EEDF400-520

VW (Engine Code CJAA/CBEA) 2.0 Liter TDI EGR Cleaning Instructions

EGR Adapter
EEDF400-520

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).
<u>This must be completed immediately after the service.</u>

EGR System Consists of:

- 1 Hot side EGR valve (no EGR cooler), a high pressure loop which controls exhaust gases for proper emissions control of NOx gases
- 1 Cold side EGR valve (after EGR cooler), a low pressure loop which controls exhaust gases for proper emissions control of No_x gases located after DOC+DPF filter
- EGR cooler (controls temperature of exhaust gases to the air intake to the engine) – low pressure loop only
- 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 the plastic engine cover.
3. If the engine is hot, the EGR cooler must be cooled – see step 8

Locations of EGR components:

- EGR valves – high pressure loop (figure 1)
- EGR valve and cooler found after DOC+DPF filter (figure 2) low pressure loop
- EGR temperature sensor on low pressure loop (figure 2)

Figure 1

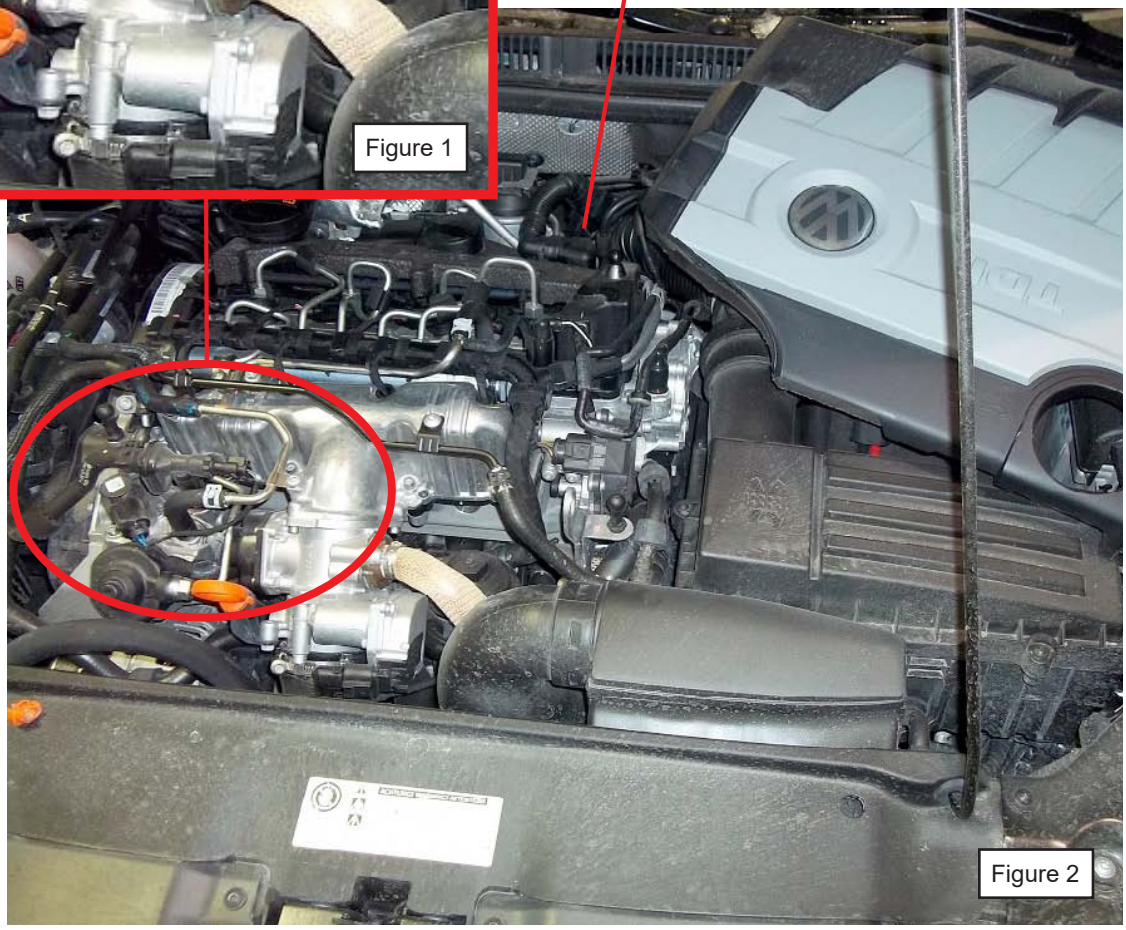

Figure 2

Tool & Manifold Required:

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

EEDF400M

EEDF400

4. Remove EGR inlet pipe bolts (see figure 3). Pull back EGR pipe about ½" and remove gasket.

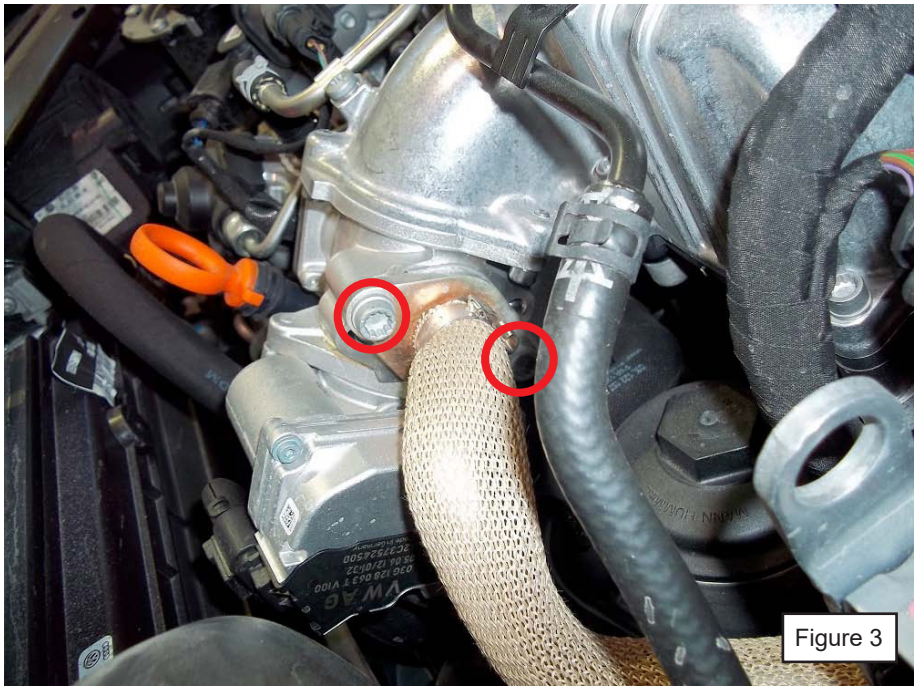

Figure 3

5. Install EGR Adapter (EEDF400-520) in its place (see figure 4) and use the two supplied bolts (hand tight) to secure the adapter. Ensure that the adapter is installed as shown (coupler facing up) for proper cleaning of the EGR system.

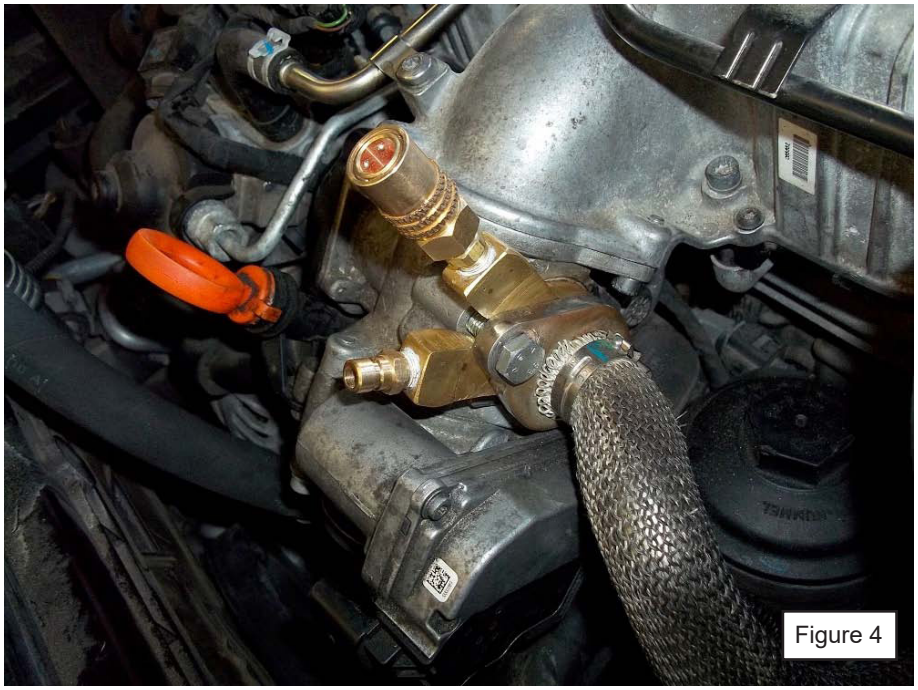

Figure 4

6. Attach EGR manifold ((EEDF400M)) to EGR adapter, then attach aerator assembly to the EGR Manifold. Ensure air valve and fluid valve are closed – see EGR tool user guide.
7. 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.
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 system must be cooled before treatment can start. Before step 9 can proceed, ignition must be off for the EGR system to be cooled. Turn valve to exhaust on EGR manifold, open canister air valve, close canister fluid valve and flush cooler with air for 2 minutes.

9. Start vehicle engine. Set EGR manifold to exhaust (see figure 5).

Figure 5

10. Open Air valve, adjust regulator to maintain initial pressure, then open the fluid valve on the tool.
11. After 1/4 of the fluid has been consumed, close the fluid valve and let the air flow for an additional 2 minutes to flush deposits into exhaust stream.
12. Raise engine rpm to 1200 as this will open the EGR valve, turn EGR Manifold valve to intake (see figure 6), open fluid valve and continue service until another ¼ of the fluid is consumed.

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

13. Close the fluid valve and turn manifold valve to exhaust (see figure 5) and let the air flow for an additional 2 minutes to cool off the exhaust stream.
14. Open fluid valve and continue service until another ¼ of the fluid is consumed.
15. Raise engine rpm to 1200 as this will open the EGR valve, turn EGR Manifold valve to intake (see figure 6), open fluid valve continue service until EGR tool is empty.

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

Figure 6

Note: 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 adapter and reassemble vehicle components in the reverse order of removal.

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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