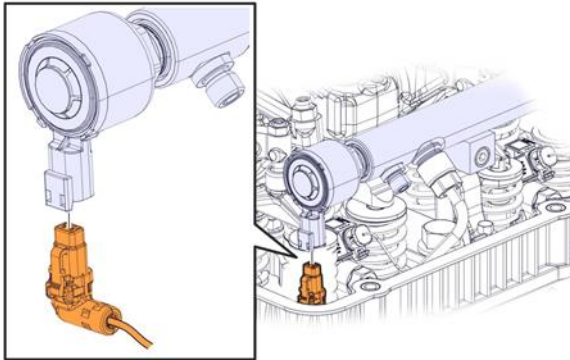
Repair Procedure

1. Refer to IMPACT document ID: 2115-03-02-02 Valve Cover, Replacement for valve cover removal procedure.
2. Loosen the cap nuts
3. Remove and discard the pipe.

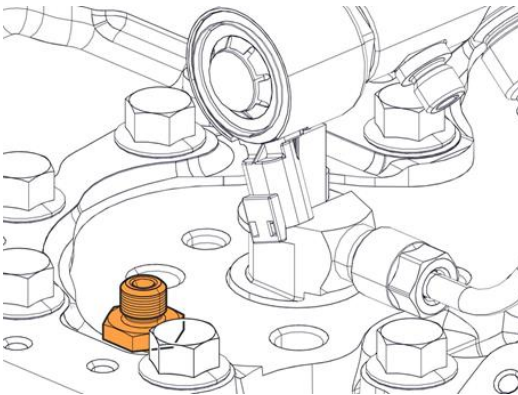


4. Disconnect the connector.

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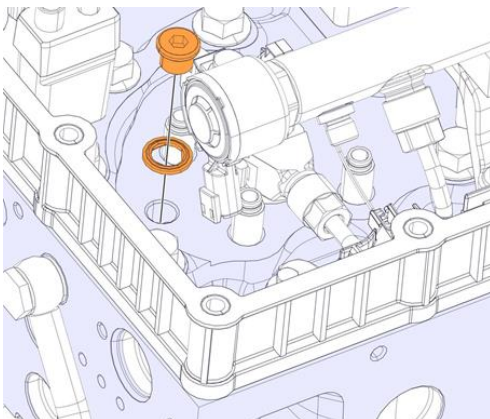


5. Clean the area around the fitting.
6. Remove the fitting and seal.



7. Install the seal and plug in the cylinder head.

| Tightening torque | |
|---------------------|------------------------------|
| Cylinder head, plug | 36± 6 lbf-ft. (50 ± 8 Nm) |

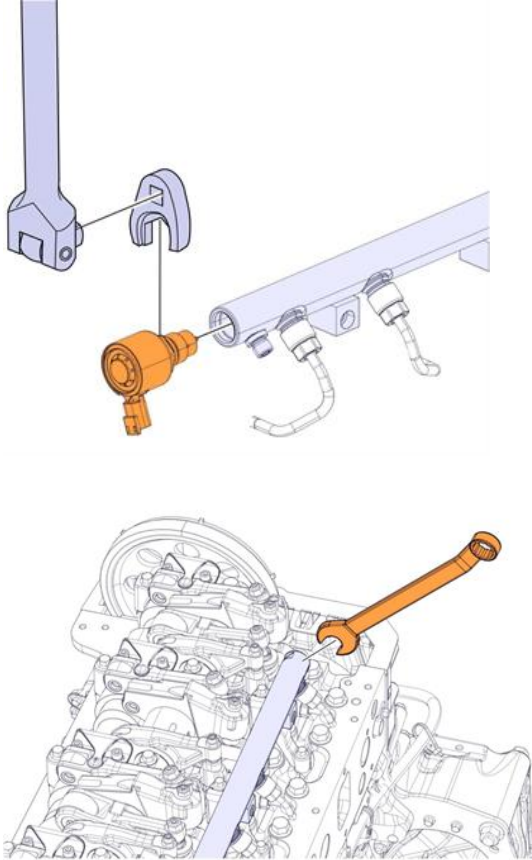


8. Install the tool. 88800634
9. Remove the valve.

Note: Use a spanner as a counterhold to prevent the common rail brackets and pressure

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pipes from being loaded during component removal and installation.



CAUTION

Risk of personal injury.

Loose particles can spatter up and injure the eyes. Work with compressed air can cause hearing impairment.

Always wear safety goggles and hearing protection when working with compressed air.

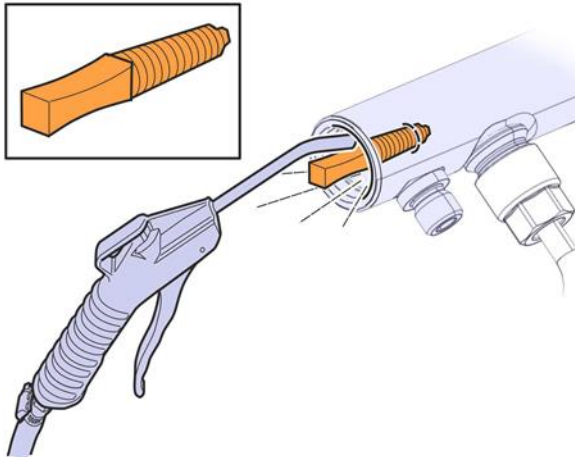
10. Install the protecting plug.

| Required material | |
|-------------------|----------|
| Protecting plug | 88800527 |

11. Clean the threads.

Note: Leave the protecting plug in place until installing the common rail plug.

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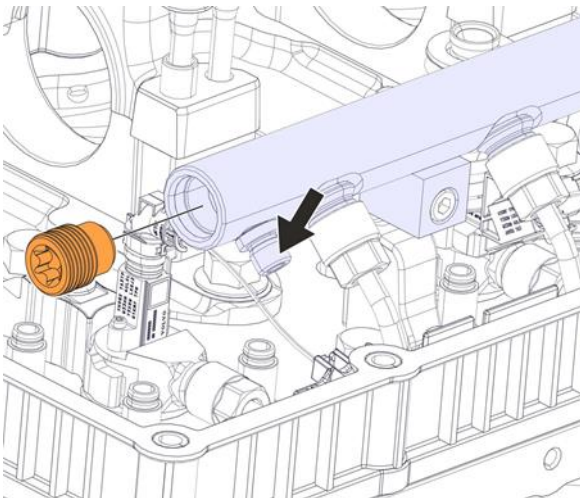
12. Remove the protecting plug.

13. Install the plug in the rail.

Note: Do not use locking fluid or thread sealant

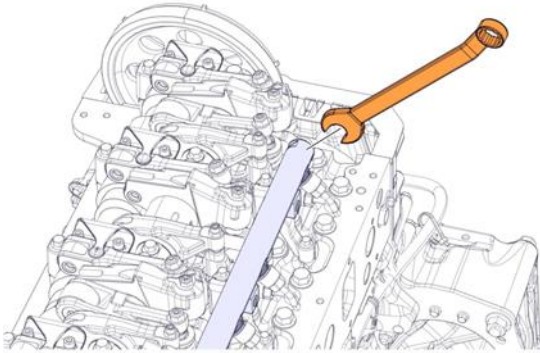
14. Torque tighten the plug.

| Tightening torque | |
|-------------------|--------------------------------|
| Common rail, plug | 92± 7 lbf-ft. (125 ± 10 Nm) |



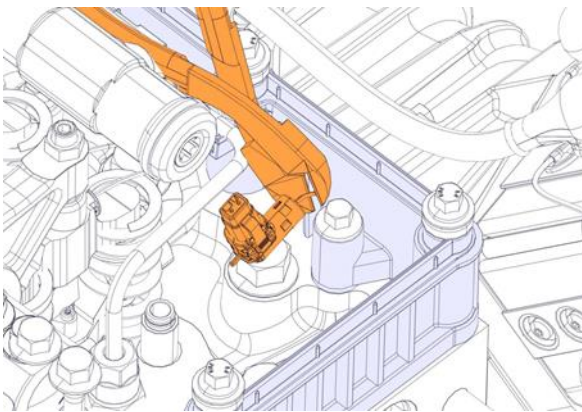
Note: Cap is not required to seal the common rail where the drain pipe connected.

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Note: Use a spanner as a counterhold to prevent the common rail brackets and pressure pipes from being loaded during component removal and installation

15. Cut the harness.
16. Remove connector and harness.



Note: Do not tape or seal the end of the harness

17. A product improvement has been made to the Fuel Rail Pressure Sensor (FRPS) and its wiring harness. A visual inspection of the FRPS electrical connector will indicate which sensor and wiring harness is on the vehicle.

| | |
|---|--|
|  |  |
| Old style Connection | New Improved Connector |

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18. Inspect the FRPS, if the Old Style Connector is found (Displayed above with red X), replace the sensor and wiring harness per Impact Instructions listed below. If the New Improved Connector is found, no farther action is needed and proceed to next step.
 - a. 2373-03-03-06 Pressure Sensor, Common Rail, Replacement, Valve Cover Removed
 - b. 2861-03-03-03 Wiring Harness, Injector, Replacement (Rear), Valve Cover Removed
19. Refer to IMPACT document ID: 2115-03-02-02 *Valve Cover, Replacement* for valve cover install procedure.
20. Using PTT Operation 1700-22-03-06 Program accessory kit: **85156014**
Note: Running this kit without removing the ePRV will result in adverse vehicle affects.