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**DEMAND PERFORMANCE**<sup>™</sup>

**18SP730 – EPA07/10 Three-Filter Fuel System DD13 High Pressure Fuel Feed Lines, Mounting Bracket and P-clips Service Kit (P/N: A0000701632)**



 **WARNING:**

**PERSONAL INJURY**

All parts provided within this kit must be installed in the proper locations, and **MUST** be fastened to the specified torque. Failure to properly torque hardware/components will result in failure of a high pressure fuel feed line, resulting in possible fire and/or personal injury.

 **WARNING:**

**PERSONAL INJURY**

All parts provided with this kit are single-use items and cannot be reused. Reuse of hardware/component items may result in the failure of a high pressure fuel line, resulting in possible fire and/or personal injury.

## NOTICE:

Failure to follow these instructions will result in catastrophic damage to the engine and will not be covered under warranty.

### **KIT DESCRIPTION**

This service kit includes all necessary parts to replace the high pressure fuel feed lines, mounting bracket and P-clips in the event one of these parts are loosened, removed or missing from the engine.

### **KIT CONTENTS**

Service kit P/N: A0000701632 contains all of the necessary parts to replace the high pressure fuel feed lines on EPA07/10 DD13 engines.

Part No.	Qty.	Description
A4710780410	2	High pressure fuel feed line
A4720700540	2	P-Clip
N000000007957	2	Bolt M6x12mm
N910105006024	1	Bolt M6x20mm
N910105008011	2	Bolt M8x20mm
A4730700440	1	Return lines P-clip
A4710700740	1	Mounting bracket
18SP730	1	Installation Instructions

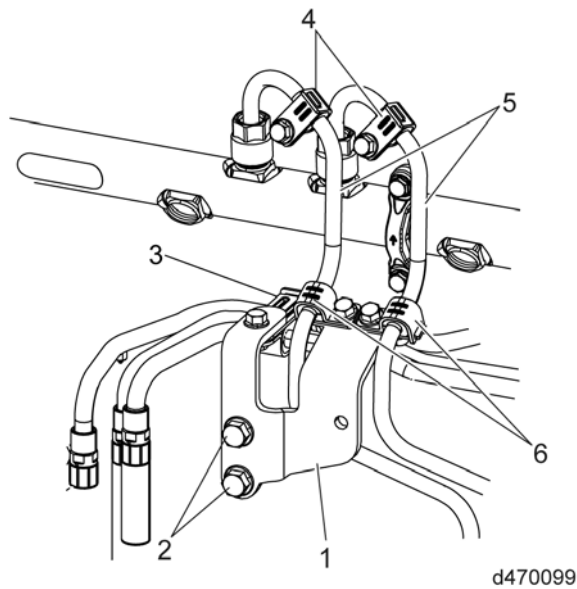
## Removal of the High Pressure Fuel Rail Feed Lines

Remove as follows:

### **WARNING:**

#### **PERSONAL INJURY**

**To prevent the escape of high pressure fuel that can penetrate skin, ensure the engine has been shut down for a minimum of 10 minutes before servicing any component within the high pressure circuit. Residual high pressure fuel may be present within the circuit.**



Item	Component
1	Mounting bracket
2	Mounting bracket bolts
3	Return lines P-clip and bolt
4	Vibration dampers and bolts
5	High pressure fuel feed lines
6	P-clips and bolts

1. Disconnect the batteries.
2. Remove and discard the return lines P-clip bolt from the mounting bracket (1).
3. Remove and discard the two bolts and P-clips (6) from the mounting bracket (1).
4. Remove and discard the mounting bracket bolts (2) from the intake manifold and discard the mounting bracket (1).

**NOTE:**

When using tool J-48770 to remove the high pressure fuel rail feed lines, hold the high pressure pump fittings with a 24mm wrench. If the high pressure pump fittings are loosened while removing the high pressure fuel rail feed lines, re-torque the fittings to 75 N·m (55 lb·ft).


- Using tool J-48770, remove and discard the high pressure fuel rail feed lines (5) and vibration dampers (4) from the fuel rail and high pressure fuel pump.
- Remove and discard the return lines P-clip (3).

## Installation of the High Pressure Fuel Rail Feed Lines

Install as follows:

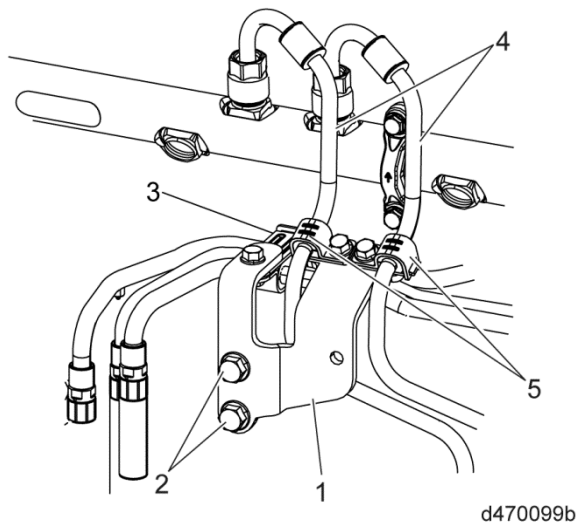
**NOTE:**

DO NOT install bolts and fittings using power tools. All bolts and fittings MUST be installed using hand tools.

 <b>WARNING:</b>
<b>PERSONAL INJURY</b>
<b>All hardware components must be installed in the proper locations, and MUST be fastened to the specified torque. Failure to properly torque hardware/components will result in failure of a high pressure fuel feed line, resulting in possible fire and/or personal injury.</b>

**NOTE:**

New high pressure fuel rail feed lines have permanent vibration dampers.



Item	Component	Part number
1	Mounting bracket	A4710700740
2	Mounting bracket bolts	N910105008011
3	Return lines P-clip and bolt	A4730700440 and N910105006024
4	High pressure fuel feed lines	A4710780410
5	P-clips and bolts	A4720700540 and N000000007957

1. Install the new return lines P-clip (3) (P/N: A4730700440) on to the return lines.
2. Clean the sealing area inside the high pressure fuel pump fittings using a clean lint free cloth.



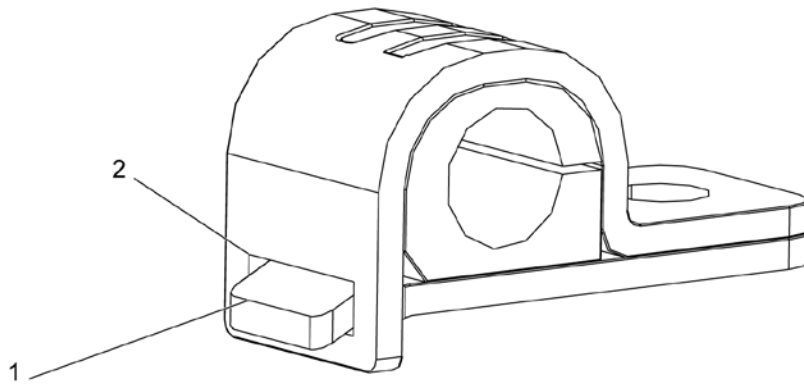
3. Clean the sealing area inside the high pressure fuel rail using a clean lint-free cloth.



4. Install the rear high pressure fuel line (4) (P/N: A4710780410) to the fuel rail and the high pressure fuel pump. Hand tighten the nuts.
5. Using tool J-48770, torque the rear high pressure fuel line nuts to 40 N·m (30 lb·ft).
6. Install the front high pressure fuel line (4) (P/N: A4710780410) to the fuel rail and the high pressure fuel pump. Hand tighten the nuts.
7. Using tool J-48770, torque the front high pressure fuel line nuts to 40 N·m (30 lb·ft).
8. Install the new mounting bracket (1) (P/N: A4710700740) and two new mounting bracket bolts (2) (P/N: N910105008011) to the intake manifold. Torque to 30 N·m (22 lb·ft).

**NOTICE:**

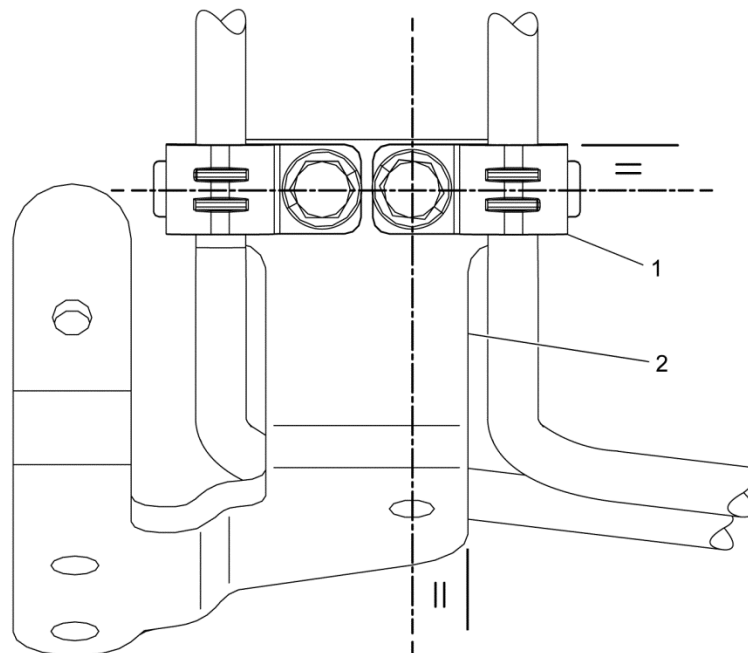
New P-clip MUST be installed on to the high pressure fuel rail feed lines with the Lower P-clip Plate (1) inserted in to the P-clip Window (2).



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**NOTE:**

New P-clips (1) **MUST** be installed perpendicular to the bracket (2) and parallel with each other. Hold P-clips in place during tightening to avoid rotation of the P-clips.



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9. Install two new P-clips (5) (P/N: A4720700540) and two new bolts (P/N: N000000007957) on to the high pressure fuel rail feed lines (5) and the mounting bracket (1). Torque to 15 N·m (132 lb·in.).

10. Install a new bolt (P/N: N910105006024) on to the return lines P-clip. Torque to 15 N·m (132 lb·in.).

**NOTICE:**

DO NOT use the high pressure fuel rail feed lines without new P-clips and bolts installed.



**CAUTION:**

**ELECTRICAL SHOCK**

**To avoid injury from electrical shock, use care when connecting battery cables. The magnetic switch studs are at battery voltage.**

11. Connect the batteries.
12. Prime the fuel system. [Refer to section "Priming of the Fuel System Using ESOC 350 Fuel Priming Pump."](#)
13. Perform the Rail Pressure Bleed-Off test to verify that there are no leaks. [Refer to section "Rail Pressure Bleed-Off Test Using DDDL \(EPA07\)."](#) [Refer to section "Fuel Injection System \(FIS\) Leak Detection \(EPA10\)."](#)
14. If there are leaks, find the leak and repair as necessary.



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**18SP730 1509** As technical advances continue, specifications will change. Printed in U.S.A.