

## 18SP722 – DD13 KM59 GEN1 Bus Two-Filter System Amplifier, Needle and PLV Return Fuel line Clearance Package Service Kit (P/N: A4710708635)

### KIT DESCRIPTION

This service kit (P/N: A4710708635) contains all the necessary parts to replace the Amplifier, Needle and PLV Return Fuel lines on the DD13 with the KM59 GEN1 Two-Filter System.

### KIT CONTENTS

Part No.	Qty.	Description
A4710706835	1	PLV Return Line (Bus)
A4710705035	1	Amplifier Return Line (Bus)
A4710706935	1	Needle Return Line (Bus)
18SP722	1	Installation Instructions

### REPAIR PROCEDURE

# Removal of the Needle, Amplifier, and Pressure Limiting Valve (PLV) Return Lines – Two-Filter System

Remove as follows:

Note:

KM59 GEN1 fuel filter module return lines are secured to the module with banjo bolts.

- 1. Remove the return line p-clip bolt securing the return lines to the mounting bracket.
- 2. Remove the return line p-clip from the engine.
- 3. Using J-48836 to hold the cylinder head fitting, remove the needle return line from the cylinder head fitting using J-48770.
- 4. Remove the PLV return line from the fuel rail and discard sealing washers.
- 5. Using J-48836 to hold the cylinder head fitting, remove the amplifier return line from the cylinder head fitting using J-48770.
- 6. Remove the three banjo bolts securing the needle, amplifier and PLV from the fuel filter module.
- 7. Remove the needle, amplifier and PLV return lines from the engine.

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8. Remove both cylinder head fittings from the cylinder head and discard the sealing washers.

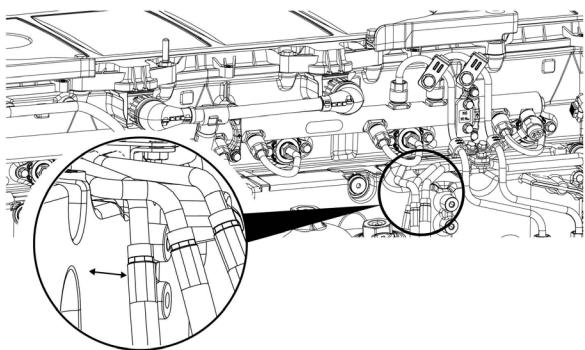
### Installation of the Needle, Amplifier, and Pressure Limiting Valve (PLV) Return Lines – Two-Filter System

Install as follows:

#### Note:

KM59 GEN1 fuel filter module return lines are secured to the module with banjo bolts.

- 1. Using new sealing washers, install both cylinder head fittings at the rear of the cylinder head. Torque to 55 to 60 N·m (40 to 44 lb·ft).
- 2. Install the needle and amplifier return lines on to the cylinder head fittings at the rear of the cylinder head. Hand-tighten the return lines. Do not torque at this time.
- 3. Install the PLV return line on to the fuel rail with new sealing washers. Hand-tighten the line. Do not torque at this time.
- 4. Install the return lines on to the fuel filter module with new sealing washers. Handtighten the lines. Do not torque at this time.
- 5. Install the return lines p-clip on to the return lines.
- 6. Install the return lines p-clip on to the mounting bracket. Torque to 15 N·m (11 lb·ft).
- 7. Using J-48770, torque the needle and amplifier return lines on to the cylinder head fittings at the rear of the cylinder head to 25 N·m (18 lb·ft).
- 8. Torque the PLV line to the fuel rail to 30 to 33 N·m (22 to 24 lb·ft).



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### NOTICE:

For KM59 GEN1 only, when tightening to the specified torque, ensure the amplifier return line to the fuel filter module does not come in to contact with the intake manifold.

- 9. Torque the return lines to the fuel module to 30 to 33 N·m (22 to 24 lb·ft).
- 10. Prime the fuel system, <u>Refer to section "Priming the Fuel System Using ESOC 350</u> <u>Fuel Priming Pump - Two-Filter System"</u>.



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