



EEDF400-391

Audi/VW 3.0 L Diesel EGR Cleaning Instructions



EGR Adapter
EEDF400-391



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

IMPORTANT: Immediately after a service, a forced regen must be completed. If a regen cannot be commanded via a scan tool (see OEM recommendations), the vehicle must be road tested at highway speeds for approximately 20-30 minutes. This is necessary to remove any remaining cleaning solution from the passages and cooler(s), and to combust any material that has reached the diesel particulate filters (DPF).

This must be completed immediately after the service.

EGR System Consists of:

- Cold side EGR valve (after EGR cooler), which 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)
- Swirl flaps (control airflow under different engine speed and loads) – closed when engine is at idle and at low engine speeds – below 1250rpm

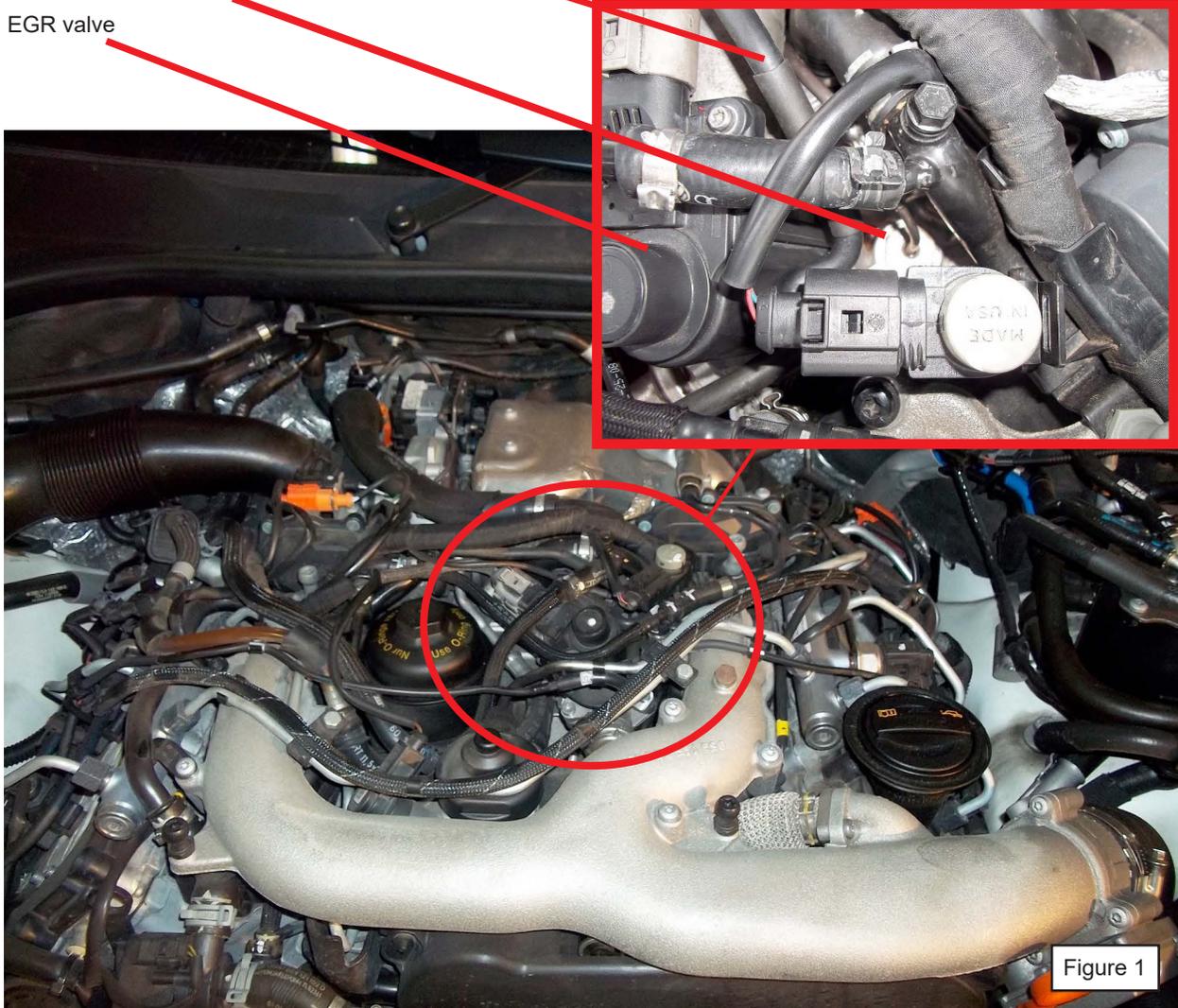
These items are critical for proper emissions management control and must be cleaned on a regular basis for optimum efficiency.

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 9.

Locations of EGR components:

- EGR cooler bypass valve vacuum hose
- EGR temperature sensor
- EGR valve



Tool & Manifold Required:

- EGR Tool (EEDF400)
- 17mm Socket (FRXM17)



FRXM17



EEDF400

4. Specialty Socket – see next page

5. Remove EGR test connector.

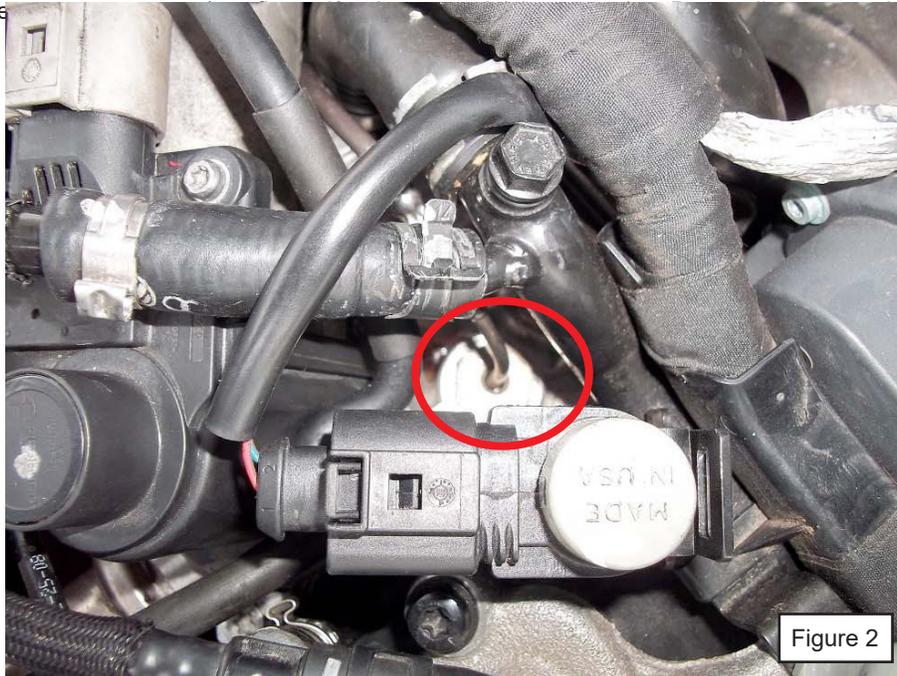


Figure 2

6. Install EGR Adapter (EEDF400-391) in its place (see figure 3).

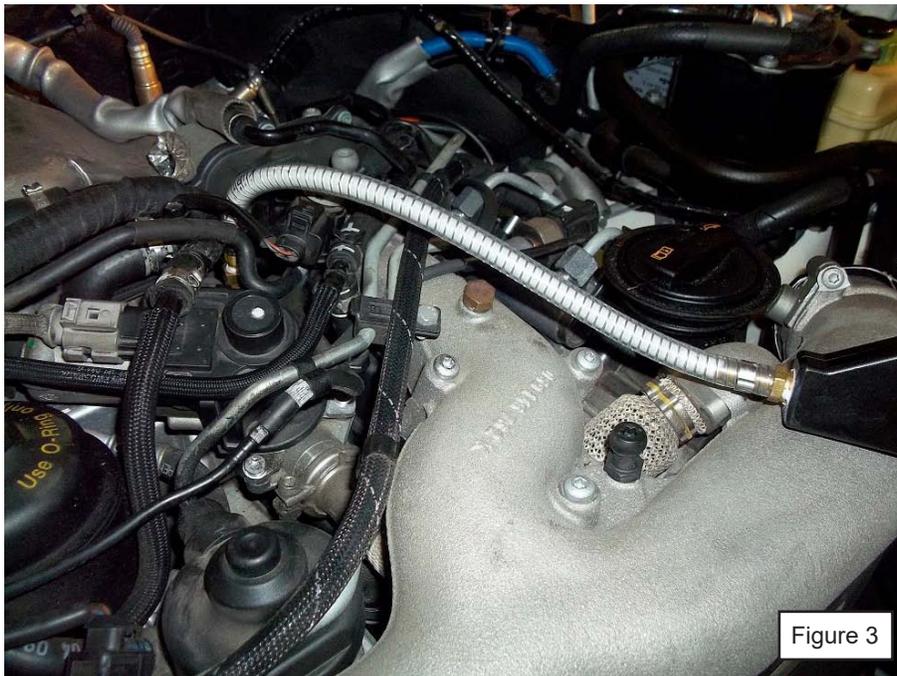


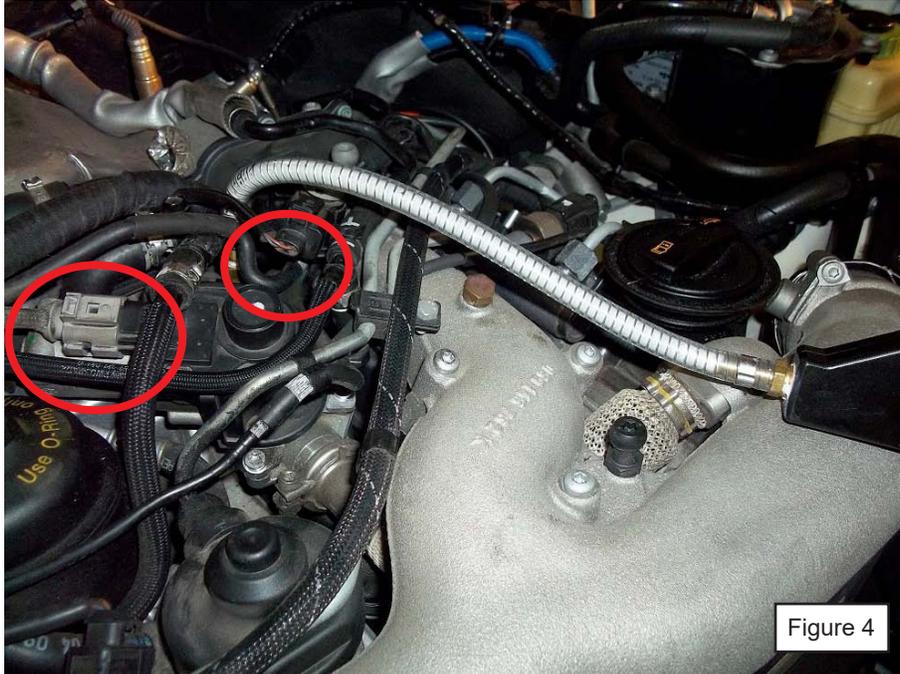
Figure 3

7. Attach EGR Tool (EEDF400) to EGR adapter. Ensure air valve and fluid valve are closed – see EGR tool user guide.
8. Unscrew fill cap and fill with 32oz (946mL) of EGR and Induction System Cleaner (EEDF400-EGR). For first application or severe coking, 64 oz. may be required.
9. 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 10 can proceed, ignition must be off for the EGR to be closed. Open canister air valve, close canister fluid valve and flush cooler with air for 2 minutes.

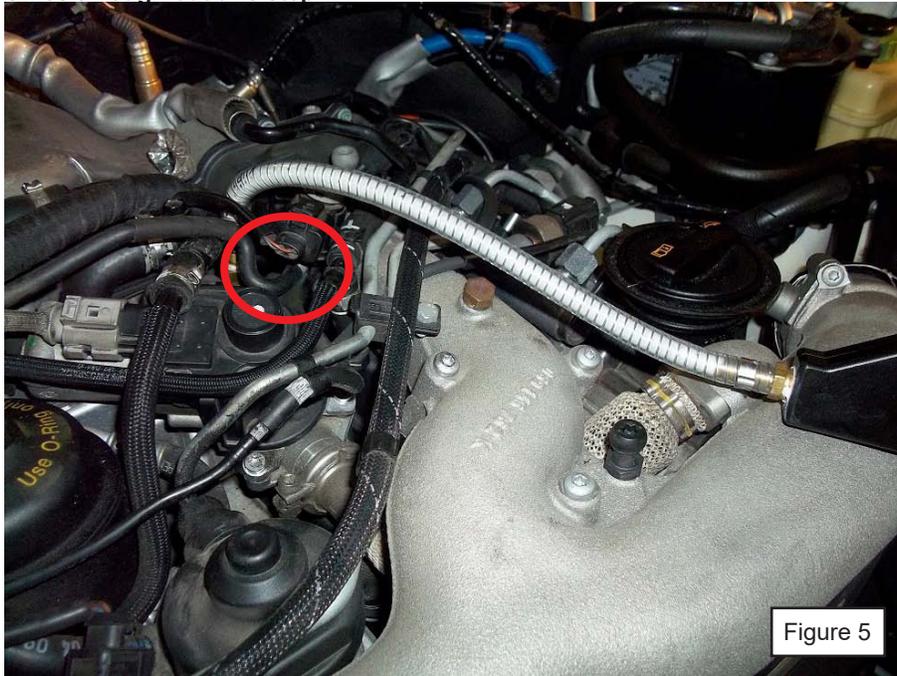
10. Start vehicle engine. Using the scan tool, command the EGR closed. Disconnect EGR cooler bypass valve vacuum hose (see figure below) this will close the EGR bypass valve.

Note: If no scan tool is available disconnect the EGR wire connector (see figure below) this will close the EGR valve.



11. Open Air valve, adjust regulator to maintain initial pressure, then open the fluid valve on the 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 10-12 allowing another 1/4 of the fluid to be consumed. Note: During this step cycle the EGR cooler bypass valve (see figure 2) several times using the scan tool. This will allow cleaning of the EGR cooler bypass port.

Note: If no scan tool available unplug and reconnect the EGR bypass valve actuator vacuum hose (see figure below) several times through out this step.



14. Using a scan tool, command the EGR valve and swirl flaps open.

Note: If no scan is available reconnect the EGR wire connector, raise engine rpm to 1500 this will allow the EGR and the swirl flaps to open.

15. Open fluid valve. Continue service until EGR tool is empty.

Note: At any time during the intake service (step 15) 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.

16. 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.
17. Remove adaptor and reassemble vehicle components in the reverse order of removal. Wipe off EGR temperature sensor using the EGR cleaning fluid before installing.

18. Immediately after a service, a forced regen must be completed. If a regen cannot be commanded via a scan tool (see OEM recommendations), the vehicle must be road tested at highway speeds for approximately 20-30 minutes. This is necessary to remove any remaining cleaning solution from the passages and cooler(s), and to combust any material that has reached the diesel particulate filters (DPF).

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