



# ***EGR Adapter Mercedes 3.0 Liter (2012-2014) Part No. 069-3505***



## **CAUTION:**

Always wear gloves and safety glasses when performing this service

### **EGR System Consists of:**

- Cold side EGR valve (after EGR cooler) controls exhaust gases for proper emissions control of No<sub>x</sub> 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)
- Swirl flaps (control airflow under different engine speed and loads) located inside intake plenum

**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:**

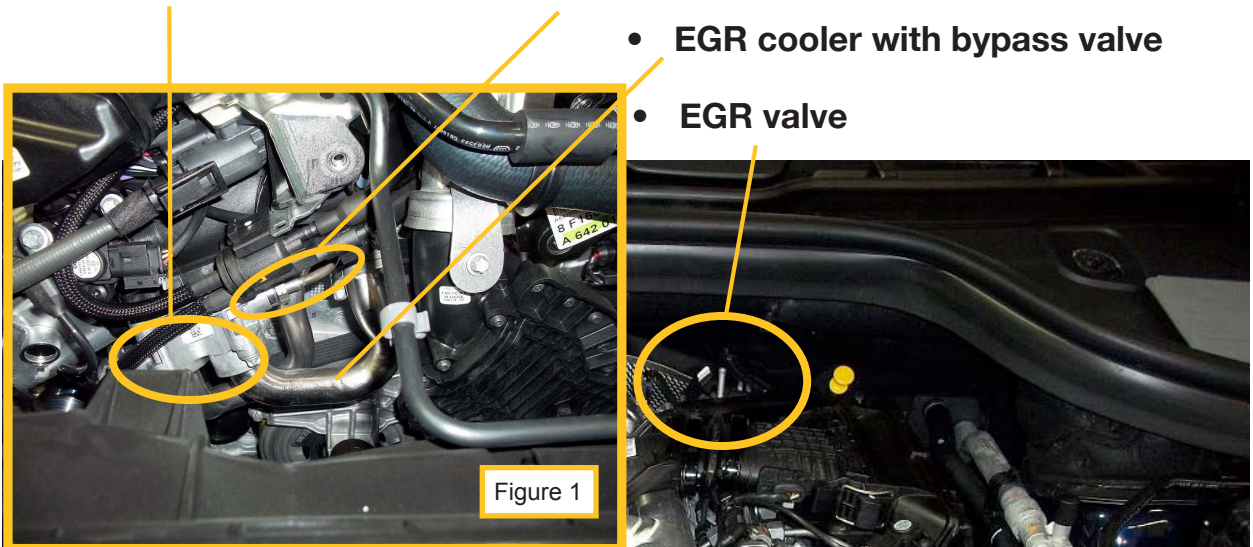
1. Add Part# 400-3012 DieselTune™ Max Strength Fuel Injector Cleaner to the vehicle's fuel tank.
2. Remove plastic engine cover.
3. If engine is hot, the EGR cooler must be cooled – see note step 12.

## Tools and Adapters Required:



## Locations of EGR components:

- EGR cooler bypass valve – EGR temperature sensor





4. Remove the two bolts securing the front engine cover along with the air intake snorkel (see figure 3).



Figure 3

5. Remove EGR cooler outlet pipe with gasket by removing two bolts (see figure 4).
6. Then rotate and wiggle down pipe to remove.
7. Remove one bolt from EGR blend housing (see figure 4).

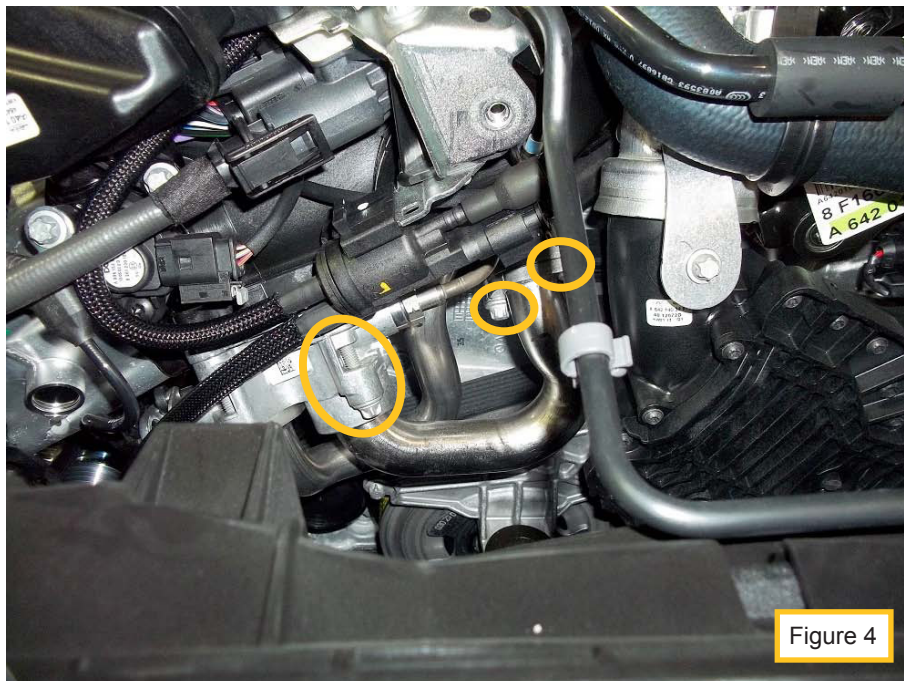


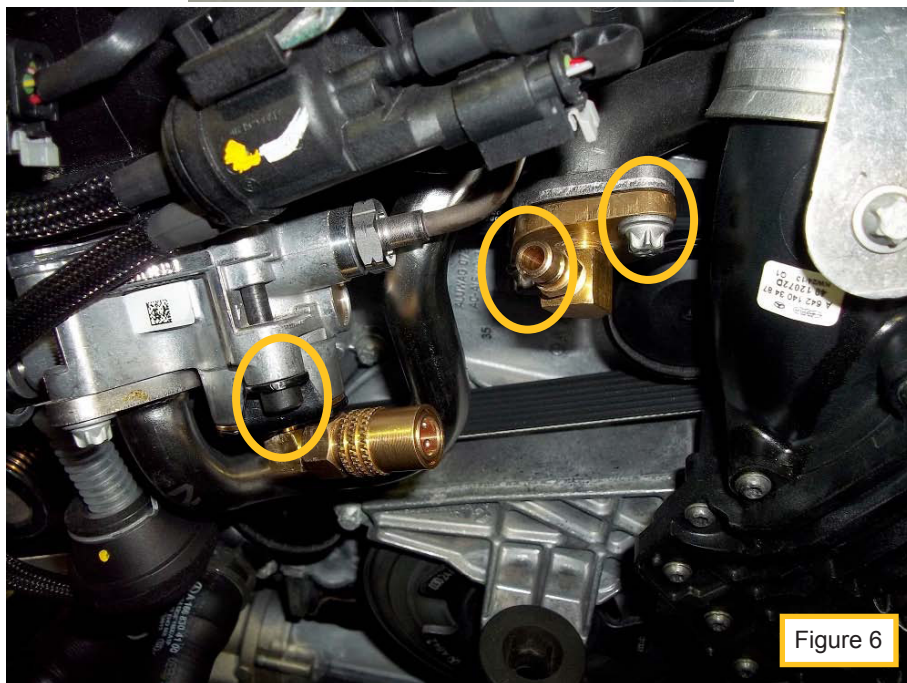
Figure 4

**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 21.

8. Install EGR adapters 069-3502 and 069-3505 see figure 6 in place of above EGR cooler outlet pipe.

**Note:** Lubricate o-ring on EGR adapter 069-3505 see figure 5 before installation, this will aid in not pinching the o-ring when installing intake side adapter.

9. Reinstall bolt from EGR blend housing and tighten as per manufacture specification (see figure 6).



10. Attach EGR manifold 069-3399 to EGR adapters 069-3502 and 069-3505. Attach EGR tool to 069-3399. Ensure air valve and fluid valve are closed – see EGR tool user guide.
11. Unscrew fill cap and fill with 32oz (946mL) of Part# 400-0280 EGR System Cleaner. For first application or severe coking, 64 oz. may be required.
12. Reinstall the fill cap and hang tool from the hood latch. Connect shop air. Set air pressure on EGR tool to 40-45 psi.

**NOTE: If engine is hot, the EGR cooler must be cooled before treatment can start. Before step 12 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, turn valve on the EGR manifold 069-3399 to exhaust and flush cooler with air for 2 minutes.**

13. Start vehicle engine. Using the scan tool, command the EGR open.
14. Set valve on adapter to exhaust (see figure 7).



15. Open air valve on EGR tool, adjust regulator to maintain initial pressure, and then open the fluid valve on the EGR tool.
16. 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.
17. Repeat step 15-17 allowing another 1/4 of the fluid to be consumed. Using a scan tool, command the EGR bypass valve to open (bypass valve will close after 30 seconds) then you must command to open again, due this through several times throughout this step.



18. Set valve on adapter to intake (see figure 8).



19. 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.**

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

20. 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.
21. After EGR cooler outlet pipe has soaked for 15 minutes, clean the pipe using EGR cleaning fluid and a flexible 1" round brush (see figure 9) inside a bucket or waste container. Fluid can be saved to be used on other EGR components if required.



22. Remove adaptor and reassemble vehicle components in the reverse order of removal.

**Note: When installing the EGR outlet pipe, lubricating the o-ring will aid in the assembly**

23. Add one bottle of Part# 400-3022 DieselTune™ Complete Fuel Supplement to the vehicle's fuel tank.
24. After service, reset any engine codes and perform a road test to clear any residual fluid from the system. Vehicle may go through Regen cycle during road test.

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