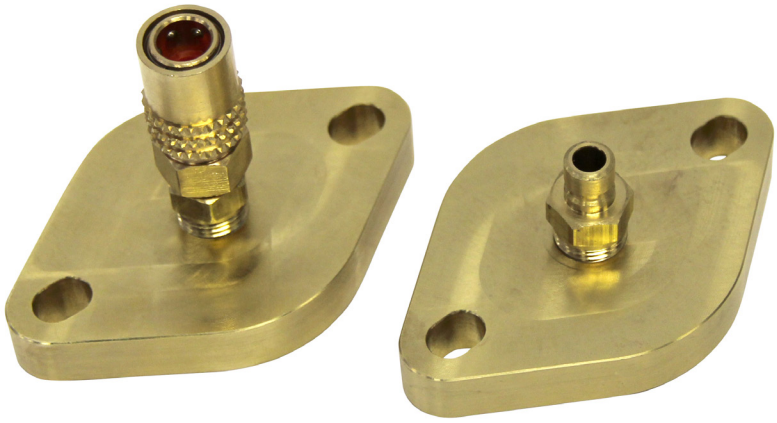
EEDF400-576 & EEDF400-577

Ford 6.7 L EGR Cleaning Instructions



Intake
EEDF400-576

Exhaust
EEDF400-577

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:

- Hot side EGR valve (before 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)
- EGR temperature sensor (measures EGR cooler exhaust temperature and efficiency)

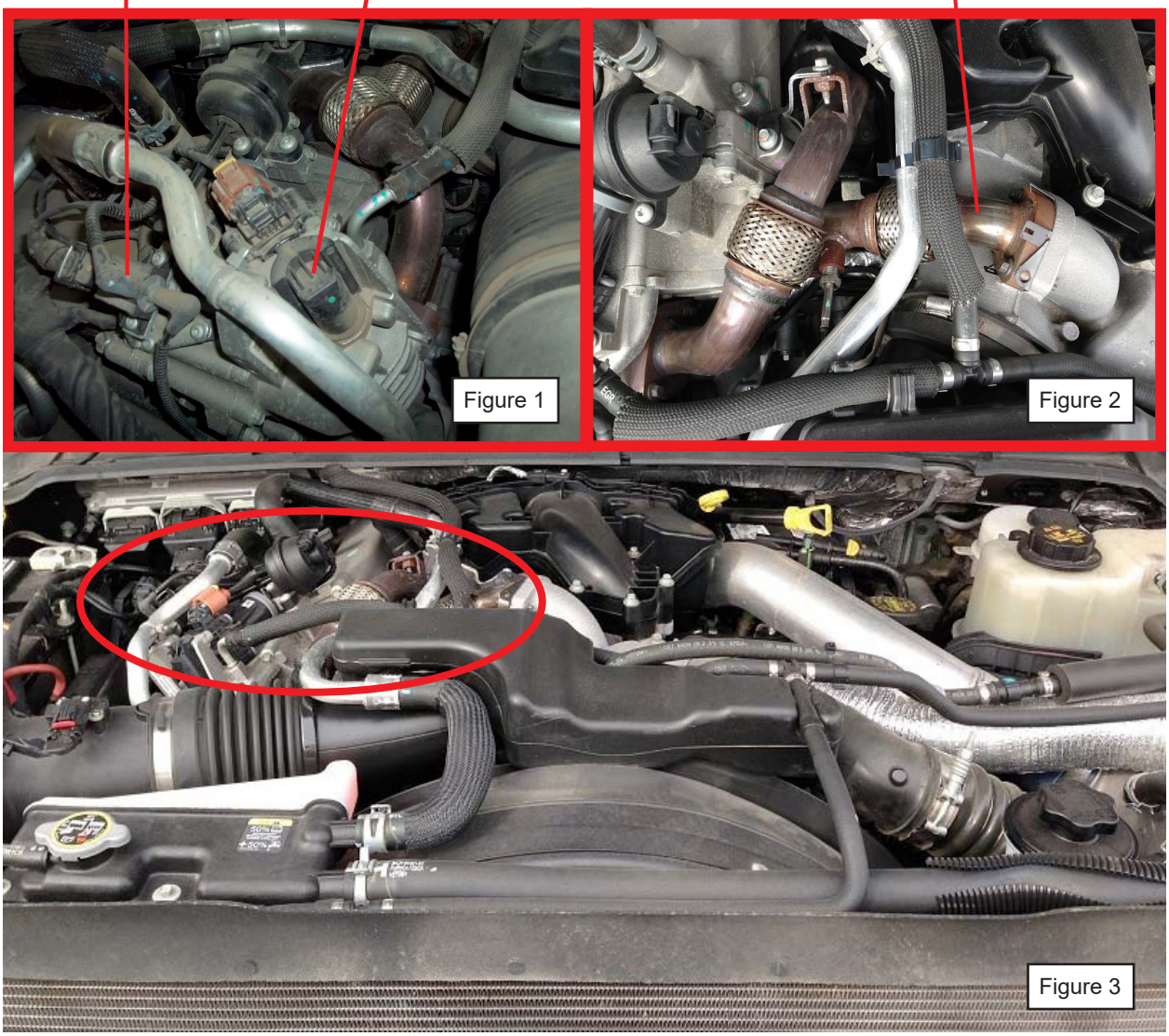
These items are critical for proper emissions management control and must be cleaned on a regular basis for optimum efficiency.

First steps before any service can be performed.

1. Add Blue-Point® (EEDF400-INJ) Diesel Fuel Injector Cleaner to the vehicle's fuel tank.
2. Remove the plastic engine cover.
3. If the engine is hot, the EGR cooler must be cooled – see step 8

Locations of EGR components:

- EGR cooler bypass valve vacuum hose
- EGR valve
- EGR cooler outlet pipe with EGR temperature sensor



Tool & Manifold Required:

- EGR Tool (EEDF400)
- EGR Manifold (EEDF400-M)

EEDF400M

EEDF400

4. Remove EGR cooler outlet pipe to intake plenum (4 screws), leaving EGR cooler temperature sensor connected. The air filter plenum may be required to be removed for easier access (see figure 4).

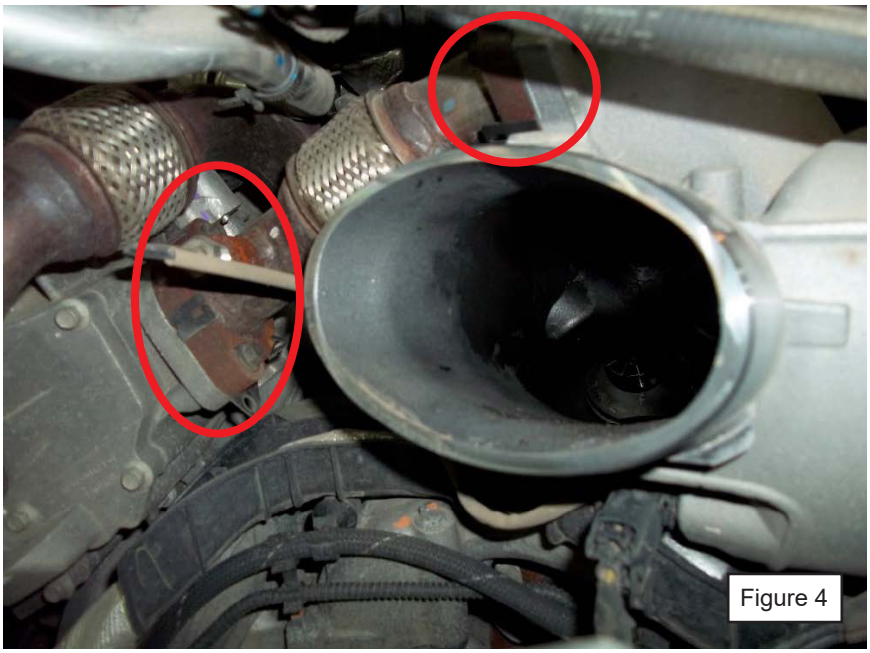


Figure 4

5. Install EGR Intake (EEDF400-576) and EGR Exhaust (EEDF400-577) Adapters (see figures 5 & 6) in place of above EGR cooler pipe and reinstall the air filter plenum and all its sensors. Ensure the exhaust side of the adapter is installed on the exhaust side and the intake side of the adapter is connected to the intake side.

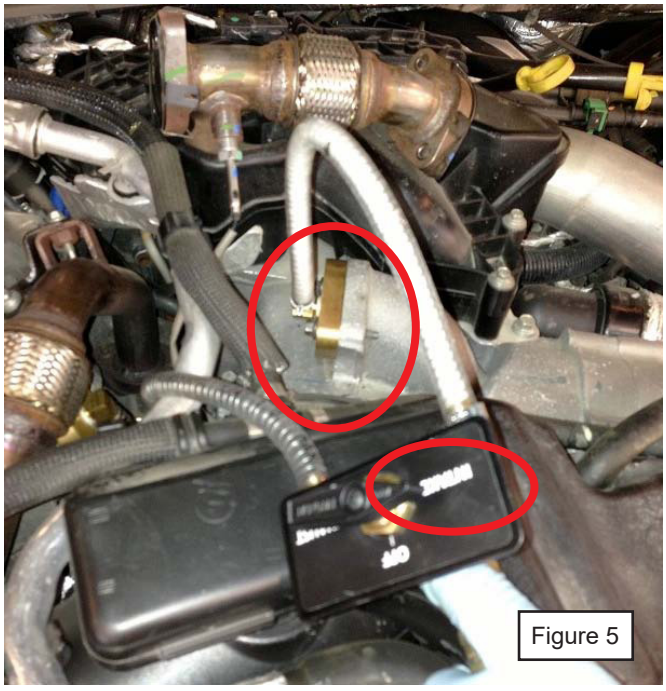


Figure 5

Figure 6

6. Attach EGR manifold (EEDF400M) to EGR intake and exhaust adapters. Attach EGR tool to EGR manifold. Ensure air valve and fluid valve are closed – see EGR tool user guide.
7. 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.
8. 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.

9. Start vehicle engine. Using the scan tool, command the EGR open. Disconnect EGR cooler bypass valve vacuum hose (see figure 7) this will close the EGR bypass valve.

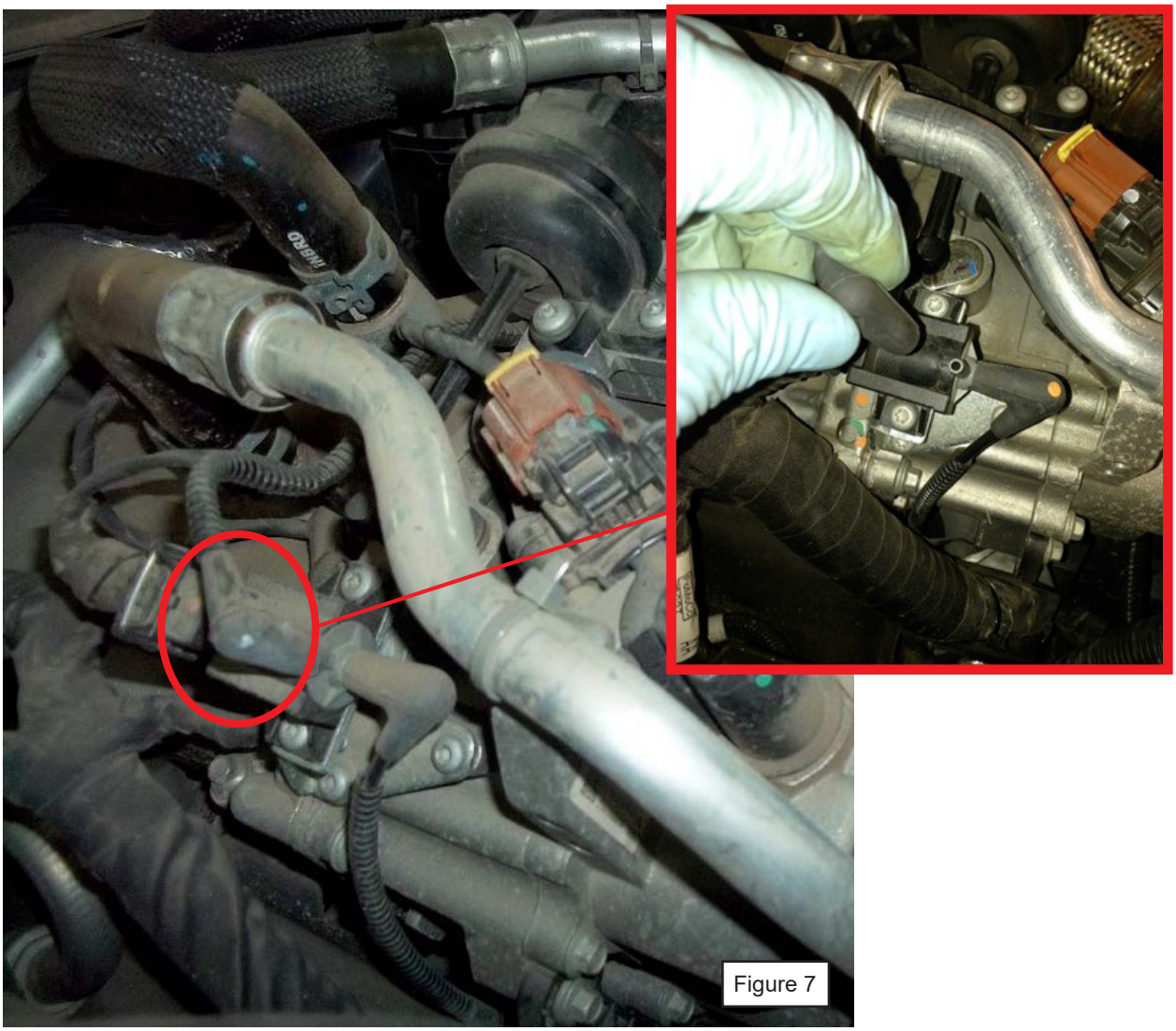


Figure 7

10. Set valve on EGR manifold to exhaust.
11. Open Air valve, adjust regulator to maintain initial pressure, then open the fluid valve on the EGR Tool.
12. After 1/4 of the fluid has been consumed, turn the fluid valve off and let the air flow for an additional 2 minutes to flush deposits into exhaust stream.

13. Repeat step 11-13 allowing another ¼ of the fluid to be consumed. Note: During this step cycle the EGR cooler bypass valve several times by unplugging and reconnecting the EGR bypass valve actuator vacuum hose (see figure 8) several times through out this step. This will allow cleaning of the EGR cooler bypass port.

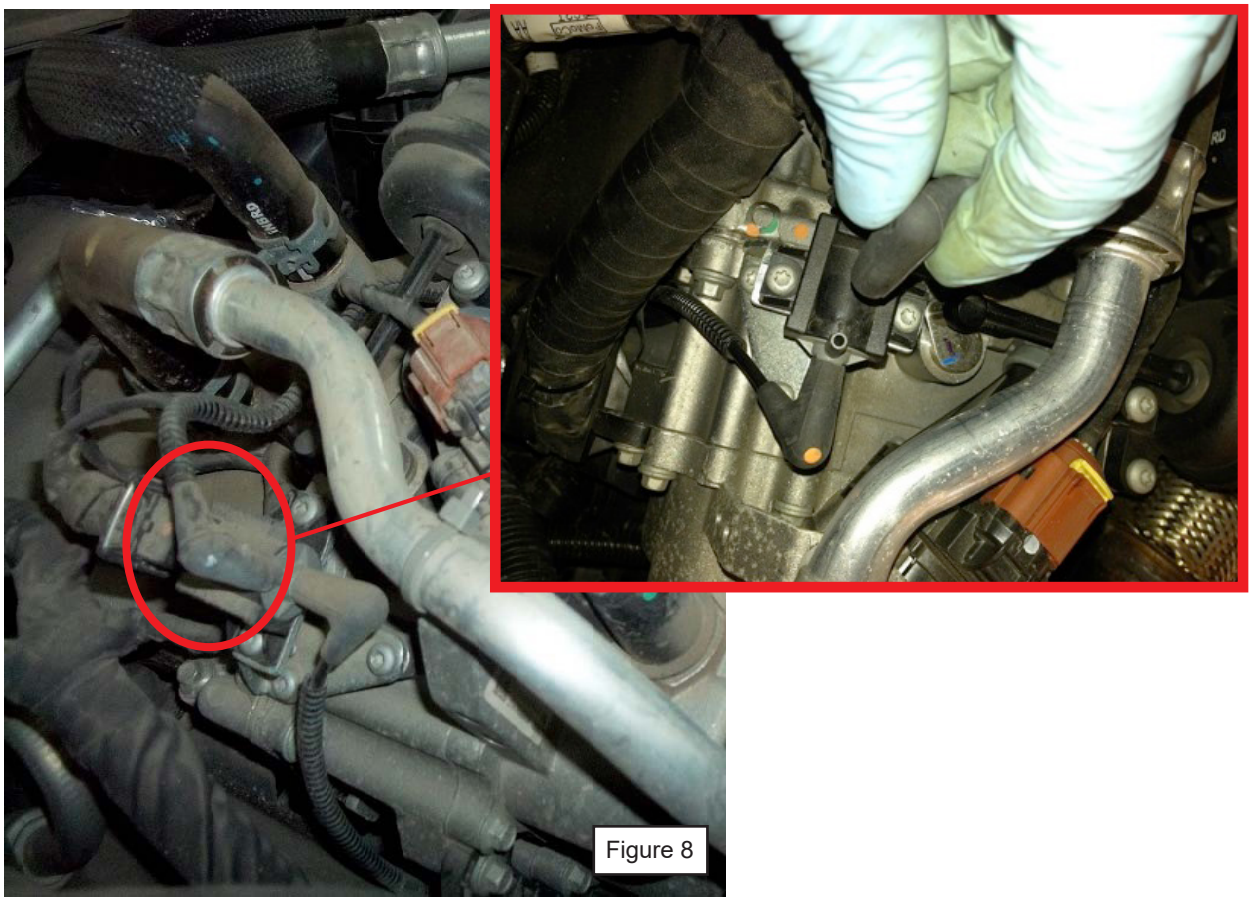


Figure 8

14. Turn EGR Manifold valve to intake, open fluid valve and continue service until EGR tool is empty.

    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.

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

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

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17. 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.**