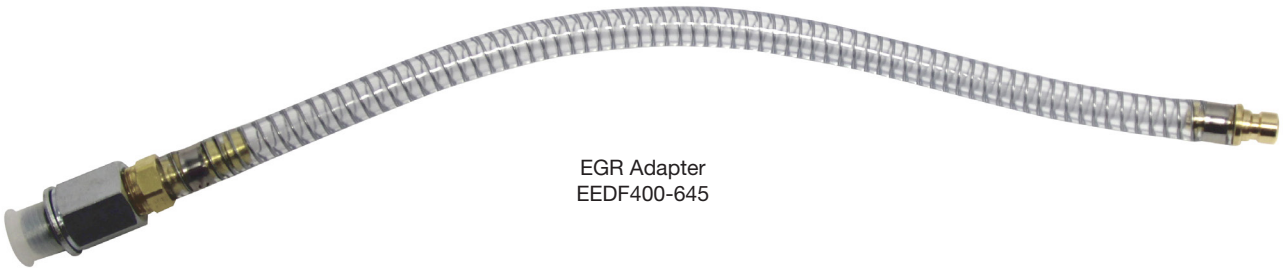
EEDF400-645

MaxxForce 7 6.4L EGR Cleaning Instructions



EGR Adapter
EEDF400-645

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 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 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 Valve (figure 1)
- EGR cooler temperature sensor (figure 2)

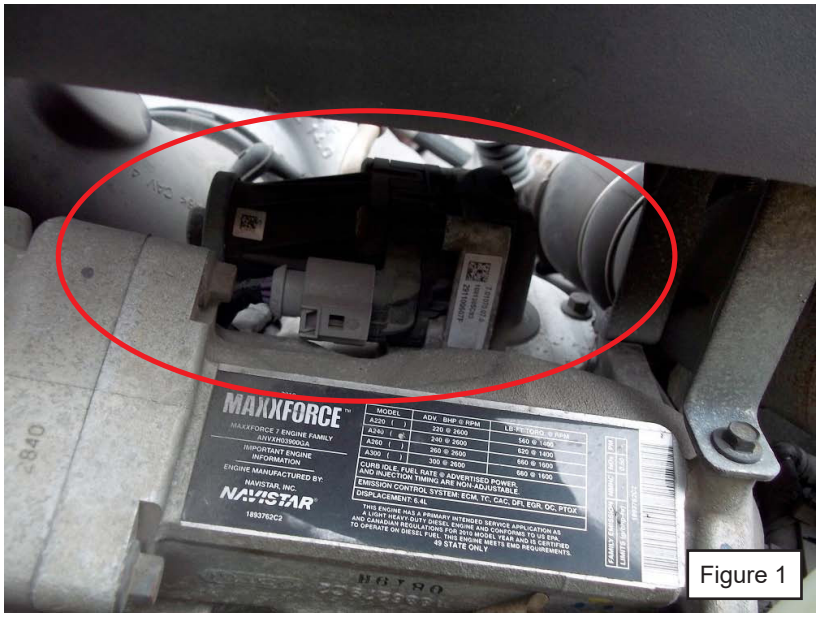


Figure 1

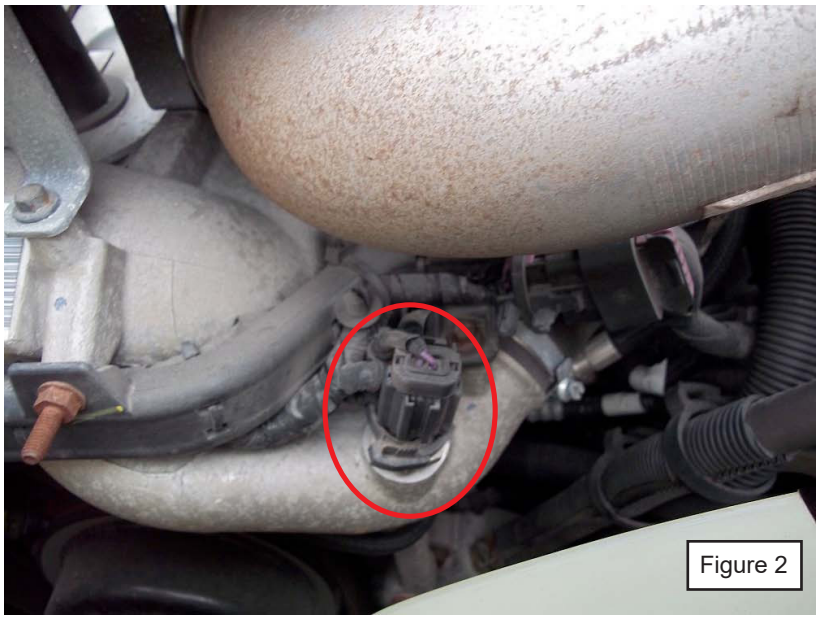


Figure 2

Tool & Manifold Required:

- EGR Tool (EEDF400)

EEDF400

4. Remove EGR cooler temperature sensor (see figure 2). Disconnect EGR valve electrical connector to close the EGR valve (see figure 3 & 4).

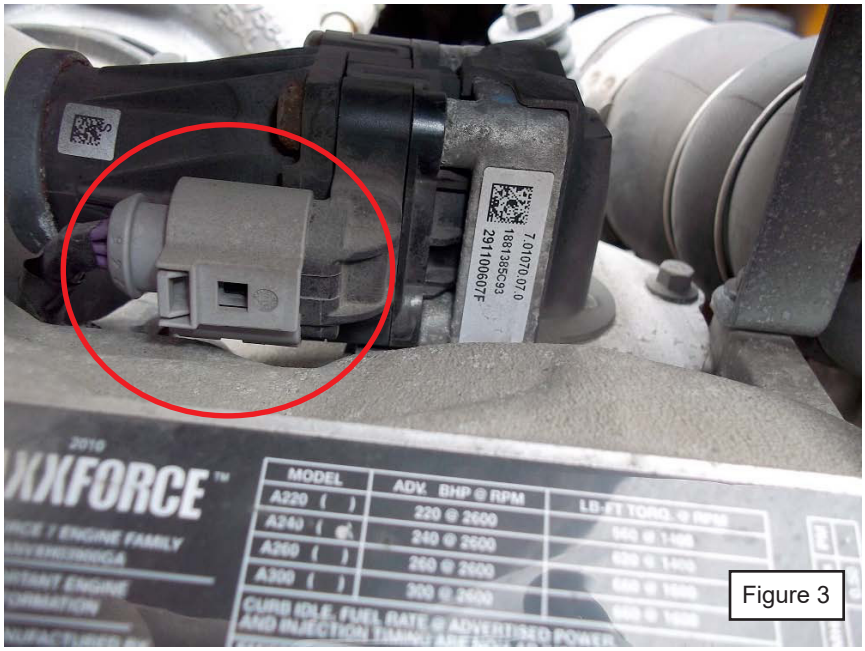


Figure 3

5. Install EGR Adapter (EEDF400-645) (see figure 4) in place of above EGR temperature sensor.

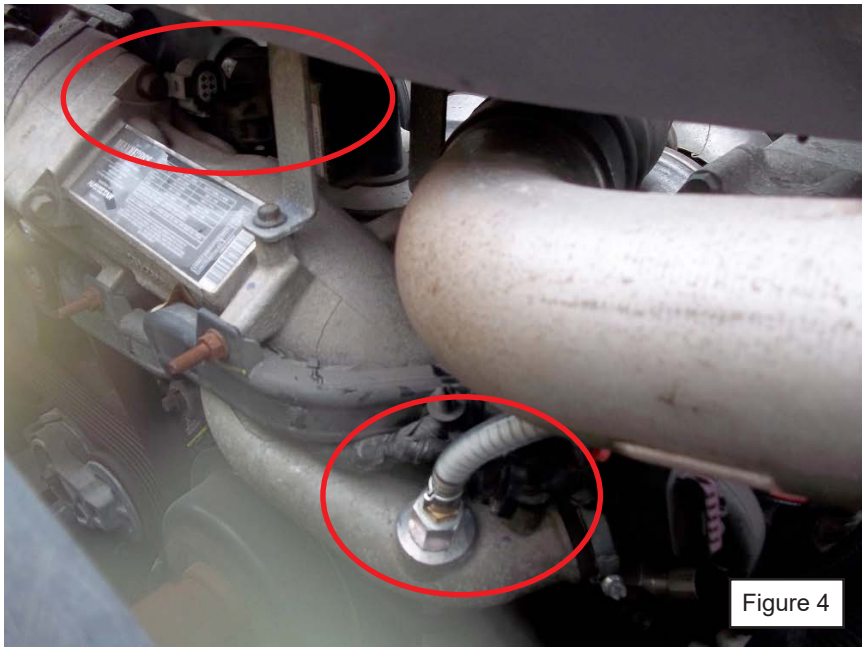


Figure 4

6. Attach EGR tool (EEDF400) to the EGR Adapter. 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. or more 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 off for the EGR system to be cooled. Open EGR tool air valve, keeping the fluid valve closed, and flush cooler with air for 2 minutes.

9. Start vehicle engine.
10. Open air valve on EGR tool, adjust regulator to maintain initial pressure and then open the fluid valve on the EGR tool.
11. 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.
12. Repeat step 10-11 allowing another 1/4 of the fluid to be consumed.
13. Reconnect EGR temperature sensor electrical connector to open EGR valve.
14. Open fluid valve. Continue service until EGR tool is empty.

    Note: At any time during the intake service (step 14) you hear a diesel knock sound, turn fluid valve to closed position for 2 minutes. After two minutes then turn fluid valve to open position 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 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 adapter and reassemble vehicle components in the reverse order of removal.
    Wipe off EGR temperature sensor using the EGR cleaning fluid before installing.

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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.**