2004-2006 Duramax LLY v1.1
EGR and VGT Electronics Mounting

- Mount as shown behind grill so electronics get proper amount of cooling.
- You may need to drill into the plastic grill support if the holes do not line up on your application.

Caution: These electronics will get hot to the touch
Procedure

We have found some discrepancies in GM's wiring diagrams and the actual wiring on the vehicle. It is very important to test the Turbo Vane Position Sensor plug wires to find the +5V and ground wires.

1) Locate the Turbo Vane Position Control Solenoid Valve plug.
   * Cut the plug's Dark Blue wire, solder and shrink-wrap the Blue wire from the ATS Vane Position Board to the end of the Dark Blue wire that runs into the harness, away from the plug.
   * Cut the plug's White wire and solder, shrink-wrap the White wire from the ATS Vane Position Board to the end of the White wire that runs into the harness, away from the plug.

2) Locate the Turbo Vane Position Sensor plug.
   * Cut the plug's Yellow wire, solder and shrink-wrap the Yellow wire from the ATS Vane Position Board to the end of the Yellow wire that runs into the harness, away from the plug.
   * Cut the Orange w/ Black wire and the Tan wire. One of these wires is the ground, the other is a +5V power source. Turn the vehicle's ignition to the on position, but do not start the vehicle. Test the wires with a voltmeter, then turn the ignition off. The ATS Vane Position Board's Gray wire will connect to the +5V wire, the ATS Vane Position Board's Black wire connects to the ground wire.
   * For 2004.5-2005 vehicles the Orange w/ Black should be the +5V wire. Test to make sure.
   * For 2006 vehicles the Tan wire should be the +5V wire. Test to make sure.
   * Solder and shrink-wrap these connections

3) Secure the Vane Position Board in a suitable location.
2004.5-2006 Duramax LLY
EGR Blocker

This modification alters the emissions system of your vehicle which may void your warranty. EGR MODIFICATIONS ARE FOR OFF ROAD USE ONLY.

EXHAUST GAS RECIRCULATION (EGR) VALVE WIRE HARNESS
2004.5-2005 DArk BLUE wire with WHITE TRACER
2008 BROWN with WHITE TRACER

ATS EGR BLOCKER
GRAY WIRE
RED WIRE
GREEN WIRE
YELLOW WIRE

MASS AIR FLOW (MAF) SENSOR WIRE HARNESS
GRAY WIRE with BLACK TRACER
PINK WIRE
YELLOW WIRE

Procedure
Disconnect the negative (-) battery terminal(s) before beginning.
Locate the MAF sensor next to the airbox and access the wires in the harness.
Tap (do not cut) the MAF’s Gray wire with Black tracer with the ATS EGR Blocker’s Gray wire.
Tap (do not cut) the MAF’s Pink wire with the ATS EGR Blocker’s Red wire.
Cut the MAF’s Yellow wire. Attach the ATS EGR Blocker’s Yellow wire to the end that runs to the MAF sensor and attach the ATS EGR Blocker’s Green wire to the end that runs into the harness and away from the MAF.
Locate the EGR valve wire harness near the MAF sensor.
FOR 2004.5-2005 VEHICLES: Tap (do not cut) the EGR’s Dark Blue wire with White tracer with the ATS EGR Blocker’s Dark Blue wire.
FOR 2006 VEHICLES: Tap (do not cut) the EGR’s Brown wire with White tracer with the ATS EGR Blocker’s Dark Blue wire.

Reconnect the negative (-) battery terminal(s).