

VW Code BRM 1.9L TDI EGR Cleaning Instructions









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 NOx 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® Diesel Fuel Injector Cleaner (EEDF400-INJ) to the vehicle's fuel tank.
- 2. Remove the plastic engine cover.
- If the engine is hot, the EGR cooler must be cooled.

Locations of EGR components:

• EGR valve

• EGR cooler and bypass valve



Tool & Manifold Required:

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





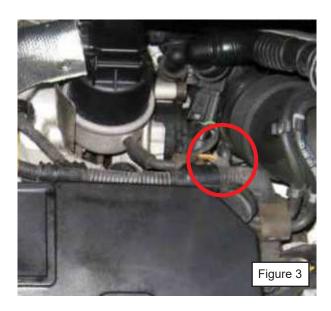
4. Remove the 3 EGR valve bolts (see Figure 2).



- 5. Remove EGR valve and set on top of engine with the electrical connector attached. Install EGR Adapter (EEDF400-565) in its place; install the 3 bolts hand tight.
- 6. Attach EGR manifold (EEDF400M) to EGR adapter. Attach EGR tool (EEDF400) to 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. Connect the hand vacuum pump tool the EGR cooler bypass vacuum actuator (see figure 3), draw a vacuum as this will close the EGR cooler bypass valve thus allowing cooling of the EGR cooler. 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. Set EGR manifold to exhaust . Disconnect EGR cooler bypass valve vacuum actuator hose and attach a hand vacuum pump tool and draw a vacuum, this will close the EGR cooler bypass valve and allow cleaning of the EGR cooler.



- 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, 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, turn manifold valve to intake, 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 and let the air flow for an additional 2 minutes to flush deposits into exhaust stream.
- 14. Open fluid valve and continue service until another ¼ of the fluid is consumed. During this step cycle the EGR cooler bypass valve several times by releasing the vacuum on your hand vacuum pump tool and drawing a vacuum several times through out this step. This will allow cleaning of the EGR cooler bypass port.
- 15. Turn manifold valve to intake, open fluid valve and 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.

Note: Let the engine run 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.

Note: Disconnect the EGR valve electrical connector and clean the EGR valve with EGR cleaning fluid using a soft bristle brush before starting step 17

- 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).

This must be completed immediately after the service.