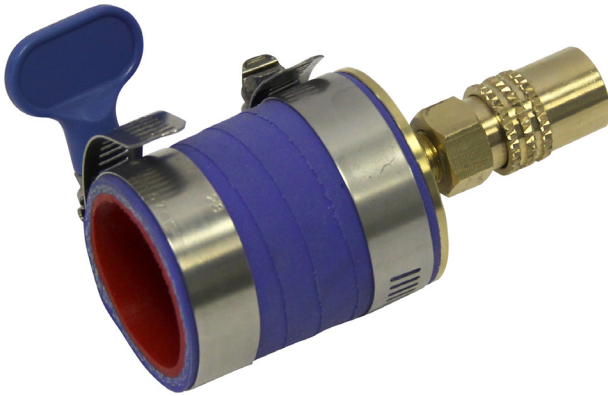




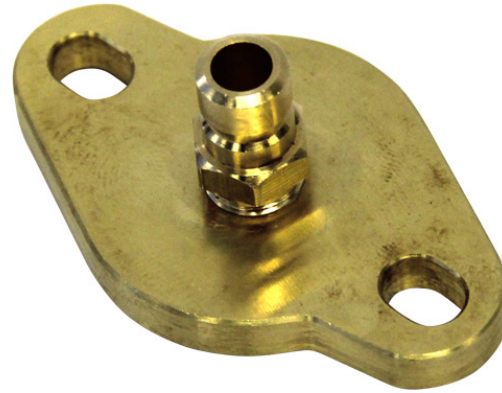
Blue-Point®

EEDF400-503 & EEDF400-502

VW (Engine Code CAYC/CKRB) 1.6L TDI EGR Cleaning Instructions



Intake
EEDF400-503



Exhaust
EEDF400-502



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:

- Hot side EGR valve (no EGR cooler), a high pressure loop which controls exhaust gases for proper emissions control of Nox gases
- Cold side EGR valve (after EGR cooler), a low pressure loop which controls exhaust gases for proper emissions control of Nox gases located after DOC+DPF filter
- EGR cooler (controls temperature of exhaust gases to the air intake to the engine through the turbo) – low pressure loop only
- EGR temperature sensor (measures EGR cooler exhaust temperature and efficiency)

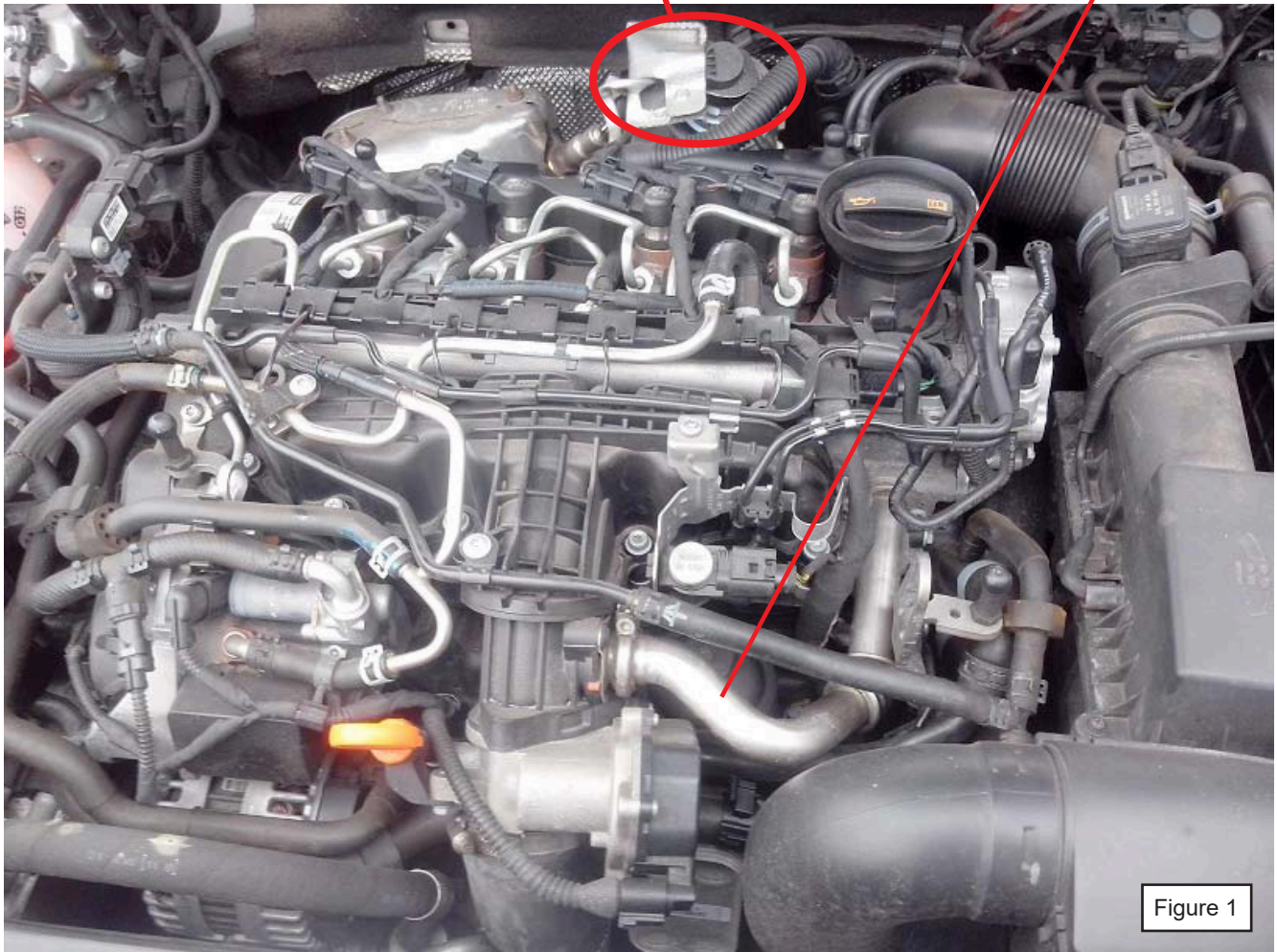
These items are critical for proper emissions management control and must be cleaned on a regular basis for optimum efficiency.

First steps before any service can be performed.

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

Locations of EGR components:

- EGR valve and cooler found after DOC+DPF filter low pressure loop (not Shown)
 - EGR valve – high pressure loop (figure 1)
- EGR Outlet Pipe (figure 1)



Tool & Manifold Required:

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



4. Remove EGR outlet pipe clamp and EGR outlet pipe bolts (see figure 2). Remove gasket and EGR outlet pipe and set aside.

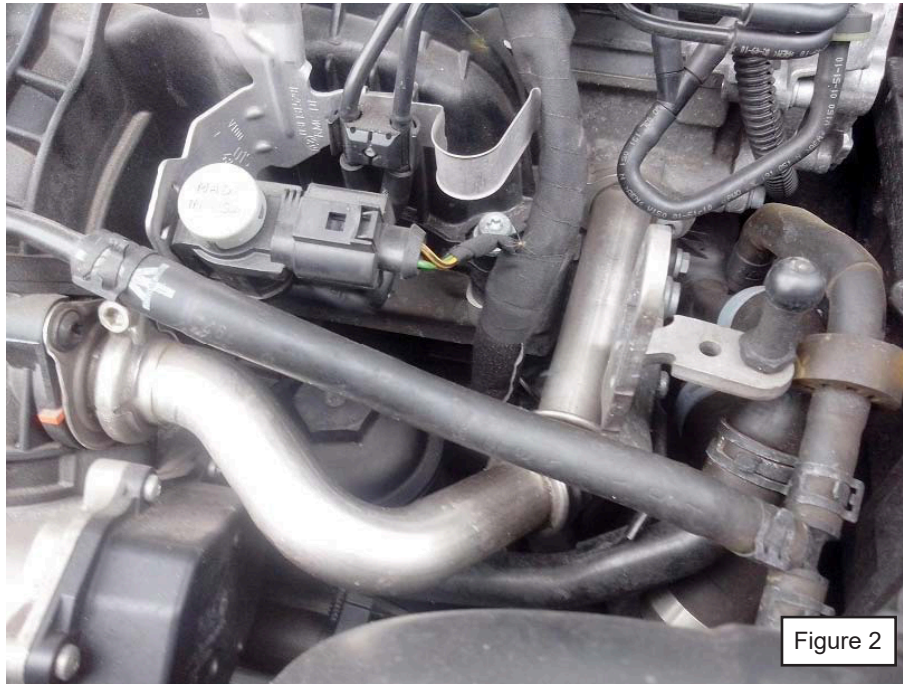


Figure 2

5. Install EGR Intake (EEDF400-503) and Exhaust (EEDF400-502) Adapters in its place (see figure 3). Use the existing two bolts on the EGR Exhaust adapter and tighten the clamp on the EGR Intake adapter.

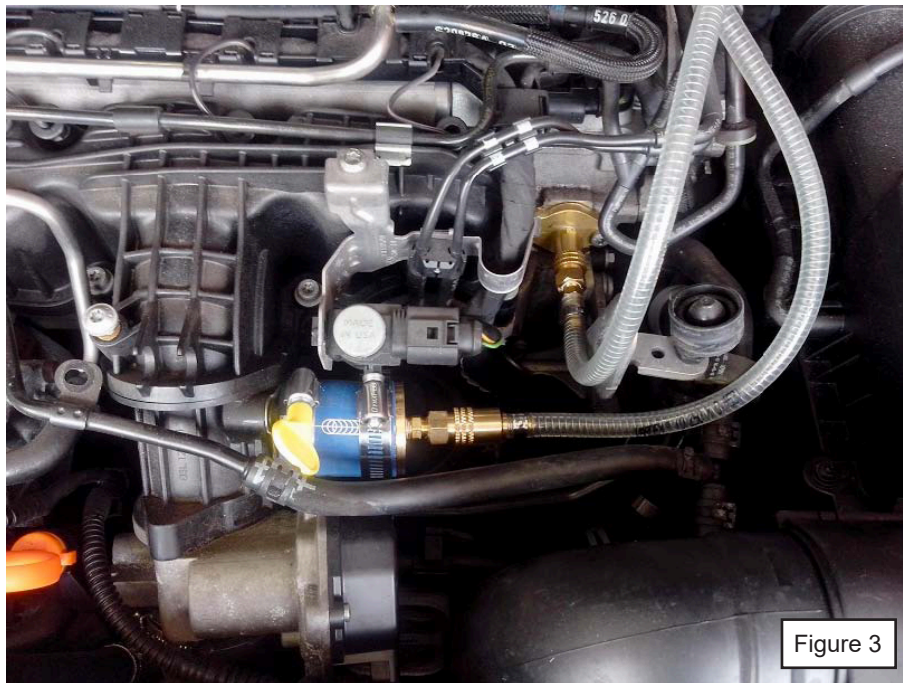


Figure 3

Quick Tip: Place the EGR cooler outlet pipe into a bucket/container and fill container with EGR fluid until submerged, this will aid in the dislodging of soot from the pipe while the EGR cleaning procedure is performed see step 17.

6. Attach EGR manifold (EEDF400M) to EGR intake and exhaust adapters, then attach aerator assembly to EGR Manifold. Ensure air valve and fluid valve are closed – see EGR tool (EEDF400) 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 the engine is hot, the EGR valve 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 and flush EGR valve with air for 2 minutes

9. Start vehicle engine. Set EGR manifold to exhaust (see figure 4). Raise engine rpm to 1200 as this will open the EGR valve.



10. Open Air valve, adjust regulator to maintain initial pressure, open 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. Turn EGR Manifold valve to intake (see figure 5), 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 EGR 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 4) and let the air flow for an additional 2 minutes to cool off the EGR valve.
14. Open fluid valve and continue service until another ¼ of the fluid is consumed. After another 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
15. Turn EGR Manifold valve to intake (see figure 5), 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 5

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. Detach shop air line and depressurize the tool by rotating the regulator knob counter clockwise.
 17. After EGR cooler outlet pipe has soaked for 15 minutes, clean the pipe using EGR cleaning fluid and a flexible 1" round brush inside a bucket or waste container. Fluid can be saved to be used on other EGR components if required.
 18. Remove adapters and reassemble vehicle components in the reverse order of removal.
19. 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.