



Blue-Point®

EEDF400-571 & EEDF400-572 & EEDF400-385

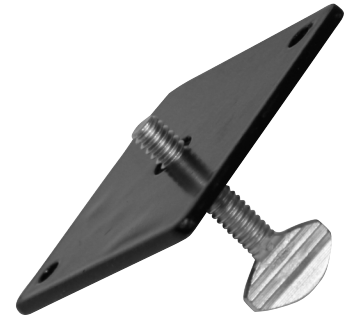
Cummins 6.7L (2500/3500) Diesel EGR Cleaning Instructions



Intake
EEDF400-571



Exhaust
EEDF400-572



EGR Manual Opener
EEDF400-385



WARNING: Wear gloves and safety goggles (User and bystanders) when performing this service

IMPORTANT: A DPF Regeneration event is required after this service. Regeneration can be initiated for many engines using one of the following Snap-on Diagnostic Tools:

- EEHD184040 Pro-Link Ultra (Snap-on)
- EEHD186030 Pocket IQ2 (Blue-Point)

EGR System Consists of:

- Cold side EGR valve (after EGR cooler) controls exhaust gases for proper emissions control of No_x gases
- EGR cooler (controls temperature of exhaust gases to the air intake to the engine)
- EGR cooler bypass valve (controls exhaust flow temperature to the air intake from the exhaust through the EGR cooler) – Model year 2008 - Present
- EGR temperature sensor (measures EGR cooler exhaust temperature and efficiency)

These items are critical for proper emissions management control and must be cleaned on a regular basis for optimum efficiency.

First steps before any service can be performed.

1. Add Blue-Point® Diesel Fuel Injector Cleaner (EEDF400-INJ) to vehicle's fuel tank.
2. Remove plastic engine cover.
3. If engine is hot, the EGR cooler must be cooled – see step 9.

Locations of EGR components:

- EGR cooler bypass valve and actuator
- EGR cooler outlet pipe
- EGR valve



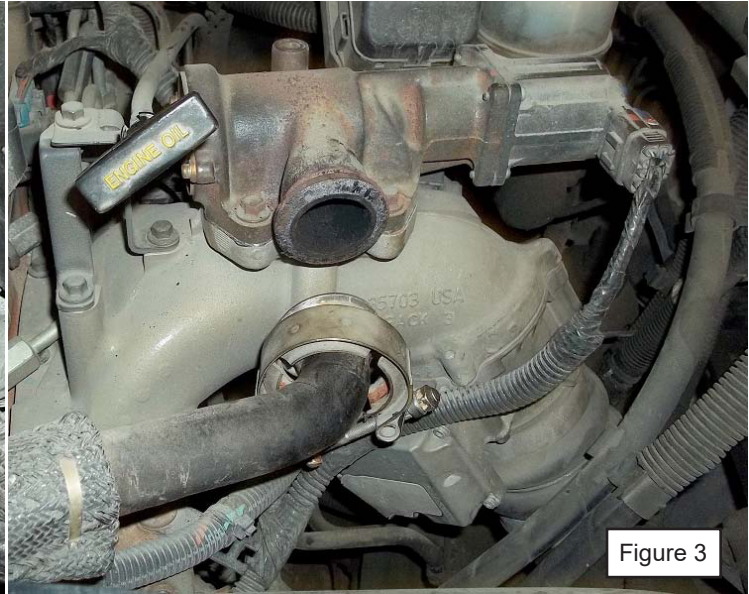
Figure 1

Tool & Manifold Required:

- EGR Tool (EEDF400)
- EGR Manifold (EEDF400M)



- Loosen clamp on EGR cooler outlet pipe and fully loosen and remove clamp at inlet to EGR valve, remove gasket and set aside and rotate EGR outlet cooler pipe downward (see figure 2 and 3).



- Install EGR Intake (EEDF400-571) and Exhaust (EEDF400-572) Adapters and reinstall EGR outlet cooler pipe valve clamp and tighten at both ends (see figure 4 and 5).

Note: Lubricate o-ring on EGR exhaust adapter before installing onto the EGR cooler outlet pipe, this will aid in the installation of EGR exhaust adapter



- Turn thumbscrew on EGR Manual Opener (EEDF400-385) fully counterclockwise but do not remove it from the adapter. Remove EGR valve solenoid (4 screws) and set aside, install EGR Manual Opener in its place using only two screws. Disconnect EGR valve solenoid electrical connector. Rotate thumb screw fully clockwise, EGR valve is now open (see figure 6). Alternately, a scan tool can be used to command the solenoid valve open and removal of the solenoid is not required, however the EGR valve solenoid electrical connector must be connected.

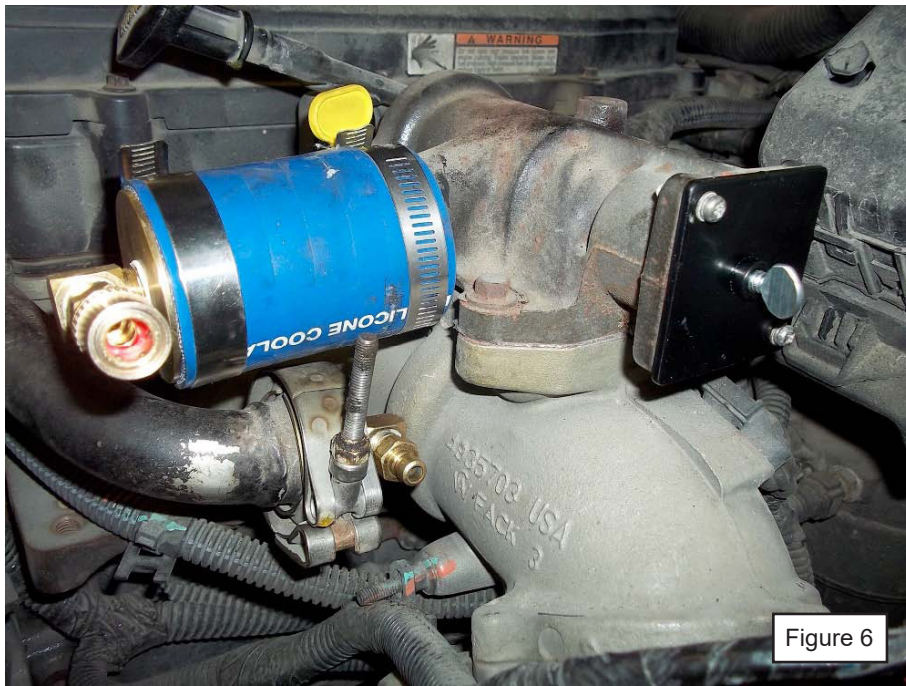


Figure 6

- Attach EGR manifold (EEDF400M) to EGR Intake and Exhaust Adapters. Attach EGR tool (EEDF400) to EGR Manifold. Ensure air valve and fluid valve are closed – see EGR tool user guide.
- Unscrew fill cap and fill with 32 oz (946 mL) of EGR and Induction System Cleaner (EEDF400-EGR). For first application or severe coking, 64 oz. may be required.
- Reinstall the fill cap and hang tool from the hood latch. Connect shop air. Set air pressure on EGR tool to 40-50 psi.

NOTE: If engine is hot, the EGR cooler must be cooled before treatment can start. Before step 9 can proceed, ignition must be on and using a scan tool, command the EGR open. Open EGR tool air valve, keeping the fluid valve closed, turn valve on the EGR manifold to exhaust and flush cooler with air for 2 minutes.

- Start vehicle engine

11. Disconnect EGR cooler bypass valve actuator electrical connector 2008-present this will close the EGR bypass valve (see figure 7). If vehicle does not have the EGR cooler bypass valve then skip this step and note in step 15.

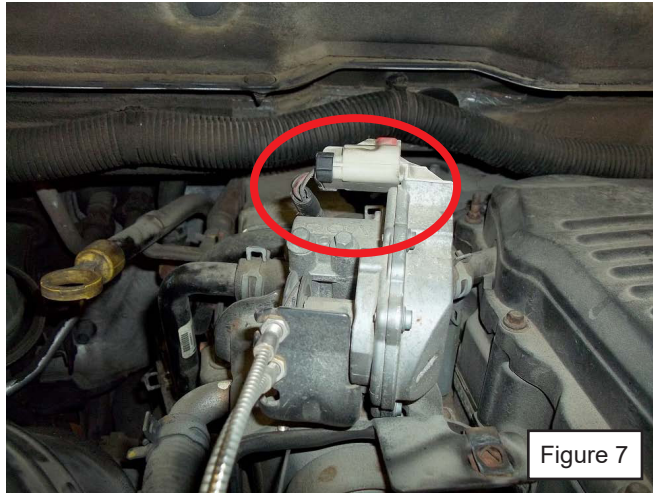


Figure 7

12. Set valve on EGR manifold to exhaust.
13. Open Air valve, adjust regulator to maintain initial pressure, then open the fluid valve on the EGR Tool.
14. After 1/4 of the fluid has been consumed, turn the fluid valve closed and let the air flow for an additional 2 minutes to flush deposits into exhaust stream.
15. Repeat step 14-15 allowing another 1/4 of the fluid to be consumed.

Note: During this step unplug and reconnect the EGR bypass valve actuator electrical connector several times through out this step. If the vehicle engine is too hot it may be necessary to manually cycle (counter clockwise) the EGR cooler bypass valve (see figure 8). The EGR cooler bypass valve actuator electrical connector must stay disconnected.

Alternately a scan tool can be used to cycle the EGR cooler bypass valve several times during this step. Reconnect the EGR cooler bypass valve actuators electrical connector. This will allow cleaning of the EGR cooler bypass port.

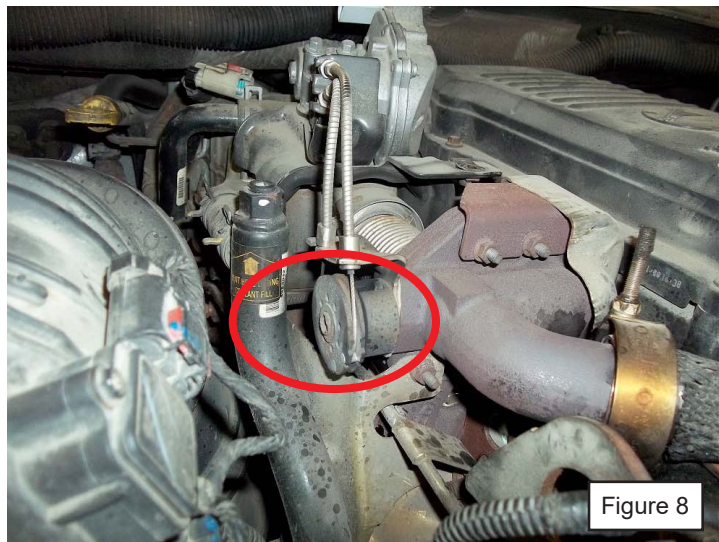


Figure 8

16. Turn valve on EGR adapter to intake, open fluid valve and continue service until EGR tool is empty (see figure 9).

Note: At any time during the intake service you hear a diesel knock sound, turn EGR manifold valve to off for 2 minutes. After two minutes then turn EGR manifold valve to intake and continue service.



Note: Let the vehicle operate for an additional 5 minutes and rev the engine several times to clear all residual fluid.

17. Turn the fluid and air valve on tool to the closed position. Turn Vehicle off. Detach shop air line and depressurize the tool by rotating the regulator knob counter clockwise.
18. Remove adaptors and reassemble vehicle components in the reverse order of removal.

IMPORTANT: A DPF Regeneration event is required after this service. Regeneration can be initiated for many engines using one of the following Snap-on Diagnostic Tools:

- EEHD184040 Pro-Link Ultra (Snap-on)
- EEHD186030 Pocket IQ2 (Blue-Point)

19. Otherwise the vehicle must be driven at highway speeds (or in the case of non-highway equipment operated under a load) for approximately 30 minutes. This is necessary to remove all of the cleaning solution from the passages and cooler(s) and to combust any material that has reached the diesel oxidation catalyst (DOC) and diesel particulate filters (DPF).

This must be completed immediately after the service.

Made in Canada

Blue-Point is a trademark of Snap-on Incorporated.
©Snap-on Incorporated 2017. Printed in Canada.
Snap-on, 2801 80th St., Kenosha, WI 53143
www.snapon.com

Fait en Canada

Blue-Point est une marque déposée de Snap-on Incorporated
©Snap-on Incorporated 2017-Imprimé en Canada
Snap-on, 2801 rue Kenosha WI 53143
www.snapon.com

Hecho en Canadá

Blue-Point es una Marca Registrada de Snap-on incorporado
©Snap-on incorporado 2017 Imprimido en Canadá
Snap-on, 2801 80th St., Kenosha, WI 53143
www.snapon.com