

MAP or MAF Sensor Enhancer Installation Instructions

Installing your Duel Edge Enhancer is quiet simple. If this is your first time, then **PLEASE** take your time. The instructions for this device work the same for MAP or MAF sensors.

Choose a spot on your firewall to drill a hole for your wires to pass through from inside of car to engine compartment.

Note It is best if you use a grommet or some type of insulation in this hole to protect your wires from being cut from the metal and possibly shorting out. Locate your MAP sensor on your vehicle (if you have a MAP and a MAF, connect to the MAP)

Check the voltage (with a volt meter) coming out of the wires on the MAP or MAF sensor harness and find the voltage wire that fluctuates the most at idle and higher RPMs, every car is different.

This wire is what sends information in voltage to your ECU (computer) make your connection here by cutting off this wire and connecting the **Yellow** wire from your enhancer going to the MAP or MAF.

The **Black** wire from your enhancer will connect to the other end of the wire (that you just cut) that is still connected to the ECU.

The **Green** wire is for ground. Note: You only cut one wire under your hood. Mount your enhancer on the dash, or console. Your car is now wired and ready to go.

The **White Wire** is used as a manual shut-off for your generator; this wire is used as a ground when you connect it to a relay that is wired to the pin #85 on relay. When you switch from Hybrid to Factory your MAP or MAF will return to factory settings and your generator will shut off.

If you don't feel comfortable connecting your system have a mechanic do your install.

Using Your MAP Sensor Enhancer

First adjust your knobs all the way counter clockwise. Full RICH

Always start your vehicle with the Enhancer on Factory.

After 5 minutes, which you should now be in limp mode, switch to hybrid and slowly adjust the city knob clockwise (lean), keep turning the city knob until you can feel the vehicle start to chug a little then turn it back a tiny bit. Drive vehicle and after another 5 minutes or more adjust your knob towards to lean and you should get a little leaner setting.

Adjusting your HWY knob should be done in the same matter, only do this when you are at highway speeds. If you find yourself needing more horsepower, like towing or climbing a steep grade, you can adjust the highway knob to more rich or flip toggle to CITY which should be set at a lower setting than your HWY knob.

Counter Clockwise Is Rich - Clockwise Is Lean

Every time you restart your car you will need to start it in Factory mode, and wait until the motor has warmed up again or ECU is in closed loop. Leaving knobs advanced and starting your vehicle when cold can turn your check engine light on and you might trigger the computer into limp mode.

Note if you advance the knobs to the point that you shut your car off you have gone too far.

Trouble Shooting

Enhancer is installed correctly but you are not seeing any savings. Your vehicle is probably in limp mode and you will have to reset the codes. You can go to your local auto parts store to have them reset the computer for free or disconnect the battery and that should reset it.