



18SP684Rev4 – EPA07 and EPA10 DD Platform EGR Delta Pressure Sensor Update

NOTE: This kit is to be used ONLY if the venturi pipe is plugged.

KIT DESCRIPTION

Two service kits have been released containing all components needed to replace the EGR Delta Pressure Sensor used on all EPA07 and EPA10 DD13 and DD15/16 engines.

The new parts became effective November 2, 2011, with DD15 engine S/N: 472903S0103639 and DD13 engine S/N: 471903S0103500.

KIT CONTENTS

The service kits in Table 1 below contain all necessary parts to replace the EGR Delta Pressure Sensor on EPA07 and EPA10 DD engines.

NOTE: The venturi pipe for the DD13 and the DD15/16 engines is **NOT** interchangeable.

Part No.	Description	DD13 Kit (P/N: 23539640)	DD15/16 Kit (P/N: 23539641)
A4701530228	EGR Delta Pressure Sensor	1	1
A4711404508	DD13 Venturi Pipe	1	NA
A4721402908	DD15/16 Venturi Pipe	NA	1
N910105006016	Bolts, Delta Pressure Sensor Mounting	2	2
A4721420880	Gasket	1	1
A0001500320	Delta Pressure Connector Pigtail with three crimp	1	1
A4729970353	Hose	1	1
A4729970245	O-ring	1	1
18SP684Rev4	Installation Instructions	1	1

Table 1 EPA07/EPA10 DD Platform, EGR Delta Pressure Sensor Installation Kits

REPAIR PROCEDURE

 WARNING: PERSONAL INJURY

To avoid injury, never remove any engine component while the engine is running.
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Use the following procedure to replace the EGR Delta Pressure Sensor.

REMOVAL PROCEDURE

1. Shut off engine and apply the parking brake, chock the wheels, open hood, disconnect vehicle battery power, and perform any other applicable safety steps.

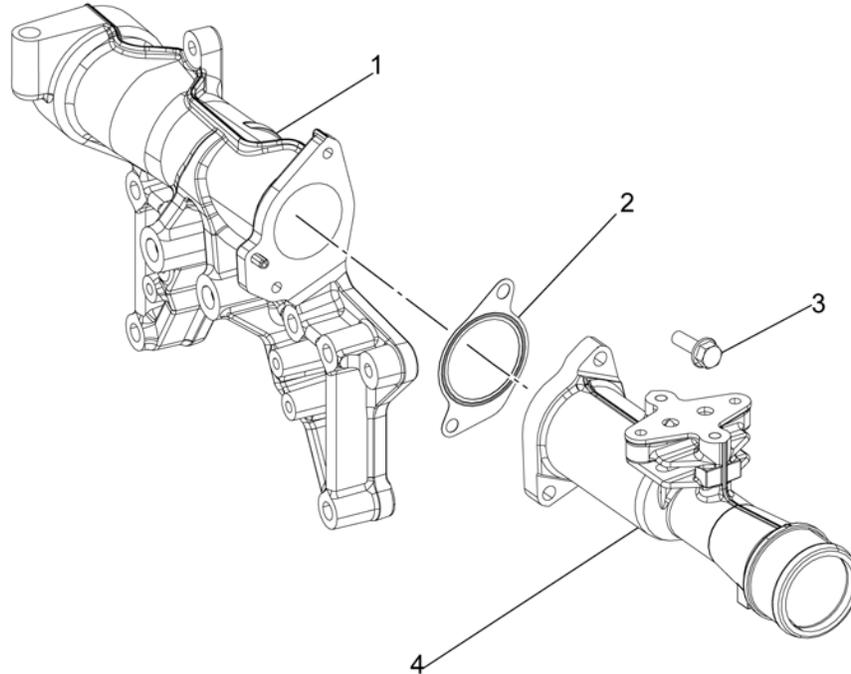
 WARNING: PERSONAL INJURY

Avoid injury from hot surfaces, wear protective gloves, or allow engine to cool before removing any component.

NOTE: Prior to performing the removal steps, ensure that the mixer pipe is not hot.

NOTE: The hose is a one-time-use item.

2. Loosen two hose clamps from hose on mixer pipe and venturi pipe. Slide the clamps over the mixer pipe as they will be reused.
3. Remove three bolts securing mixer pipe to cold boost pipe. Remove the remaining bolt above the intake throttle valve holding the mixer pipe. Save bolts for reuse.
4. Remove mixer pipe and seal from cold boost pipe. Save mixer pipe for reuse.
5. Remove and discard hose and seal.
6. Release harness connector on EGR Delta Pressure Sensor by pushing the orange tab up to unlock the connector; depress the thumb tab and remove the harness connector.
7. Remove the two bolts (3) from the venturi pipe (4) to the EGR crossover pipe (1) and remove the venturi pipe. Save bolts for reuse. Discard venturi pipe and gasket (2). See Figure 1.



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Figure 1 Venturi Pipe

INSTALLATION PROCEDURE

1. Install a new gasket (P/N: A4721420880) onto the EGR crossover pipe.
2. Install new venturi pipe (DD13 P/N: A4711404508 or DD15/16 P/N: A4721402908) onto the EGR crossover pipe with two bolts. Torque to 30 N·m (22 lb·ft).

NOTICE

Before the hose is installed on the mixer pipe, ensure there are no sharp edges that may cut the hose liner.

NOTE: If hose clamps have been removed from mixer pipe, they must be reinstalled prior to hose installation.

3. Install a new hose (P/N: A4729970353) on the mixer pipe.
4. Install a new seal (P/N: A4729970245) on mixer pipe and install onto the intake mixer housing with three bolts.
5. Insert the EGR cooler water manifold side of mixer pipe hose into the venturi and secure with two clamps. Torque clamps to 3.0 to 3.5 N·m (26 to 26.5 lb·in.).
6. Install the remaining bolt above the intake throttle valve. Torque the four bolts to 30 N·m (22 lb·ft).

7. Install new EGR Delta Pressure Sensor (P/N: A4701530228) to the venturi pipe with two new bolts (P/N: N910105006016). Torque to 10 N·m (7 lb·ft).
8. Strip the wires on the delta pressure sensor connector pigtail (P/N: A0001500320).
9. Install the wire crimps on the pigtail ensuring they are heat shrank properly.
10. Remove the old delta pressure connector by cutting the harness six inches from the connector.
11. Trim the conduit on the engine harness to expose the wires.
12. Strip the wires on the engine harness.

NOTICE:

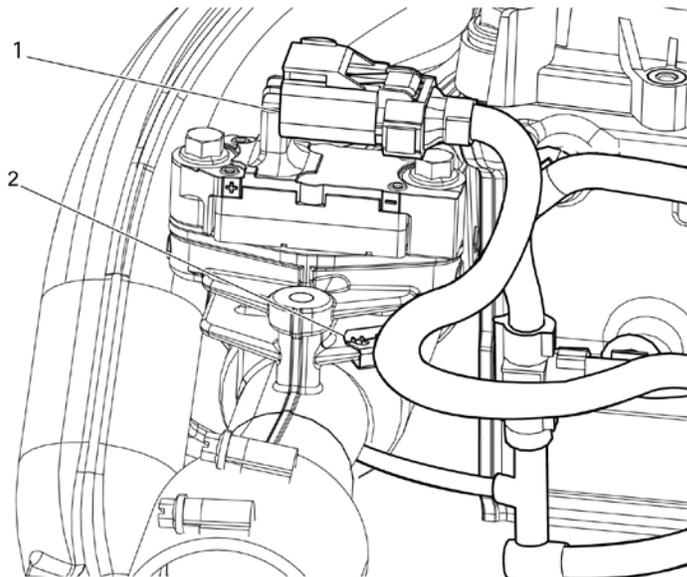
Do **NOT** apply the grease directly to the sensor connector terminals. Static electricity could cause electrical damage to the sensor.

13. Apply dielectric grease to the harness connector only using P/N: 23538278.
14. Connect the new pigtail to the delta pressure sensor.
15. Crimp the wires from the engine harness to the delta pressure sensor by matching the colors respectively. Ensure the crimps are heat shrank properly.
16. Wrap the exposed wires with electrical tape.

NOTICE:

Ensure the harness is not contacting the venturi pipe other than the mounting point or damage could occur.

17. Clip the harness for the delta pressure sensor (1) to the venturi pipe (2).



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CAUTION:

ELECTRICAL SHOCK

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

18. Connect the batteries.
19. Using DiagnosticLink™, calibrate the Delta Pressure Sensor.



WARNING:

ENGINE EXHAUST

To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.



WARNING:

PERSONAL INJURY

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

20. Close the hood.
21. Start the engine and confirm repairs.



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