



18SP684Rev. – EPA07 and EPA10 DD Platform, EGR Delta Pressure Sensor Update

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

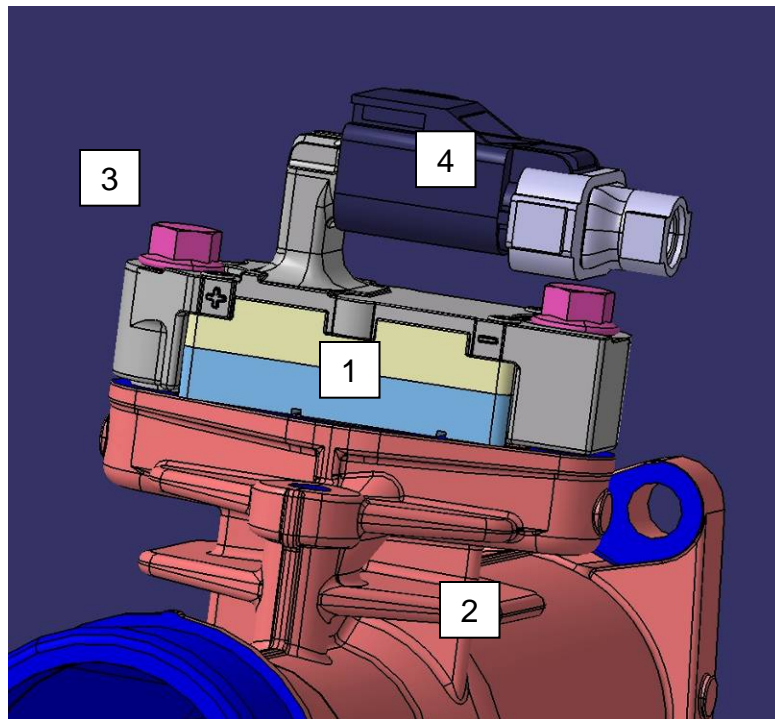
The service kits in Table 1 below contain all necessary parts to replace the EGR Delta Pressure Sensor on EPA07 and EPA10 DD engines.

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

Part No.	Description	DD13 Kit (P/N: A0091537728)	DD15/16 Kit (P/N: A0091537828)
A4701530028	EGR Delta Pressure Sensor	1	1
A4711404508	DD13 Venturi Pipe	1	NA
A4721402908	DD15/16 Venturi Pipe	NA	1
N910105006016	Bolts	2	2
A4721420880	Gasket	1	1
A0435454428	Connector	1	1
A4729970353	Hose	1	1
A4729970245	Seal	1	1
018SP684Rev.	Installation Instructions	1	1

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

See Figure 1 for the new style EGR Delta Pressure Sensor kit components.



- 1. EGR Delta Pressure Sensor
- 2. EGR Venturi Pipe
- 3. Bolt
- 4. EGR Delta Pressure Sensor Electrical Connector

Figure 1 New EGR Delta Pressure Sensor Components

REPAIR PROCEDURE

WARNING: **PERSONAL INJURY**

To avoid injury, never remove any engine component while the engine is running.

Use the following procedure to replace the EGR Delta Pressure Sensor. Reference Figure 2 for component location.

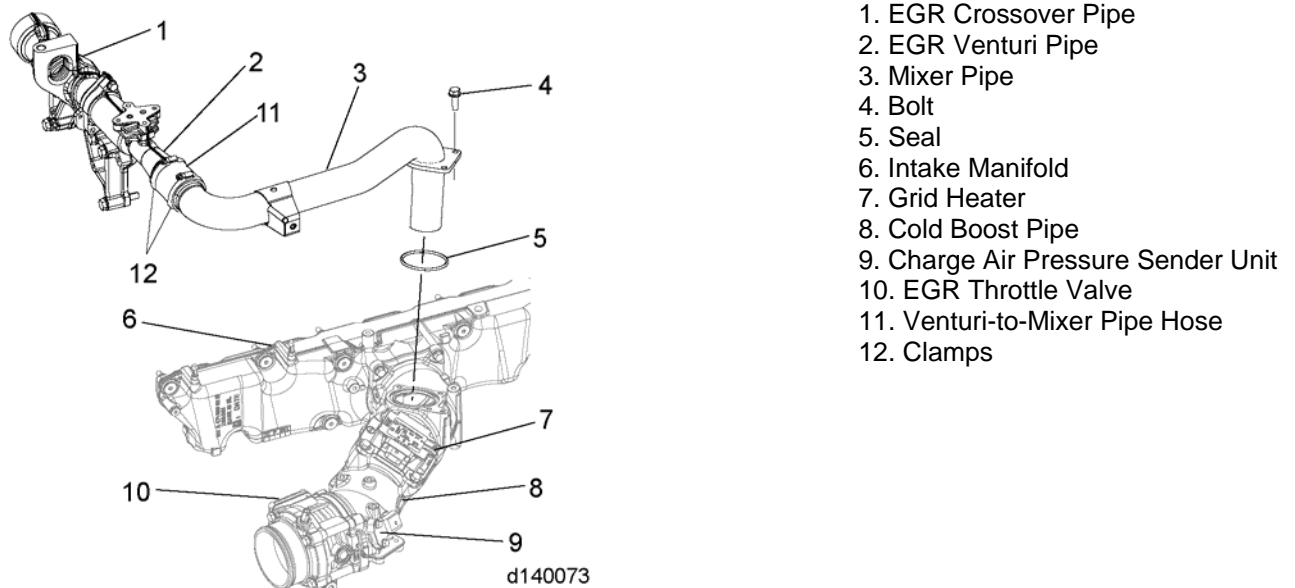


Figure 2 EGR Delta Pressure Sensor Components

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 from the venturi pipe to the EGR crossover pipe and remove the venturi pipe. Save bolts for reuse. Discard venturi pipe and gasket. See Figure 3.

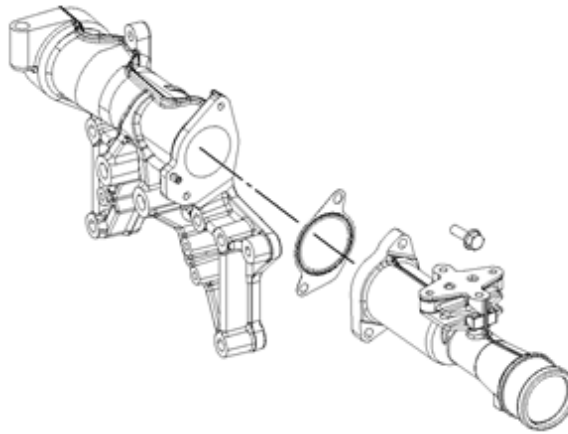


Figure 3 Venturi Pipe

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: A4701530028) to the venturi pipe with two new bolts (P/N: N910105006016). Torque to 10 N·m (7 lb·ft).

NOTICE:

Do not cut the delta pressure sensor connector off the harness; the terminals will be reused with the new connector.

8. Remove the terminals from the EGR Delta Pressure Sensor connector on the Engine Sensor Harness and install them in the new connector (P/N: A0435454428). The former connector has a different key pattern and cannot be used with the new sensor. The terminals will be installed into the same cavities as they were removed from. Reference Figures 4 and 5.

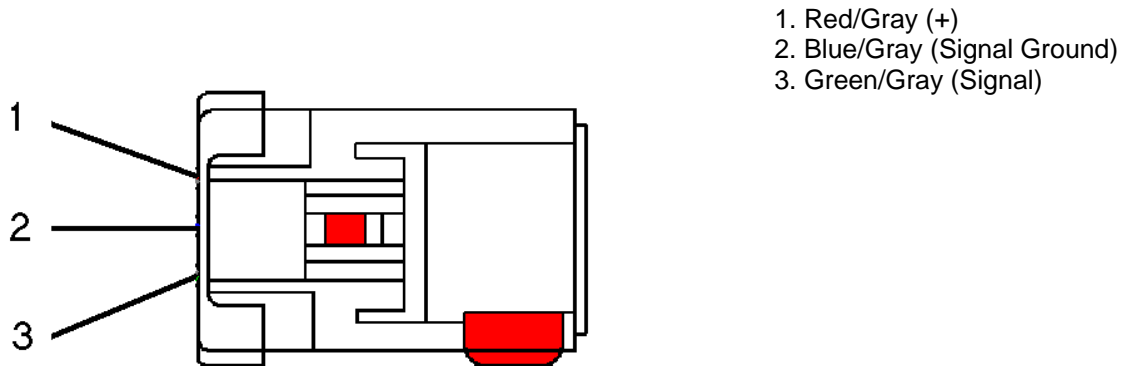
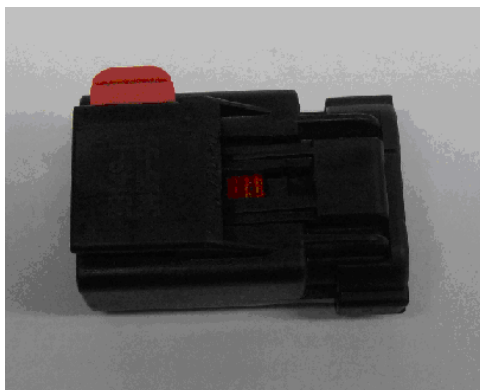
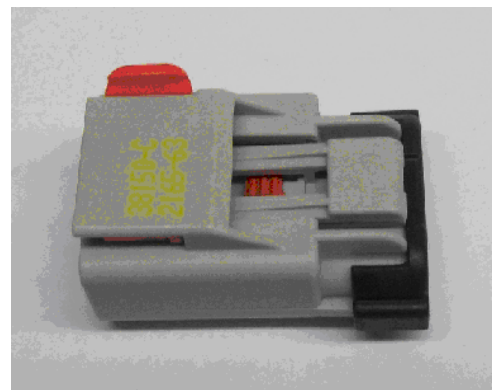


Figure 4 Engine Sensor Harness Connector

9. The new connector is black in color. The former connector is gray in color. Reference Figure 5.



New Connector



Former Connector

Figure 5 Connector Comparison

10. Plug the new connector into the EGR Delta Pressure Sensor.
11. Properly tie strap the connector pigtail so it does not contact the venturi pipe. See Figure 6.



Figure 6 **Connector Pigtail Routing**

12. Use DDDL/DDRS to perform the EGR Delta P Sensor Recalibration Service Routine under the Actions » EGR menu.
13. Start the engine and confirm repairs.



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18SP684Rev. 1201 As technical advances continue, specifications will change. Printed in U.S.A.