



**DETROIT**<sup>TM</sup>  
**DEMAND PERFORMANCE**<sup>SM</sup>

**18SP699Rev – EPA10/GHG14 Two-Filter Fuel System KM59 GEN1 DD13 High Pressure Fuel Feed Lines, Mounting Bracket, Vibration Dampers and P-clips Service Kit (P/N: A4710706035)**



 **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, P-clips and vibration dampers in the event one of these parts are loosened, removed or missing from the engine.

### **KIT CONTENTS**

Service kit P/N: A4710706035 contains all of the necessary parts to replace the high pressure fuel feed lines on EPA10/GHG14 DD13 engines.

Part No.	Qty.	Description
A4710780010	2	High pressure fuel feed line
A4720700240	2	Vibration damper
A4720700540	2	P-Clip
N000000007957	2	Bolt M6x12mm
N910105006023	4	Bolt M6x16mm
A4710700840	1	Mounting bracket
18SP699Rev	1	Installation Instructions

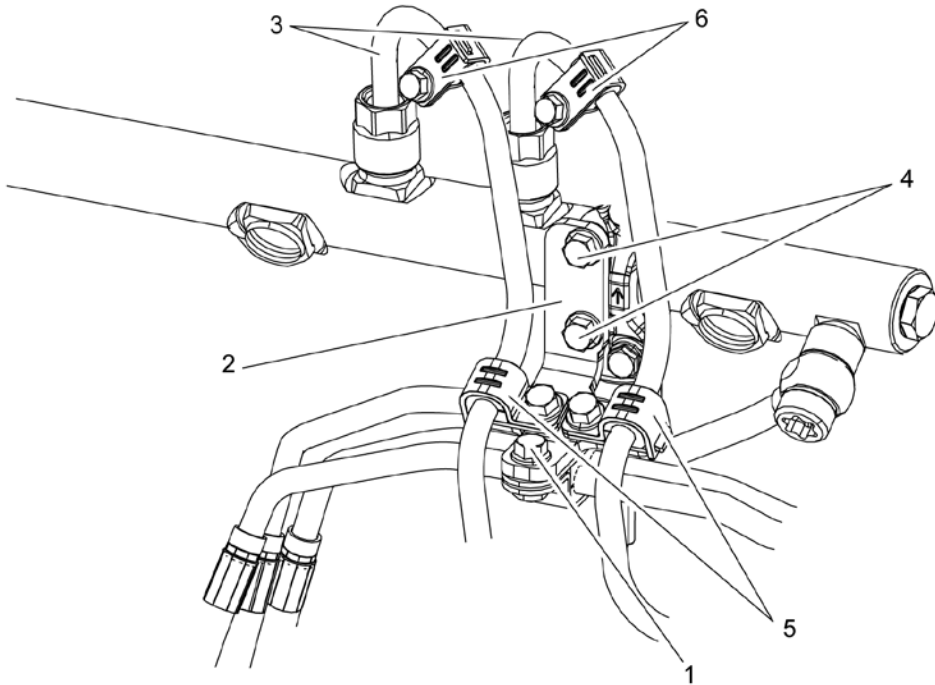
## Removal of the High Pressure Fuel Rail Feed Lines

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.**



d470160b

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

1. Disconnect the batteries.

Note: Do not discard the return lines P-clip and bolt. They will be reused on the installation of the high pressure fuel rail feed lines.

2. Remove the return lines P-clip bolt (1) from the mounting bracket (2).
3. Remove and discard the two bolts and P-clips (5) from the mounting bracket (2).
4. Remove and discard the mounting bracket bolts (4) from the fuel rail clamp and discard the mounting bracket (2).

**NOTE:**

When using tool J-48770 to remove the high pressure fuel rail feed lines, hold the high pressure pump fitting with a 24mm wrench.


5. Using tool J-48770, remove and discard the high pressure fuel rail feed lines (3) and vibration dampers (6) from the fuel rail and high pressure fuel pump.

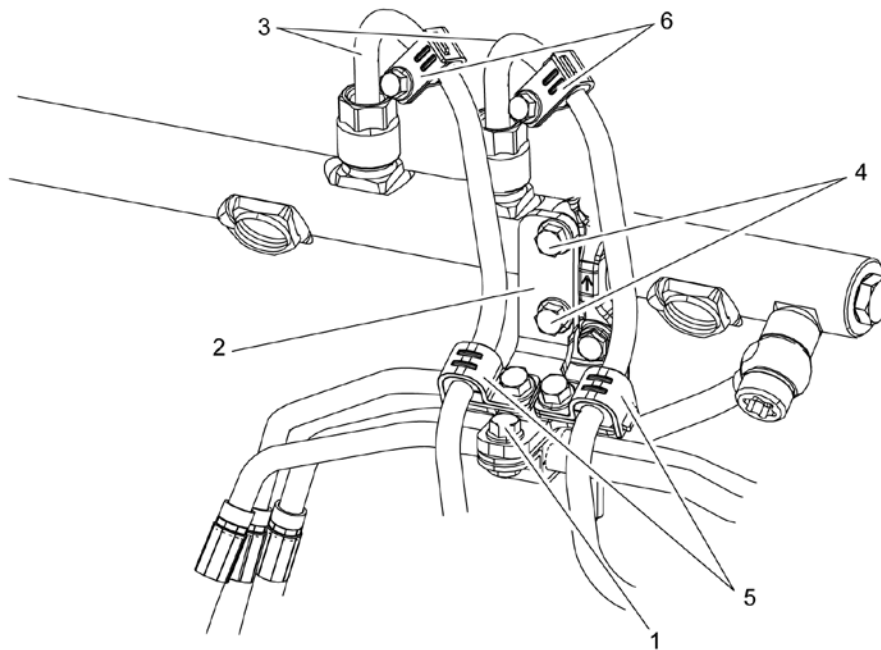
# Installation of the High Pressure Fuel Rail Feed Lines

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>
<p>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.</p>



d470160b

Item	Component	Part number
1	Return lines P-clip	Reused
2	Mounting bracket	A4710700840
3	High pressure fuel feed lines	A4710780010
4	Mounting bracket bolts	N910105006023
5	P-clips and bolts	A4720700540 and N000000007957
6	Vibration dampers and bolts	A4720700240 and N910105006023

1. Clean the sealing area inside the high pressure fuel pump fittings using a clean lint-free cloth.



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

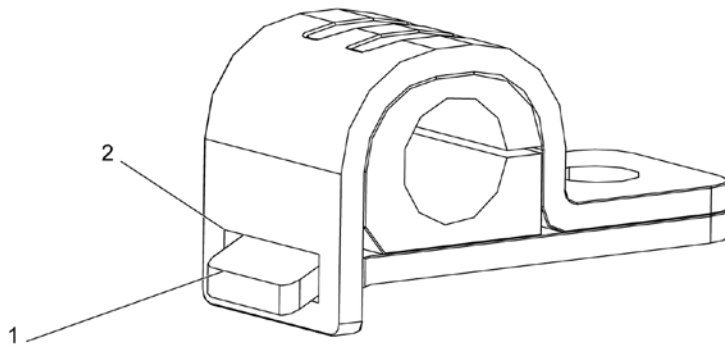


3. Install the rear high pressure fuel line (3) (P/N: A4710780010) to the fuel rail and the high pressure fuel pump. Hand tighten the nuts.
4. Using tool J-48770, torque the rear high pressure fuel line nuts to 40 N·m (30 lb·ft).

5. Install the front high pressure fuel line (3) (P/N: A4710780010) to the fuel rail and the high pressure fuel pump. Hand tighten the nuts.
6. Using tool J-48770, torque the front high pressure fuel line nuts to 40 N·m (30 lb·ft).
7. Install the new mounting bracket (2) (P/N: A4710700840) and two new mounting bracket bolts (4) (P/N: N910105006023) to the fuel rail clamp. Torque to 15 N·m (132 lb·in.).

**NOTICE:**

New P-clip/vibration dampers **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/vibration damper window (2). See figure below.



d470247

8. Install two new P-clips (5) (P/N: 4720700540) and two new bolts (P/N: N000000007957) on to the high pressure fuel rail feed lines (3) and the mounting bracket (2). Torque to 15 N·m (132 lb·in.).
9. Install two new vibration dampers (6) (P/N: A4720700240) and two new bolts (P/N: N910105006023) on to the high pressure fuel rail feed lines (3). (Refer to illustration for proper location of the vibration dampers). Torque to 15 N·m (132 lb·in.).
10. Reinstall the return lines P-clip bolt (1). Torque to 15 N·m (132 lb·in.).

**NOTICE:**

**DO NOT** use the high pressure fuel rail feed lines without new P-clips, vibration dampers 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 Two Filter Fuel System"](#)  
[Refer to section "Fuel Injection System \(FIS\) Leak Detection \(EPA10\)."](#)
14. If there are leaks, find the leak and repair as necessary.



13400 Outer Drive, West, Detroit, Michigan 48239-4001  
Telephone: 313-592-5000  
[WWW.DEMANDETROIT.COM](http://WWW.DEMANDETROIT.COM)

---

Specifications are subject to change without notice. Detroit Diesel Corporation is registered to ISO 9001:2008. Copyright © Detroit Diesel Corporation. All rights reserved. Detroit™ is a brand of Detroit Diesel Corporation, a Daimler company.

**18SP699Rev 1405** As technical advances continue, specifications will change. Printed in U.S.A.