## EEDF400-384 & EEDF400-382



## Duramax 6.6L Diesel Engine (GM/Isuzu) (2008-Present) EGR Cleaning Instructions



WARNING: Wear gloves and safety goggles (User and bystanders) when performing this service

IMPORTANT: A DPF Regeneration event is required after this service. Regeneration can be initiated for many engines using one of the following Snap-on Diagnostic Tools:

- EEHD184040 Pro-Link Ultra (Snap-on)
- EEHD186030 Pocket IQ2 (Blue-Point)

## **EGR System Consists of:**

- Hot side EGR valve (before EGR cooler) 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.

## Steps to perform service:

- 1. Add Diesel Fuel Injector Cleaner (EEDF400-INJ) to vehicle's fuel tank.
- 2. Remove the temperature sensor on the EGR Cooler (On vehicles 2008 and newer the sensor is towards the front of the engine) and attach the EGR M12x1.25 adapter (EEDF400-382) to the EGR cooler temperature sensor port. Do not disconnect wire connector.

Note: For cube vans remove the extension for 069-3382. This will allow the adapter to fit into the tight space for these vehicles.

 Remove Intake Boost pressure sensor and attach the EGR 0.40" DIA. Adapter (EEDF400-384) (use existing bolt and tighten bolt very lightly). Then attach aerator assembly to the EGR M12x1.25 adapter. Ensure air valve and the fluid valve are closed. Do not disconnect wire connector.

- 4. 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.
- 5. 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 cooler must be cooled before treatment can start. Before step 6 can proceed, open canister air valve, close canister fluid valve, and flush cooler with air for 2 minutes.

- 6. Start vehicle engine. Disconnect EGR solenoid harness to close EGR valve.
- 7. Open Air valve, adjust regulator to maintain initial pressure then open the fluid valve on the tool.
- 8. 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.
- 9. Repeat step 7 allowing another ¼ of the fluid to be consumed.
- 10. Disconnect Aerator Assembly from the EGR M12x1.25 adapter and connect to the EGR 0.40" DIA. Adapter. Turn both the air valve and fluid valve on the tool to open position.
- 11. Reconnect EGR solenoid harness to open EGR valve. Continue service until EGR tool is empty.

Note: At any time during the intake service (step 11) you hear a diesel knock sound, turn fluid valve to closed position for 2 minutes. After two minutes then turn fluid valve to open position and continue service.

- 12. 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.
- 13. Remove the adapters and reassemble vehicle components in the reverse order of removal.

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- 14. Otherwise the vehicle must 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 must be completed immediately after the service.