

VW Jetta 1.9L TDI (2005-2006) (Engine Code BRM) Diesel the EGR Cleaning Instructions

**Always wear gloves and safety glasses
when performing this service**

EGR System Consists of:

- **Cold side the EGR valve (after the 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 cooler bypass valve (controls exhaust flow temperature to the air intake from the exhaust through the EGR cooler)**
- **EGR temperature sensor (measures the EGR cooler exhaust temperature and efficiency)**

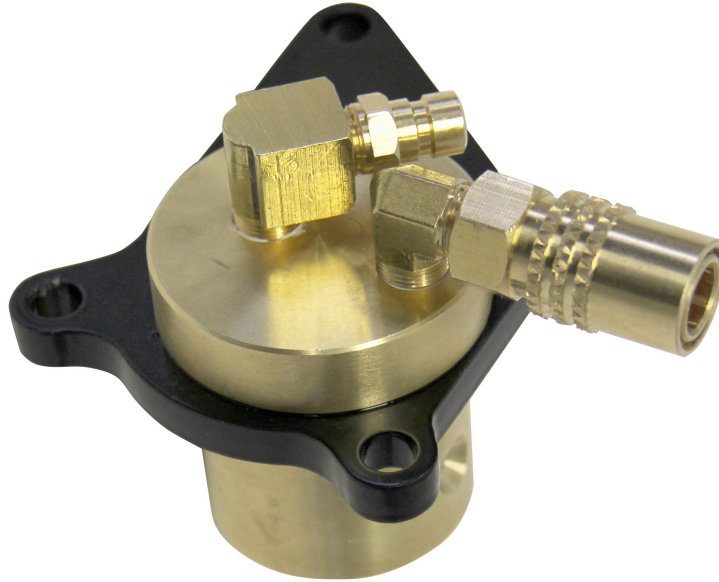
These items are critical for proper emissions management control and must be cleaned on a regular basis for optimum efficiency.

First steps before any service can be performed.

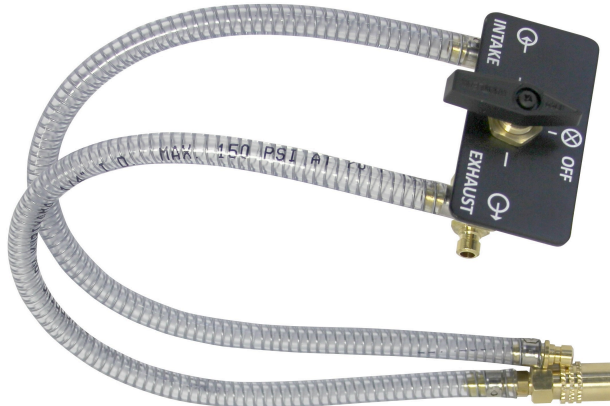
- 1. Add TerraDiesel™ Fuel Injector Cleaner (201255) to the vehicle's fuel tank.**
- 2. Remove the plastic engine cover and foam insulator.**
- 3. If the engine is hot, the EGR system must be cooled.**

Adapters Required:

201565 EGR Adapter



201399 EGR Manifold

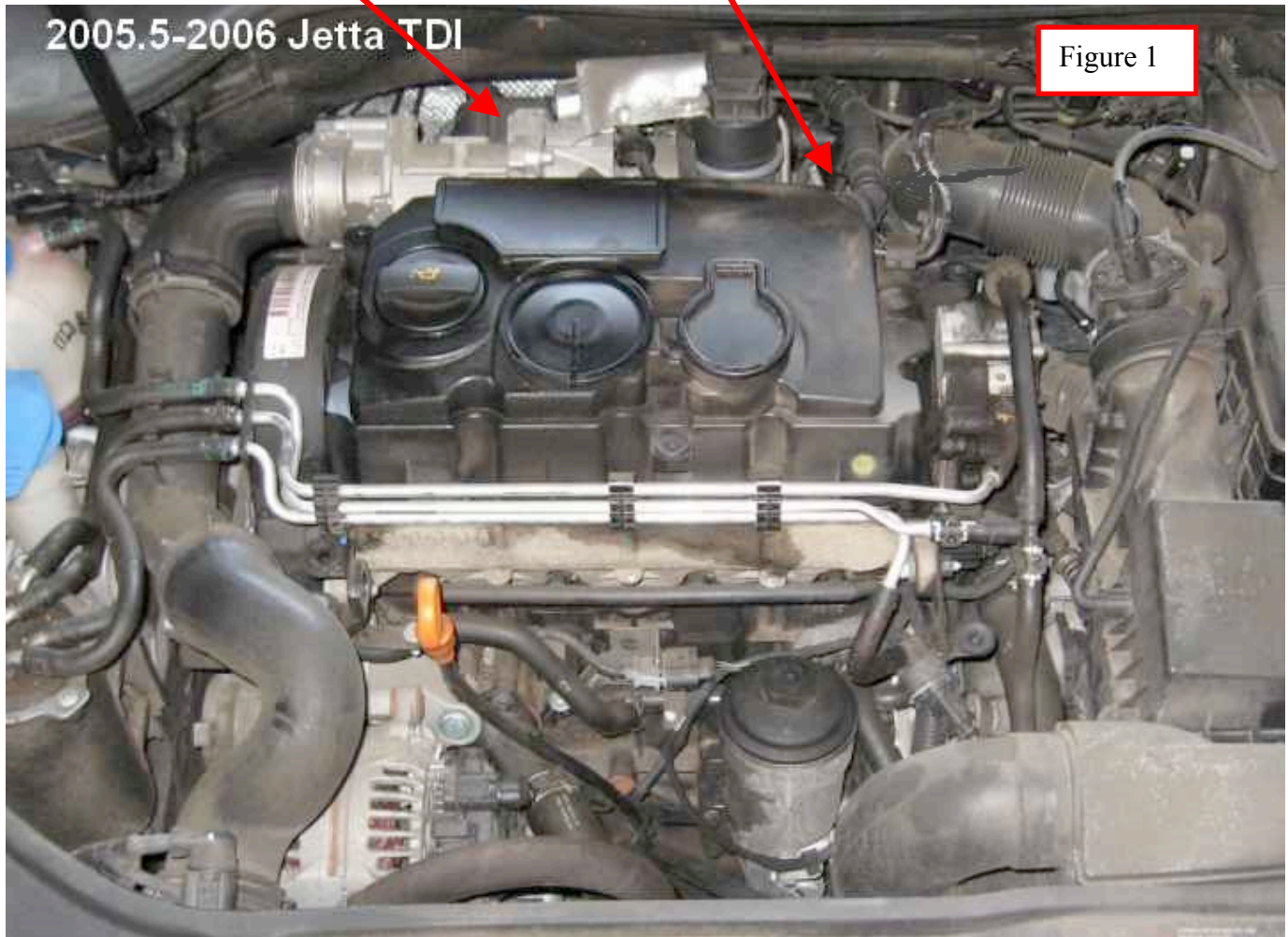


Tools Required:

- **201170 – TerraDiesel™ the EGR Cleaning Tool**
- **Hand Vacuum Pump Tool**

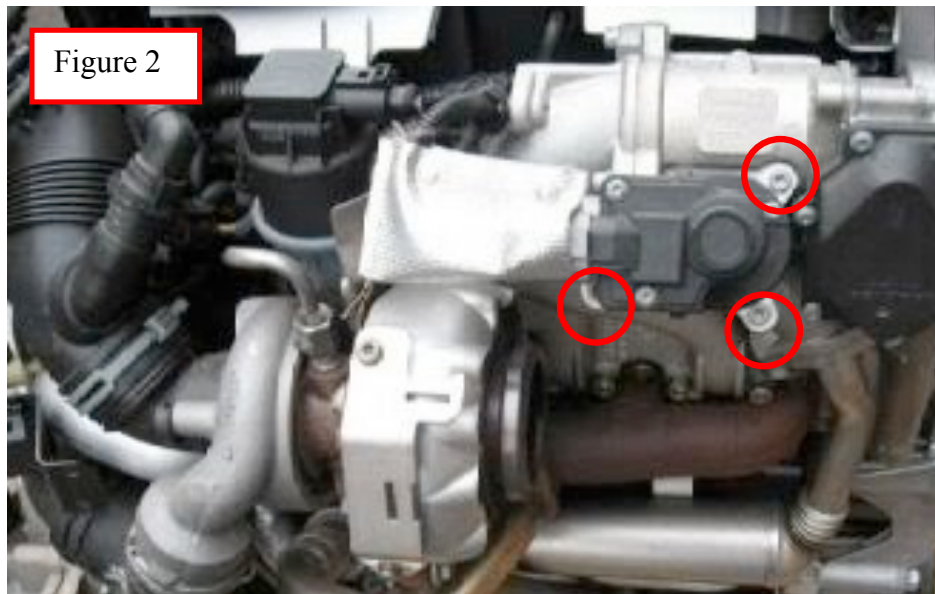
Locations of the EGR components:

- EGR valve (Figure 1)
- EGR cooler and bypass valve (Figure 1)



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Diesel the EGR Cleaning Instructions**

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



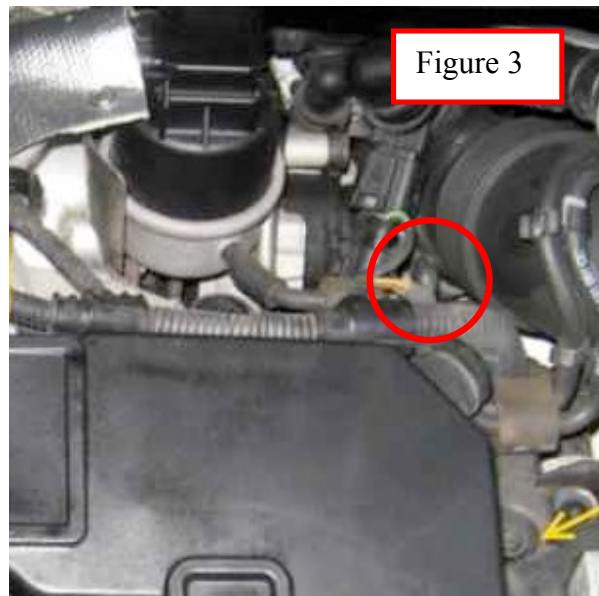
2. Remove the EGR valve and set on top of engine with the electrical connector attached. Install the EGR Adapter (201565) in its place; install the 3 bolts hand tight.
3. Attach the EGR Manifold(201399) to the EGR Adapter. Attach the EGR Cleaning Tool (201170) to the EGR Manifold. Ensure that the air valve and fluid valve are closed – see the EGR Cleaning Tool user guide.
4. Unscrew the fill cap and fill with 32oz (946mL) of TerraDiesel™ EGR System Cleaner (201278, 201279 or 201280). For first application or severe coking, 64 oz. may be required.
5. Reinstall the fill cap and hang the EGR Cleaning Tool from the hood latch. Connect shop air. Set air pressure on the EGR Cleaning Tool to 40-50 psi.

NOTE: If engine is hot, the EGR system must be cooled before treatment can start. Before step 6 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 the EGR Cleaning Tool air valve, keeping the fluid valve closed, turn valve on the EGR Manifold to exhaust and flush cooler with air for 2 minutes.

6. Start the vehicle engine. Set the EGR manifold to exhaust. Disconnect the 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.



7. Open the air valve on the EGR Cleaning Tool, adjust regulator to maintain initial pressure, and then open the fluid valve on the EGR Cleaning Tool.
8. 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.
9. Raise the engine rpm to 1200, turn the EGR Manifold valve to intake, open fluid valve and continue service until another 1/4 of the fluid is consumed.

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

10. Close the fluid valve and turn the EGR Manifold valve to exhaust and let the air flow for an additional 2 minutes to flush deposits into exhaust stream.
11. Open fluid valve and continue service until another 1/4 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 throughout this step. This will allow cleaning of the EGR cooler bypass port.
12. Turn the EGR Manifold valve to intake, open fluid valve and continue service until the EGR Cleaning Tool is empty.

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

Let the engine run for an additional 5 minutes and rev the engine several times to clear all residual fluid.

13. Turn the fluid and air valve on the EGR Cleaning Tool to the closed position. Turn the vehicle off. Detach shop airline and depressurize the EGR Cleaning Tool by rotating the regulator knob counter clockwise.

NOTE: Disconnect the EGR valve electrical connector and clean the EGR valve with the EGR cleaning fluid using a soft bristle brush before starting step 14

14. Remove the EGR adapter and reassemble vehicle components in the reverse order of removal.
15. Add one bottle of TerraDiesel™ Multi-function Fuel Treatment (201250) to the vehicle's fuel tank.
16. After service, reset any engine codes. The vehicle should then be set to run a manual regeneration cycle or if that is not possible, the vehicle should 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 should be done as soon as possible.