BOOSTBYSMITH'S
NOS HARNESS
FOR ECU FLASHING

WARNING: You must have your ECU re-flashed and setup for NOS control ***BEFORE*** install this nitrous harness. Failure to do so will damage your engine, as well as nitrous solenoid.

Flapper Valve Solenoid Connection:

Remove drivers seat and lift tank. Locate the flapper valve solenoid located along the left side frame rail (2 pin black connector with orange and brown wires). Disconnect the solenoid and connect the plug and play 2 pin connector. Once connected you no longer have control of the flapper valve located in the bottom of the stock airbox (which the small box mod eliminates anyway). Warning, until you change the settings, in stock form this output is triggered from 600-2200 RPM.

Toggle Switch:

The toggle switch is long enough to reach to your left side inner panels, mount where-ever is convenient. Drill a ¼" through hole for the toggle to slide up through. DO NOT OVERIGHTEN THE NUT. The toggle switch will pull itself apart if you over-torque the retaining nut.

Relay:

The relay is setup to rest between your battery and the ECU, you may need to gently lift up on the ECU's harness to get it to fit in there snugly.
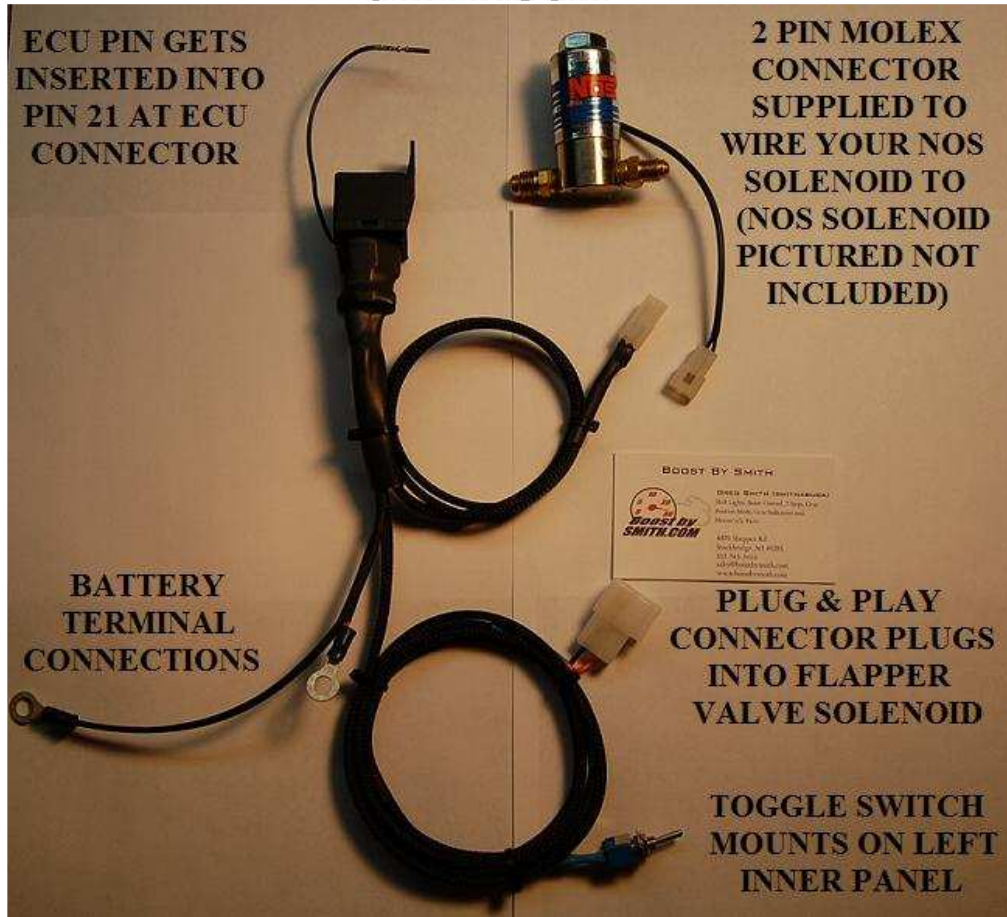
Battery Connections:

Connect the red wire with ¼" eyelet to the positive terminal of the battery. Connect the black wire with ¼" eyelet to the negative terminal of the battery. Be sure to tighten the bolts back nice and snug. A loose ground connection at your battery will cause all sorts of interesting issues.
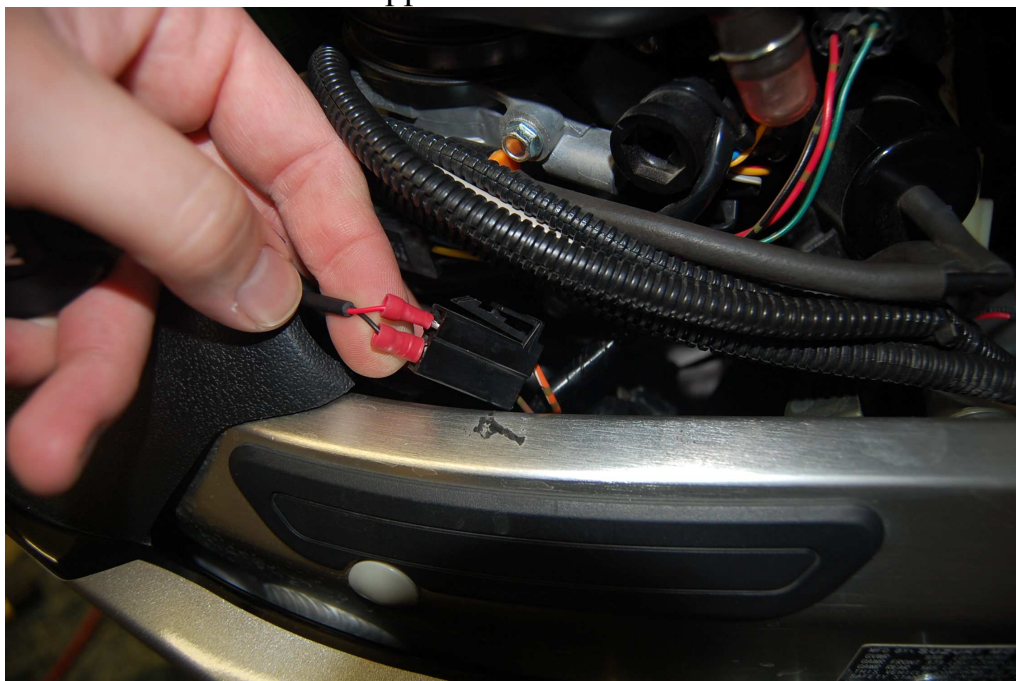
ECU Connection:

Remove the black wire with tan tracer (pin 21 on the 34 pin connector) and insert the wire with ECU pin from my harness in it's place. Simply tape off or place shrink tube over the black wire with tan tracer to keep the pin from grounding on anything else metal.

NOS Solenoid Connection:

Solder and or crimp on the 2 small molex pins and insert into the 2 pin white molex housing onto your nos solenoid. This will allow you to easily plug in and remove your NOS solenoid from the bike. To trigger anything other than a solenoid, please see last page of directions.
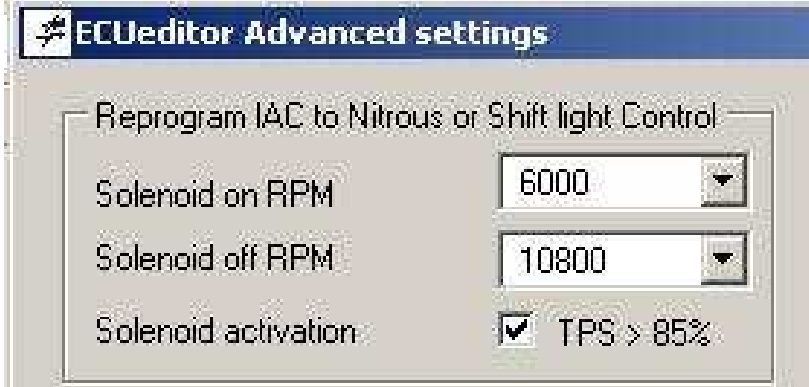
ECU PIN GETS INSERTED INTO PIN 21 AT ECU CONNECTOR

2 PIN MOLEX CONNECTOR SUPPLIED TO WIRE YOUR NOS SOLENOID TO (NOS SOLENOID PICTURED NOT INCLUDED)

BATTERY TERMINAL CONNECTIONS

PLUG & PLAY CONNECTOR PLUGS INTO FLAPPER VALVE SOLENOID

TOGGLE SWITCH MOUNTS ON LEFT INNER PANEL

Flapper Valve Location

Setup in ECU Editor:

In the advanced settings tab in the upper left hand corner you can program the window and wide open throttle switch like in the picture below.

When mapping for nitrous, you use the MS FUELMAP, and MS IGNITION MAP. Refer to my 4 tutorial videos for further info…
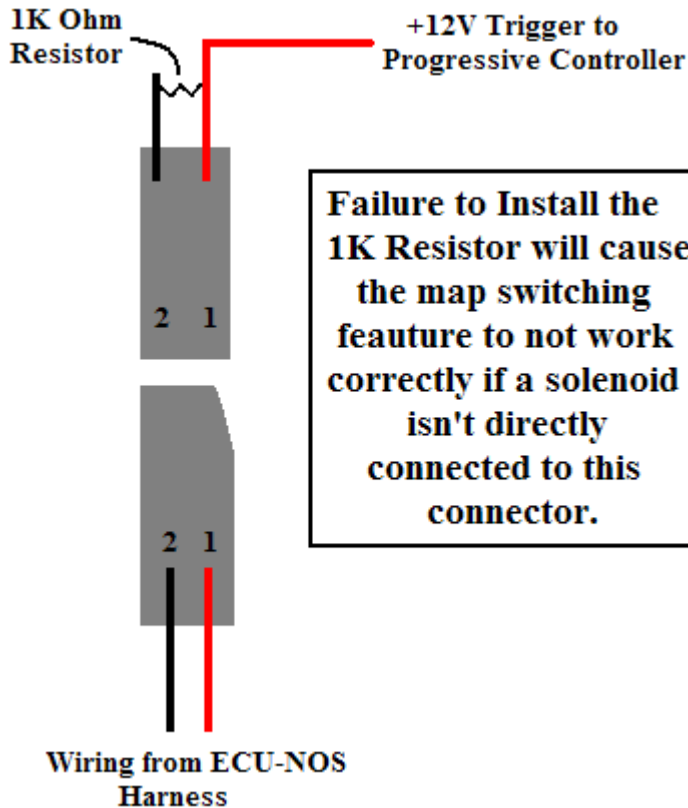

***In order to make a dry run to see that fueling and ignition is different in your secondary map, you must leave the solenoid connected to the harness and just turn the

bottle off. If the solenoid isn't connected, the circuit won't work correctly. If you need to run the bike without a solenoid connected, I would remove the wire from the relay to pin 21, and replace the stock wire.

Triggering a Progressive Controller:

Triggering a progressive controller is no problem when using this harness, but you will need to install a resistor at the white molex connector to replace the resistance that the NOS solenoid would typically provide. Purchase a ¼ or 1/2W 1.0K Ohm resistor from Radio Shack. The red wire at the molex connector switches to +12 Volts when the NOS criteria are met. The ground is a direct connection to the battery ground. Using the provided connector, pins, and schematic below will ensure a proper activation / map switching setup for a progressive controller.

1K Ohm Resistor

+12V Trigger to Progressive Controller

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Failure to Install the
1K Resistor will cause
the map switching
feauture to not work
correctly if a solenoid
isn't directly
connected to this
connector.
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2 1

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Wiring from ECU-NOS Harness

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